

THE PANAMA CANAL RECORD

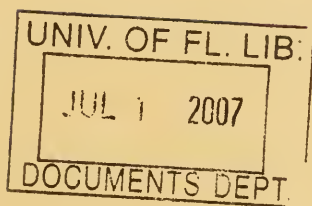
VOLUME 26

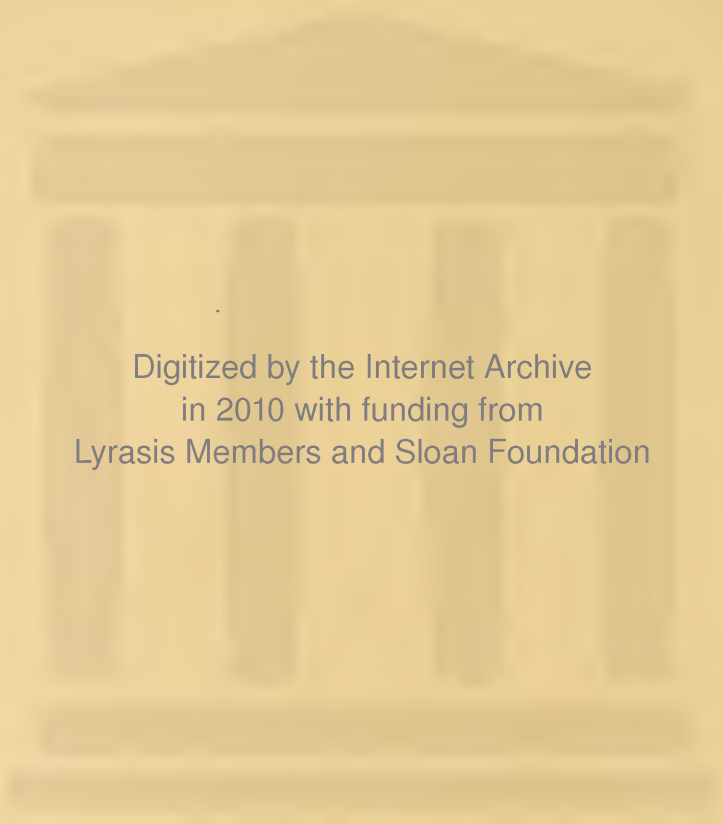
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THE PANAMA CANAL RECORD

PUBLISHED WEEKLY UNDER
THE AUTHORITY AND SUPER-
VISION OF THE PANAMA CANAL

AUGUST 3, 1932 TO JULY 15, 1933

VOLUME XXVI
WITH INDEX

THE PANAMA CANAL
BALBOA HEIGHTS, CANAL ZONE
1933

THE PANAMA CANAL PRESS
MOUNT HOPE, CANAL ZONE
1933

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Entered as second-class matter February 6, 1918, at the Post Office

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., August 3, 1932.

No. I.

Canal Traffic During July.

During the month of July, 1932, 326 commercial vessels and 6 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,468,728.36, and on the launches, \$40.21, or a total tolls collection of \$1,468,768.57.

The daily average of commercial vessels was 10.52, and the daily average tolls collection was \$47,378.33, as compared with an average of 11.20 transits and \$51,159.77 in tolls for the previous month, and an average of 13.10 transits and \$59,633.50 in tolls for July, 1931. The average amount of tolls paid by each of the commercial transits was \$4,505.30 as compared with \$4,553.30 for the month of July, 1931.

Commercial traffic for the past month was the lowest of any month of the current calendar year, to date, both with respect to the number of transits and tolls collected. In comparison with July, 1931, it showed a decrease of 19.7 per cent in transits and 20.0 per cent in tolls collected. The number of vessels transiting last month was the lowest since February, 1923, when the same number was passed through. Tolls collected last month were also the lowest since February, 1923, when that revenue amounted to \$1,423,954.21.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 7 months of the current calendar year, with the daily averages of transits and tolls, and the totals for the first 7 months of the calendar years 1931 and 1930:

	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	358	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
July.....	326	1,468,728.36	10.52	47,378.33
Total, first 7 months of calendar year 1932.....	2,487	11,392,972.03	11.68	53,488.13
Total, first 7 months of calendar year 1931.....	3,033	13,596,325.91	14.31	64,133.61
Total, first 7 months of calendar year 1930.....	3,471	15,428,832.62	16.37	72,777.51

As compared with the first 7 months of the calendar year 1931, the corresponding period this year has had 546 fewer transits and \$2,203,353.88 less tolls, decreases of 18.0 per cent and 16.2 per cent, respectively. In comparison with the first 7 months of the calendar year 1930, there occurred a decrease of 984, or 28.4 per cent, in transits, and \$4,035,860.59, or 26.2 per cent, in tolls collected.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, July 30, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)		Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.									Nature.	Tons.	Gross.	Net.
Cal.	16	13.30	24	6.05	24	14.08	24	21.30	German.	216.5	32.9	12.4	Cristobal, C. Z.	Guayaquil, Ecuador	General.	341	1,105	498
Jacob Luckenbach.	23	19.45	24	6.25	24	13.43	24	14.54	American.	434.1	57.7	24.6	Houston, Tex.	Los Angeles, Calif.	General.	5,710	7,982	5,922
Brilliant ¹ & 2	24	1.40	24	7.30	24	15.01	24	16.18	American.	480.5	66.0	20.0	New York, N. Y.	Los Angeles, Calif.	Ballast.	9,822	6,749	
Empire City.	24	6.35	24	8.25	24	16.10	24	17.11	American.	395.5	55.0	19.3	Baltimore, Md.	Seattle, Wash.	Steel products.	3,822	7,330	5,239
Pire ¹	23	17.35	24	8.50	24	16.50			Panamanian	60.0	18.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		47	32
Wilhelm A. Riedemann ¹ & 2	24	7.10	24	9.50	24	17.15	24	18.35	Danish.	525.0	66.0	18.8	Fawley, England	Talara, Peru	Ballast.		12,171	8,592
Irisbank ¹	24	6.55	24	10.00	24	18.55	24	20.00	British.	426.0	57.0	23.6	Baltimore, Md.	Yawata, Japan.	General.	4,480	7,623	5,336
Los Angeles ²	23	13.10	24	11.10	24	18.10	24	19.30	German.	432.0	59.0	19.5	Hamburg, Germany	Vancouver, B. C.	General.	3,739	8,454	6,344
San Mateo.	23	9.20	24	12.25	24	19.43	25	12.05	American.	315.2	44.2	18.3	New York, N. Y.	Pro Armuelles, R. P.	Ballast.		3,496	2,141
America ²	24	9.35	24	13.10	24	20.40	24	21.40	Danish.	465.0	62.0	18.3	Copenhagen, Den.	Vancouver, B. C.	General.	80	11,000	8,076
Toronto ²	24	13.05	24	14.25	24	21.40	24	22.45	Norwegian.	400.0	52.0	18.6	New York, N. Y.	Manila, P. I.	General.	1,538	5,673	3,614
Dos Hermanos ¹	23	17.35	24	6.30	24	16.16			Panamanian	49.0	12.5		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		13	13
Real ³	23	22.00	24	11.15	24	19.46			Panamanian	62.0	17.0		Cristobal, C. Z.	Pro Armuelles, R. P.	General.	45	46	22
Pres. Herrenschmidt ¹ & 2	24	17.35	24	20.25	25	12.10	25	13.20	Norwegian.	477.1	63.0	21.0	Ceuta, Africa.	Talara, Peru.	Ballast.		9,441	6,483
Lochkarne ¹ & 2	24	13.20	25	6.10	25	13.40	25	14.40	British.	477.0	62.0	18.8	Rotterdam, Holland	Vancouver, B. C.	General.	957	10,802	7,595
Belgium Maru.	25	6.55	25	7.10	25	14.25	25	15.40	Japanese.	385.0	51.0	23.10	New York, N. Y.	Kobe, Japan.	Scrap steel.	6,176	6,219	4,611
Asrolabe.	25	5.20	25	11.10	25	17.53	25	19.18	French.	352.0	52.0	18.6	Dunkirk, France.	Noumea, N. Caled.	General.	803	5,580	3,797
Svenor ²	25	13.25	25	13.30	25	20.17	25	21.18	Norwegian.	460.0	59.0	21.0	Hamburg, Germany	Los Angeles, Calif.	Ballast.	8,301	5,502	
Otra.	25	11.55	25	14.40	25	20.17	25	22.44	British.	450.0	58.4	28.1	London, England	Napier, N. Z.	General.	4,560	8,343	5,547
El Aleo ¹ & 2	25	15.00	25	15.10	25	22.20	25	23.14	Japanese.	440.0	60.0	21.8	Philadelphia, Pa.	La Libertad, Ecua.	Ballast.		7,555	5,049
Kimi Maru ²	26	7.05	26	7.20	26	13.45	26	14.14	Japanese.	446.0	60.0	18.8	New York, N. Y.	Kobe, Japan.	Gen., auto parts.	1,733	8,932	6,304
Osanig.	25	22.05	26	8.15	26	15.05	26	16.00	American.	380.0	53.0	15.6	Baltimore, Md.	San Francisco, Cal.	General.	1,380	5,685	4,233
Pennsylvania.	26	8.15	26	9.25	26	16.41	26	17.50	American.	407.7	53.7	18.0	Boston, Mass.	Seattle, Wash.	General.	2,211	7,107	5,041
Negs ¹ & 2	24	8.30	26	11.45	26	16.45			American.	431.0	54.3	19.11	Brooklyn, N. Y.	Pro Armuelles, R. P.	Lumber, ties.	18	46	22
Real ³	25	22.35	26	10.38	26	16.45			Panamanian	62.0	17.0		Cristobal, C. Z.	Talara, Peru.	Ballast.		18	
Danmark ¹ & 2	25	12.10	26	18.40	27	10.57	27	12.05	Danish.	490.8	67.0	18.0	Nyborg, Denmark.	Vancouver, B. C.	General.	1,479	6,642	4,860
Axel Johnson ²	26	12.40	27	6.05	27	13.47	27	15.00	Swedish.	392.0	52.6	17.5	Stockholm, Sweden	Vancouver, B. C.	General.			
Lillian Luckenbach.	27	6.40	27	7.10	27	14.48	27	15.50	American.	448.9	60.2	19.0	Boston, Mass.	Seattle, Wash.	General.	1,971	9,294	6,865
Roxen.	27	9.55	27	10.10	27	16.54	27	18.10	Swedish.	377.0	54.2	18.0	Antwerp, Belgium.	San Francisco, Cal.	General.	4,018	6,235	4,486
Jutlandia ²	27	12.25	27	14.40	27	21.30	28	15.30	Danish.	470.0	53.0	13.0	Copenhagen, Den.	San Francisco, Cal.	Cement.	3,773	5,364	3,950
Fella ²	27	7.00	27	15.45	27	22.45	27	23.55	Italian.	330.0	55.0	15.1	Treviso, Italy.	Vancouver, B. C.	General.	1,088	7,841	6,043
Pacific.	27	21.00	28	6.10	28	14.05	29	00.35	British.	435.9	60.6	19.0	Glasgow, Scotland	Vancouver, B. C.	General.	464	9,633	6,998
Exportor ²	27	15.20	28	6.00	28	14.04			American.	149.0	30.0	12.0	Charleston, S. C.	Los Angeles, Calif.	Ballast.			
Contocook ⁵	27	15.20	28	6.00	28	14.04			U. S. Navy.									

¹ Tanker.² Motor ship.³ Motor schooner.⁴ Transport.⁵ Tug.⁶ Paper, coffee, and general.

	16	13	30	28	6	10	28	14	04	Colombian	Colombian Government	92	0	10	0	Cristobal, C. Z.	Buenaventura, Col.	Ballast	5,796
Andagoya ¹	27	21	20	28	8	10	28	15	14	Dutch	Anglo-Saxon Pet. Co.	450	0	20	7	Rotterdam, Holl'd	Buenaventura, Col.	Ballast	5,361
Manzanara ²	27	10	20	28	8	10	28	16	17	German	Hamburg-American Line	374	0	14	6	Hamburg, Germany	Champerco, Guat.	General	3,442
Palatia	27	21	10	28	9	20	28	16	10	Panamanian	Hans Elliot	108	0	8	6	Cristobal, C. Z.	Buenaventura, Col.	General	101
Nueva Panama ³	28	15	30	28	15	35	28	22	10	Japanese	Mitsui & Co.	400	0	15	0	New York, N. Y.	Moji, Japan	General	4,728
Shikisan Maru ⁴	28	15	30	28	15	35	28	22	10	Japanese	Mitsui & Co.	400	0	15	0	New York, N. Y.	Moji, Japan	General	4,728
No. 5219, C. Z.	28	15	30	28	15	35	28	22	10	American	George Brown	400	0	15	0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	1
President	28	14	35	29	6	05	29	14	16	American	Dollar Line	516	5	72	2	New York, N. Y.	Manila, P. I.	General	1,408
Virginia	29	5	55	29	7	15	29	14	51	British	Panama-Pacific Line	586	4	80	3	New York, N. Y.	San Francisco, Cal.	General	15,299
Chesapeake ¹	29	3	30	29	8	35	29	15	37	American	Anglo-American Oil Co.	476	8	63	17	Belfast, Ireland	Los Angeles, Calif.	General	18,170
Texmar	29	8	15	29	8	35	29	17	28	American	Calmar S. S. Corp.	410	5	54	3	Philadelphia, Pa.	Seattle, Wash.	General, steel	6,465
Canadian	29	11	10	29	11	20	29	18	55	British	Can. Nat. Steamships	400	0	52	0	Montreal, Canada	Vancouver, B. C.	General	4,909
Ranger	29	11	10	29	11	20	29	18	55	British	Can. Nat. Steamships	400	0	52	0	Montreal, Canada	Vancouver, B. C.	General	4,121
Adolf von	29	5	00	29	14	35	29	21	40	German	Hamburg-American Line	409	1	54	0	Hamburg, Germany	Valparaiso, Chile	General	5,504
Bayer	29	20	30	6	10	30	14	06	30	Danish	Comp. Adm. del Guano	320	0	44	0	Maracaibo, Venez.	Paipa, Peru	Ballast	3,372
Leise Maerak ²	29	20	30	6	10	30	14	06	30	American	Roosevelt S. S. Co., S. B.	395	5	53	0	Baltimore, Md.	Shanghai, China	General	5,233
Potter ³	29	20	30	6	10	30	14	06	30	American	Swayne & Hoyt	379	9	53	0	New Orleans, La.	Seattle, Wash.	General	4,103
Point Ancha	30	6	20	30	8	10	30	15	47	Colombian	Colombian Government	150	0	27	2	Rio Hacha, Colon	Tunaco, Colombia	Salt	307
Florancia	30	3	50	30	7	10	30	18	45	Colombian	Isthmian S. S. Lines	424	2	56	2	Mobile, Ala.	Tacoma, Wash.	Steel, general	4,450
Amistad City	30	11	45	30	11	10	30	17	41	American	Amer-Hawaiian Line	407	7	53	7	Boston, Mass.	Portland, Oreg.	General	5,094
Dakotan	30	11	45	30	11	10	30	17	41	American	Amer-Hawaiian Line	407	7	53	7	Boston, Mass.	Portland, Oreg.	General	5,094

Nitrate of soda, rosin, etc.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Iowan.....	24	5	55	24	7	11	24	14	30	24	14	30	American...	Amer-Hawaiian Line.	407	7	53	7	26	0	Portland, Oreg.	Boston, Mass.	General.	7,515	7	079	5	028
Byrnie ¹⁰	24	16	30	25	7	01	25	14	10	25	14	10	Norwegian...	Canadian Transp. Co.	351	3	51	4	24	0	Vancouver, B. C.	Hull, England.	(+)	6,530	4	944	3	118
Point Brava.....	24	19	00	25	7	35	25	15	10	25	15	10	American...	Swayne & Hoyt.	386	8	52	2	20	2	Portland, Oreg.	Houston, Tex.	Lumber, general.	4,869	5	696	4	125
Annam ¹⁰	25	7	30	25	9	27	25	18	20	26	1	30	Danish...	East Asiatic Co.	410	4	55	2	28	0	Vancouver, B. C.	Copenhagen, Den.	Grain, fruit.	9,159	7	067	5	285
Tai Yang ¹⁰	25	12	45	25	13	38	25	20	20	26	1	30	Norwegian...	Barber-Williamsen Line	461	0	60	6	21	4	Davao, P. I.	Boston, Mass.	General.	4,020	10	009	7	075
Real ¹⁰	25	10	10	25	10	10	25	22	35	26	9	50	Panamanian	Hans Elliot.	62	0	18	0	5	0	Balboa, C. Z.	Cristobal, C. Z.	Empty drums.	14	46	22	22	22
Pennsylvania...	25	10	10	26	6	15	26	13	25	27	14	52	American...	Panama-Pacific Line.	586	4	80	3	30	0	San Francisco, Cal.	New York, N. Y.	General.	7,086	25	262	18	194
Overtown.....													American...	U. S. Navy.	314	0	31	0	14	0	Balboa, C. Z.	Cristobal, C. Z.						
No. 239 ¹²													American...	Lukenbach Line.	448	9	60	2	28	1	Seattle, Wash.	Boston, Mass.	General.	7,643	9	262	6	853
Harry Lucken-	26	8	25	26	8	54	26	15	30	26	15	30	American...	Richard E. Byrd.	190	4	29	9	15	0	Oakland, Calif.	Boston, Mass.	Ballast.	861	381	5	442	
Bear of Oakland	26	21	50	27	7	15	27	14	40	27	15	20	British...	Donaldson Brothers.	425	0	56	0	28	0	Vancouver, B. C.	Glasgow, Scotland.	General.	7,654	7	827	5	442
Gregalia.....	26	21	50	27	7	15	27	14	40	27	15	20	British...	Donaldson Brothers.	425	0	56	0	28	0	Vancouver, B. C.	Glasgow, Scotland.	General.	7,654	7	827	5	442
Pacific.....	26	23	00	27	8	34	27	15	20	27	15	20	British...	Furness, Withy & Co.	435	9	60	2	27	1	Vancouver, B. C.	London, England.	General.	7,788	9	644	6	967
Reliance ¹⁰	26	23	00	27	8	34	27	15	20	27	15	20	British...	Furness, Withy & Co.	435	9	60	2	27	1	Vancouver, B. C.	London, England.	General.	7,788	9	644	6	967
Selma City.....	27	6	01	27	9	16	27	17	40	27	17	40	American...	Isthmian S. S. Lines	424	2	56	2	28	0	Honolulu, T. H.	New Orleans, La.	Sugar.	9,500	7	611	5	450
Mercury Sun ¹⁰	27	11	48	27	12	37	27	19	50	27	19	50	American...	Shell Oil Co.	480	0	66	0	30	0	Los Angeles, Calif.	Baltimore, Md.	Gasoline.	13,592	9	713	6	536
Nueva.....	27	11	55	27	13	09	27	21	10	28	9	20	Panamanian	Hans Elliot.	108	5	20	6	9	3	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	205	226	101	101	
Panama ¹⁰	27	12	30	27	13	41	27	21	05	27	21	05	American...	Amer-Hawaiian Line.	471	1	59	1	22	2	Seattle, Wash.	Boston, Mass.	General.	3,464	9	092	6	638
Nebraska.....	28	5	15	28	8	16	28	16	45	28	16	45	British...	W. R. Smith & Sons.	400	5	54	3	26	0	N. Westminster, B. C.	Cardiff, Wales.	General.	8,125	6	997	5	461
Leeds City.....	28	8	40	28	9	34	28	17	45	28	22	30	German...	Hamburg-American Line	477	5	63	1	27	0	Vancouver, B. C.	Hamburg, Germany.	General.	7,612	10	267	7	252
Vancouver.....	28	10	25	28	11	08	28	19	35	28	20	50	Danish...	W. Tankership Rhoderia.	470	1	63	2	27	2	Talara, Peru.	Rouen, France.	Naphtha.	11,447	9	302	6	127
Pendople ¹⁰	28	10	25	28	11	08	28	19	35	28	20	50	Danish...	W. Tankership Rhoderia.	470	1	63	2	27	2	Talara, Peru.	Rouen, France.	Naphtha.	11,447	9	302	6	127
Calgarolite ¹⁰	29	1	00	29	6	18	29	14	25	29	14	25	British...	Imperial Oil Co.	521	5	70	4	31	5	Talara, Peru.	Montreal, Canada.	Crude oil.	16,500	12	339	7	717

¹⁰ Motor ship.

¹² Motor schooner.

¹³ Lumber, grain, and whisky.

²² Destroyer.

²³ Motor oil.

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¹² Motor schooner.

¹³ Lumber, grain, and whisky.

²² Destroyer.

²³ Motor oil.

¹⁰ Motor ship.

¹² Motor schooner.

¹³ Lumber, grain, and whisky.

²² Destroyer.

²³ Motor oil.

¹⁰ Motor ship.

¹² Motor schooner.

¹³ Lumber, grain, and whisky.

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¹³ Lumber, grain, and whisky.

²² Destroyer.

²³ Motor oil.

¹⁰ Motor ship.

¹² Motor schooner.

¹³ Lumber, grain, and whisky.

²² Destroyer.

²³ Motor oil.

¹⁰

Lumber, grain, and whisky.

Destroyer.

Motor schooner.

Motor ship.

Tanker.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
July 29.....	Quirigua.....	United Fruit Co.	New York via wayports.	July 28.....	No. 669-M ¹⁷	Pan American Airways.	Barraquilla, Colombia.
July 29.....	Annetta I. ¹⁹	P. W. Hamilton.	Acaudi, Colombia.	July 28.....	Fortuna ¹⁸	United Fruit Co.	Colon, Rep. of Panama.
July 30.....	Venezuela.....	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	July 27.....	Pearl Marie ¹⁸	G. I. Bryan.	Bluefields, Nicaragua.
July 30.....	Saramacca.....	United Fruit Co.	Port Limon, Costa Rica.	July 29.....	No. 300-N ¹⁷	Pan American-Grace Airways.	Chelavio via wayports.
July 30.....	Santa Marta.....	United Fruit Co.	New York via Kingston.	July 29.....	Quirigua.....	United Fruit Co.	Port Limon, Costa Rica.
July 30.....	No. 145-M ¹⁷	Uraba Medellin & Cent. Airways.	Medellin, Colombia.	July 30.....	Cefalu.....	Standard Fruit & S. S. Co.	New Orleans via wayports.
July 30.....	Annetta I. ¹⁹	P. W. Hamilton.	Colon, Rep. of Panama.	July 30.....	Cavina.....	Elders & Pyffes, Ltd.	Avonmouth via wayports.
July 30.....	Anachucuna ¹⁹	A. Tagaropulos.	Colon, Rep. of Panama.	July 30.....	Venezuela.....	Royal Netherlands S. S. Co.	Amsterdam via wayports.
July 30.....	Inapaquina ¹⁹	A. Tagaropulos.	Colon, Rep. of Panama.	July 30.....	Annetta I. ¹⁹	P. W. Hamilton.	Colon, Rep. of Panama.
July 30.....	Fortuna ¹⁸	Standard Fruit & S. S. Co.	Colon, Rep. of Panama.	July 30.....	Inapaquina ¹⁹	A. Tagaropulos.	Colon, Rep. of Panama.
PORT OF BALBOA.				PORT OF CRISTOBAL.			
July 24.....	Antigua.....	United Fruit Co.	San Francisco, Calif.	July 24.....	Antigua.....	United Fruit Co.	San Francisco, Calif.
July 28.....	Almirante ²⁰	G. Tamm.	Panama Bay, R. P.	July 28.....	Almirante ²⁰	G. Tamm.	Panama Bay, R. P.

* Other than ships passing through the Canal.

²⁰ Motor ship.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 90 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Tolls Charges for Transit of The Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... .72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton..... .50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessels to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton..... 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake to original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in current tariff or supplements thereto.

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hind-quarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Fire aboard the "Constance Chandler."

The steamship *Constance Chandler* of the Arrow Line, bound from New York to the west coast of the United States, was brought into Cristobal on July 10, 1932, with fire in the No. 3 hold and with steering gear out of order. The Panama Canal tug *Tavernilla* had met the vessel about 20 miles out. After removal of part of the cargo the fire was extinguished in the morning of July 11, repairs were made to the steering gear and the voyage was resumed on July 13. The cause of the fire was not determined.

Panama Canal Traffic During the Fiscal Year 1932, Segregated by Nationality of Vessels.

Commercial traffic through the Panama Canal in the fiscal year 1932, was made up of 22 nationalities as compared with 19 in the previous fiscal year. Transits of vessels of the United States registry, totaling 1,917, exceeded those of any other nationality, with British, German, Norwegian, Japanese, Dutch, Swedish, Danish, Panamanian, French, and Italian following in order named. Vessels of the 10 aforementioned nationalities, excluding those of Panama because of their low average net tonnage, made up 95.1 per cent of the total transits for the year, 97.7 per cent of the net tonnage (Panama Canal measurement), paid 97.7 per cent of the total tolls collected, and carried 97.4 per cent of the total cargo during the year.

The following statement shows the commercial traffic through the Canal during the fiscal year 1932, segregated according to registry of vessels, with the grand totals for the two preceding fiscal years:

TOTAL TRAFFIC FOR FISCAL YEAR 1932, BY NATIONALITY OF VESSELS.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	15	82,487	64,440	103,643	65,874	\$71,889.20	80,798
British.....	1,054	5,905,997	4,293,526	7,189,973	4,358,934	5,071,635.31	4,633,068
Chilean.....	5	8,856	6,710	13,337	7,754	8,258.09	6,420
Colombian.....	33	5,350	5,212	7,912	5,252	5,720.03	4,424
Costa Rican.....	1	331	333	497	255	249.75	.....
Danish.....	105	561,492	391,131	640,687	403,156	472,460.19	521,481
Danzig.....	33	244,300	207,894	351,636	199,028	217,087.09	238,884
Dutch.....	117	553,085	369,944	625,641	373,360	448,527.20	440,870
Finnish.....	1	4,460	4,498	4,568	2,760	5,352.00	5,660
French.....	81	454,890	297,566	531,694	305,829	371,786.60	338,786
German.....	338	1,280,999	864,591	1,460,065	871,777	1,072,736.05	1,078,738
Greek.....	16	61,544	41,207	64,338	39,836	48,892.40	69,034
Honduran.....	4	10,060	8,116	13,196	8,024	8,694.10	1,567
Italian.....	67	479,441	336,920	623,579	370,173	414,286.78	215,139
Japanese.....	179	930,349	797,480	1,226,693	787,392	991,758.25	1,031,704
Norwegian.....	311	1,530,459	1,032,132	1,724,341	1,037,446	1,215,134.95	1,427,284
Panamanian.....	102	81,130	44,463	83,664	44,473	54,948.16	48,046
Peruvian.....	3	3,367	3,270	4,614	2,642	4,049.60	4,615
Spanish.....	2	8,470	6,832	11,508	6,904	7,319.20	7,650
Swedish.....	114	538,989	376,576	937,634	458,649	435,051.16	761,015
United States.....	1,917	10,790,751	8,027,221	13,106,853	8,003,940	9,749,018.51	8,835,055
Yugoslav.....	8	38,612	27,727	44,868	27,690	32,522.43	52,760
Total, 1932.	4,506	23,625,419	17,207,789	23,770,941	17,386,148	20,707,377.05	19,807,998
Total, 1931.	5,529	27,792,146	20,595,189	34,232,824	20,768,461	24,645,456.57	25,082,800
Total, 1930.	6,185	29,980,614	22,683,006	37,430,657	22,797,619	27,076,890.01	30,030,232

As related to the total traffic and as compared with the fiscal year 1931, the classification by nationality is more clearly shown in the following tabulation in which the percentage of the fiscal years'

traffic (1931 and 1932) is substituted for actual figures. In the tabulation, figures are shown for only those nationalities contributing 450,000 or more net tons, Panama Canal measurement, others being classed as "all others":

Nationality.	Percentage of total traffic in fiscal year.							
	No. of ships.		Panama Canal net tonnage.		Tolls.		Tons of cargo.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
United States.....	43.7	42.5	45.3	45.7	46.4	47.1	47.1	44.6
British.....	25.1	23.4	27.0	25.0	26.7	24.5	23.8	23.4
Norwegian.....	6.5	6.9	6.3	6.5	5.7	5.9	6.9	7.2
German.....	6.6	7.5	5.1	5.4	4.9	5.2	5.0	5.4
Japanese.....	3.5	4.0	3.7	4.2	4.3	4.8	4.4	5.2
Danish.....	2.2	2.4	2.2	2.4	2.1	2.3	2.4	2.6
Dutch.....	2.2	2.6	2.1	2.3	1.9	2.2	1.9	2.2
Swedish.....	2.0	2.5	1.9	2.3	1.7	2.1	2.9	3.8
Italian.....	1.2	1.5	1.7	2.0	1.6	2.0	1.0	1.1
French.....	2.0	1.8	2.2	1.9	2.1	1.8	2.0	1.7
All others.....	5.0	4.9	2.5	2.3	2.6	2.1	2.6	2.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Foreign naval vessels, other than transports, colliers, hospital ships, and supply ships, pay tolls at the rate of \$0.50 per displacement ton. Included in the above tabulations of transits and tolls, but not of tonnages are the foreign naval vessels transiting the Canal during the fiscal year 1932, and paying tolls on the basis of displacement:

Nationality.	No. of ships.	Displacement tonnage.	Tolls.
British.....	7	32,430	\$16,215.00
French.....	1	7,175	3,587.50
German.....	1	6,545	3,272.50
Total.....	9	46,150	23,075.00

Transits of vessels of all the 10 leading nationalities above listed, with the exception of Swedish and Italian, showed decreases in comparison with 1931. Vessels of Swedish registry with 114 in 1932, made three more transits than in 1931, while those of Italy, with 67, made the same number as in 1931. Vessels of United States registry declined 500 transits, or 20.7 per cent, in comparison with 1931, while those of British registry decreased 336 transits, or 24.2 per cent. Of the 8 leading nationalities showing decreases during the year, those of Dutch registry showed the least percentage of loss—6.4 per cent. With respect to net tonnage (Panama Canal measurement) of vessels, losses were recorded in all the leading nationalities with the exception of Sweden and Italy which showed slight increases.

"Bear of Oakland" Transits Canal.

The *Bear of Oakland*, recently acquired by Admiral Richard E. Byrd, transited the Canal on July 27, 1932, and cleared on the following day for New York, en route from Oakland, Calif., to Boston, where it was planned to outfit her for a 2-year trip to the Antarctic. The vessel, a coal-burning steamer with an auxiliary barkentine rig, is of wood construction, 190 feet long, 30 feet beam, and of 726 gross tons. She was built in Scotland in 1874 for the whaling trade, and in later years used as a cutter by the United States Government in Alaskan waters. While in the Government's service she was known as the *Bear*.

Oil Plant Operations on Sundays and Holidays.

THE PANAMA CANAL, SUPPLY DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 2, 1932.

To steamships agents and fuel oil companies:

1. With reference to the circular issued under date of March 14, 1932, restricting the operation of the Fuel Oil Plants on Sundays and holidays, you are advised that on account of further decline in business the oil plants will be operated hereafter during the first shift on Sundays and holidays on the same basis as they are now being operated on the second shift.

2. This means that if it is desired to handle a commercial vessel for bunkers or discharge of oil, etc. between the hours of 7 a. m. and 3 p. m. on Sundays and holidays, it will be necessary to notify the oil plant concerned before 6 a. m. so that the plant crew can be called to duty. Also similar notice must be given before 2 p. m. as at present if a commercial ship is to be handled after 3 p. m. on Sundays and holidays. Failure to give such notice will result in no working crew being available at the plant.

3. It is believed that no serious inconvenience will result to shipping by reason of this procedure if all concerned will give the necessary advance notice, and your cooperation is solicited in this regard to avoid unnecessary delays to vessels.

ROY R. WATSON,
Chief Quartermaster.

APPROVED:

H. BURGESS,
Governor.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., July 28, 1932.

No. 1104.

AID TO NAVIGATION.

The following cablegram was received by the Captain of the Port at Cristobal from the Captain of the Port at Buenaventura, Colombia.

July 27, 1932, 4.34 p. m.—Visible remains of the wreck of the *Tritonia* in Buenaventura Harbor has been removed and the site is marked with a buoy with a green light. The submerged portion of the wreck remains as before.

Approximate position: 3° 53' N., 77° 06' W.

H. BURGESS,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 2, 1932.

No. 1107.

Central America, Corinto Harbor, Costa Rica, Blanca Islet. From the commanding officer of the U. S. S. *Memphis*, on July 29, 1932:

Corinto Harbor: There are nine (9) finger cribs 75 yards in length built at right angles to the shore, at 80-yard intervals at Punta Icaco. A rock sea wall is being constructed at this point.

The church spire is obscured westward of a line through that object and No. 12 buoy.

Buoys No. 3 and No. 9 are missing. Light buoy No. 2 at entrance of Cardon Channel is moored 400 yards, 304°, from Cardon Head light. (H. O. Light list Vol. No. 1-No. 3141 Remarks.) Light buoy No. 7 is not listed in reference (b). All buoys in Corinto Harbor have recently been painted.

Central America, Costa Rica, Blanca Islet. (H. O. Light list Vol. No. 1-No. 3139.5.) On 26 July, 1932, the above light was observed to be showing one flash every five and two-fifth (5-2/5) seconds. Approximate position 9° 32' 00" N., 85° 06' 30" W.

H. BURGESS,
Governor.

Corrections.

In the issue of THE PANAMA CANAL RECORD for November 18, 1931 (Vol. XXV, No. 16), page 217, in statement captioned "Traffic by Commodities for October, 1931," the tonnage of the commodity lumber, 204,007, in the second column, is changed to read 196,364, and the amount in the last column, 259,513, is changed to read 251,870. The tonnage for gasoline, benzine, naphtha under "oils," in the second column on the same page, 155,884, is changed to read 163,527 tons, and the amount in the last column, 211,180, is changed to read 218,823.

In the issue of June 15, 1932 (Vol. XXV, No. 46), under heading, "Traffic by Commodities for May, 1932," page 643, the tonnage of 847 shown opposite lead, under metals, in the third column, should be changed to 25 tons.

Executive Order.

Delimiting Canal Zone Judicial Districts.

SECTION I. By virtue of the authority vested in me by law, Section I of Executive Order No. 1898, of March 12, 1914, relating to the Canal Zone judiciary, as amended by Executive Orders No. 3965, of February 26, 1924, and No. 5704, of September 2, 1931, is hereby amended so that in addition to the area now included in the Balboa Division of the District Court of the Canal Zone there shall be included in that division the following additional area:

A strip of land 200 ft. in width, extending 62.5 ft. from the center line of the Madden Road on its eastern boundary and 137.5 ft. from the center line of the Madden Road on its western boundary, containing an area of 105.8 acres or 42.81 hectares, as shown on Panama Canal Drawing No. X-2005-33, Sheet 1, Revised, the description of the said center line being as follows:

Beginning at the intersection of the located center line of the Madden Road and the Canal Zone-Republic of Panama 5-mile boundary line, said point being located N. 29° 20' W. a distance of 168.04 ft. along said boundary line from boundary monument No. 65, the geodetic position of boundary monument No. 65 being latitude N. 9° 07' plus 3,948.8 ft. and longitude 79° 37' plus 1,174.6 ft.; thence N. 43° 10' E. a distance of 541.1 ft. to station 324 plus 06.65 ft.; thence on a 3° curve to the left, a distance of 347.2 ft. to station 327 plus 53.9 ft.; thence N. 32° 45' E., a distance of 656.8 ft. to station 334 plus 10.7 ft.; thence on a 3° curve to the left a distance of 455.55 ft. to station 338 plus 66.25 ft.; thence N. 19° 05' E. a distance of 1,135.70 ft. to station 350 plus 01.95 ft.; thence on an 8° curve to the left a distance of 650.7 ft. to station 356 plus 52.7 ft.; thence N. 32° 58' W. a distance of 636.0 ft. to station 362 plus 88.7 ft.; thence on a 10° curve to the right a distance of 227.3 ft. to station 365 plus 16.0 ft.; thence N. 10° 14' W. a distance of 314.5 ft. to station 368 plus 30.5 ft.; thence on a 5° curve to the left a distance of 178.7 ft. to station 370 plus 09.2 ft.; thence N. 19° 10' W. a distance of 4,250.1 ft. to station 412 plus 59.3 ft.; thence on a 5° curve to the right a distance of 720.7 ft. to station 419 plus 80.0 ft.; thence N. 16° 52' E. a distance of 1,664.3 ft. to station 436 plus 44.3 ft.; thence on a 5° curve to the left a distance of 597.7 ft. to station 442 plus 42.0 ft.; thence N. 13° 01' W. a distance of 543.8 ft. to station 447 plus 85.8 ft.; thence on a 5° curve to the right a distance of 770.7 ft. to station 455 plus 56.5 ft.; thence N. 25° 31' E. a distance of 1,492.2 ft. to station 470 plus 48.7 ft.; thence on a 5° curve to the right a distance of 808.0 ft. to station 478 plus 56.7 ft.; thence N. 65° 55' E. a distance of 281.8 ft. to station 481 plus 38.5 ft.; thence on an 8° curve to the left a distance of 446.4 ft. to station 485 plus 84.9 ft.; thence N. 30° 12' E. a distance of 479.6 ft. to station 490 plus 64.5 ft.; thence on a 5° curve to the left a distance of 329.4 ft. to station 493 plus 93.9 ft.; thence N. 13° 44' E. a distance of 1,639.9 ft. to station 510 plus 33.8 ft.; thence on a 5° curve to the left a distance of 832.3 ft. to station 518 plus 66.1 ft.; thence N. 27° 53' W. a distance of 483.9 ft. to station 523 plus 50.0 ft.; thence on an 8° curve to the right a distance of 469.6 ft. to station 528 plus 19.6 ft.; thence N. 9° 41' E. a distance of 1,697.6 ft. to station 545 plus 17.2 ft.; thence on a 10° curve to the left a distance of 451.7 ft. to station 549 plus 68.9 ft., which is the intersection of the Madden Road center line with the boundary line of the additional land acquired by the United States on the left bank of the Rio Chagres in the vicinity of the Madden Dam. (All bearings are true bearings.)

SECTION II. The area hereinabove described is that in which jurisdiction was ceded to the Government of the United States by the Government of the Republic of Panama, in Decree No. 43 of October 27, 1928, during the period of construction of the Madden Dam.

SECTION III. This order shall take effect from and after the date hereof and shall be in force so long as the Government of the United States exercises jurisdiction in the area herein described.

HERBERT HOOVER

THE WHITE HOUSE,
July 9, 1932.

Information from American Consuls.

The Consular officers of the United States at seaports all over the world are *ex officio* representatives of The Panama Canal for the purpose of furnishing information to shipping and allied interests as to conditions, charges, etc., at the Panama Canal affecting the operation of ships. The current publications of The Panama Canal of interest to shipping are furnished to the Consular officers and filed for reference.

It is not desired that inquiries of a general nature be addressed to the Consular officers, or that they be burdened with requests which should be made direct to The Panama Canal; but ships' operators who may not be sufficiently advised as to charges, supplies, facilities, etc., at the Canal will often save time by applying to the nearest American Consul.

Executive Order.

Regulating the Transportation of Liquors over the Highways and Waterways of the Canal Zone.

By virtue of the authority vested in me by an act entitled "AN ACT To provide for the transportation of liquors under seal through the Canal Zone," approved July 5, 1932, and reading as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 20 of the National Prohibition Act is hereby amended by adding after the proviso therein the following additional proviso: *'And provided further,* That this section shall not apply to the transportation of liquor, under seal, in transit to and from points outside the Canal Zone over the highways or waterways of the Canal Zone under regulations to be prescribed by the President, when such liquor is not destined for use or consumption or final delivery in the Canal Zone,' "

I hereby establish the following Executive order for the Canal Zone, effective from and after the date of this order, regulating the transportation of liquors under seal in transit to and from points outside of the Canal Zone over the highways or waterways of the Canal Zone when such liquor is not destined for use or consumption or for final delivery in the Canal Zone:

1. Each shipment of such liquors shall be accompanied at all times by a certificate by proper Panamanian authority showing that the liquors concerned are in transit through the Canal Zone, giving the name of consignor and consignee, and specifying the point of origin and point of destination outside of the Canal Zone and the United States and all territory under the jurisdiction of the United States.

2. The outside containers of such liquors, whether boxes, barrels, kegs, cases, or other containers, shall be sealed by the official issuing the above certificate in such manner that no part of the contents can be removed without breaking such seals, and such containers and liquors shall remain under seal while passing through Canal Zone territory.

3. The certificate covering such liquors in transit through the Canal Zone must be exhibited upon demand to the proper officers or officials of the Canal Zone.

4. The transit must be continuous, and no such liquor in transit shall be permitted to remain within the Canal Zone.

5. The Governor of the Panama Canal is hereby authorized to prescribe from time to time rules and regulations to carry out this order.

HERBERT HOOVER

THE WHITE HOUSE,
July 16, 1932.

[No. 5888]

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective August 2, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.24
Brass, sheet, average.....	Lb.	.24
Bronze, Tobin, average.....	Lb.	.24
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.16
Oakum, Navy, unspun.....	Lb.	.13
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.50
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, in drums, Gulftriton Med. No. 2135.....	Gal.	.33
Oil, engine, gas, extra heavy, in cases, Gulftriton No. 2250.....	Gal.	.45
Oil, engine, gas, extra heavy, in drums, Gulftriton, No. 2250.....	Gal.	.38
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.49
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.11
Paint, zinc oxide, dry.....	Lb.	.10
Paint, zinc oxide, in oil.....	Lb.	.11
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3.....	Lb.	.08
Grease, yellow, cup, No. 5.....	Lb.	.09
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.09
Waste, cotton, white.....	Lb.	.15

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending July 31, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Cerigo	Hamburg-American Line	July	17		233
Ancon	Panama Railroad S. S. Line	July	17		410
Sixaola	United Fruit Co.	July	17		134
Santa Cecilia	Panama Mail S. S. Co.	July	17		535
Colombia	Royal Netherlands S. S. Co.	July	17		184
Acajutla	Pacific Steam Navigation Co.	July	17	435	672
Bogota	Colombian S. S. Line	July	17	8	396½
Pastores	United Fruit Co.	July	18	3	52
Santa Barbara	Grace Line	July	18	181	29
Juan Sebastian Elcano	Spanish S. S. Line	July	18	96	244
West Ivis	McCormick S. S. Line	July	18	20	16
Oakland	Hamburg-American Line	July	19	115	93
Macoris	French Line	July	19	20	415
Coppename	United Fruit Co.	July	20	661	72
Baarn	Royal Netherlands S. S. Co.	July	20	(*)	67
Balboa	Johnson S. S. Line	July	20	1	(*)
Sveadrott	South Pacific Line	July	20	238	(*)
San Clemente	Quaker S. S. Line	July	20	79	5
Santa Maria	Grace Line	July	21	266	530
Albert Voegler	Hamburg-American Line	July	21	26	(*)
Stella Lykes	Lykes Brothers	July	21	376	49
Santa Elisa	Panama Mail S. S. Line	July	21	477	46
Nueva Panama	United Fruit Co.	July	21	233	36
Guayaquil	Panama Railroad S. S. Line	July	21	897	479
President Monroe	Dollar Line	July	22	1	(*)
Calamares	United Fruit Co.	July	22	192	11
President Coolidge	Dollar Line	July	22	544	(*)
Arta	North German Lloyd	July	22	4	(*)
Contessa	Standard Fruit & S. S. Co.	July	22	232	130
Abraham Lincoln	Fred Olsen Line	July	23	(*)	230
Coppename	United Fruit Co.	July	23	38	
Metapan	United Fruit Co.	July	23	270	
Durazzo	Hamburg-American Line	July	23	1,172	
Anachucuna	A. Tagaropoulos	July	23	45	
Annetta I.	P. W. Hamilton	July	23	32	
Los Angeles	Hamburg-American Line	July	23	101	
Call	North German Lloyd	July	24		340
Coppename	United Fruit Co.	July	24		1,051
Metapan	United Fruit Co.	July	24		371
Los Angeles	Hamburg-American Line	July	24		292
Toronto	Barber S. S. Line	July	24	2	(*)
Amerika	Danish-East Asiatic Co.	July	24	20	(*)
Lochkatrine	Royal Mail Steam Packet Co.	July	24	124	6
Martinique	Colombian S. S. Line	July	24	112	660
Antiochia	Hamburg-American Line	July	25		256½
Calamares	United Fruit Co.	July	25	(*)	112
Tai Yang	Barber-Wilhelmsen Line	July	25	200	8
Saramacca	United Fruit Co.	July	26	578	26½
Venezuela	Royal Netherlands S. S. Co.	July	26	134	7
Axel Johnson	Johnson S. S. Line	July	26	141	(*)
Pearl Marie	R. Feuillebois	July	27		24
Fella	Navigazione Libera-Trilestina	July	27	383	(*)
Daytonian	Leyland S. S. Line	July	27	274	28
Palatia	Hamburg-American Line	July	27	97	342
Nueva Panama	United Fruit Co.	July	27	230	43
Cristobal	Panama R. R. S. S. Line	July	27	1,921	575
Vancouver	Hamburg-American Line	July	28	68	149
San Mateo	United Fruit Co.	July	29	1	(*)
Quirigua	United Fruit Co.	July	29	168	3½
Annetta I.	P. W. Hamilton	July	29	32	
Manizales	Hamburg-American Line	July	29	1,008	
Adolf von Baeyer	Hamburg-American Line	July	29	63	183
Cefalu	Standard Fruit & S. S. Co.	July	29	249	151
Remuera	New Zealand Shipping Co.	July	29	54	(*)
Salvador	Pacific Steam Navigation Co.	July	30	339	
Venezuela	Royal Netherlands S. S. Co.	July	30	31	222
Orazio	Italian S. S. Line	July	30	7	
Anachucuna	A. Tagaropoulos	July	30	23	
Santa Marta	United Fruit Co.	July	30	281	345
Saramacca	United Fruit Co.	July	30	220½	637
Santa Ana	Grace Line	July	30	366	517
Bolivar	Colombian S. S. Line	July	31	229½	419½
Capss	Anglo-Saxon Petroleum Co.	July	31	12,400	
Durazzo	Hamburg-American Line	July	31	441	

* No cargo discharged.

* No cargo laded.

* 30 pounds.

* 2 packages.

* 6 packages.

Telegraphic Address of The Panama Canal.

The cable and radio address of The Panama Canal, on the Isthmus, is "Pancanal, Panama;" in the United States, "Pancanal, Washington."

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1932 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Ancon</i>	August 2....	August 7....	August 10....	August 14....	August 17....	August 22.
<i>Cristobal</i>	August 16....	August 21....	August 24....	August 29....	September 1..	September 6.
<i>Ancon</i>	August 30....	September 4..	September 7..	September 11.	September 14.	September 19.
<i>Cristobal</i>	September 13.	September 18.	September 21.	September 25.	September 28.	October 3.
<i>Ancon</i>	September 27.	October 2....	October 5....	October 9....	October 12....	October 17.
<i>Cristobal</i>	October 11....	October 16....	October 19....	October 23....	October 26....	October 31.
<i>Ancon</i>	October 25....	October 30....	November 2....	November 6....	November 9....	November 14.
<i>Cristobal</i>	November 8....	November 13.	November 16.	November 20.	November 23.	November 28.
<i>Ancon</i>	November 22.	November 27.	November 30.	December 4....	December 7....	December 12.
<i>Cristobal</i>	December 6....	December 11.	December 14.	December 19.	December 22.	December 27.
<i>Ancon</i>	December 20..	December 25..	December 28..	January 1....	January 4....	January 9.

¹ Changed; previously scheduled for September 24.

Steamers sail at 4 p. m. standard time from Pier 65, North River, foot of West 25th St., New York.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Density of Water in Balboa and Cristobal Harbors.

Place.	Weight of sea water in ounces per cubic ft.			Rainy season. Average tempera- ture. Degrees F.
	Average.	Maximum.	Minimum.	
Cristobal (between docks 8 and 9).....	1018	1020	1013	84.0
Balboa (dock 18).....	1011	1021	1005	83.0

(NOTE.—The above is based on two months' observations at Cristobal and Balboa. Average taken at 12-foot depth. Minimum occurred after heavy rain at 3-foot depth at Cristobal and 12-foot depth at Balboa. The weight of a cubic foot of fresh water at 35° F. is 995 ounces.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal, Washington, D. C.

Entered as second-class matter February 6, 1918, at the Post Office

at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., August 10, 1932.

No. 2.

Traffic by Nationality for July, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of July, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for July, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Brazilian.....	1	3,656	2,797	4,969	3,062	\$3,496.25	2,277
British.....	* 32	183,578	127,605	219,295	132,374	157,319.63	71,019
Colombian.....	1	307	302	405	308	368.40	630
Danish.....	5	27,765	20,270	33,675	20,807	22,183.33	5,803
Danzig.....	2	14,719	11,391	19,292	10,950	10,597.68	.....
Dutch.....	4	24,694	18,262	30,534	18,377	19,113.99	3,184
French.....	2	11,265	7,463	12,823	7,667	9,328.75	1,734
German.....	11	37,254	23,576	41,817	24,250	29,470.00	17,344
Italian.....	3	25,272	16,819	31,681	19,264	21,023.75	1,882
Japanese.....	9	47,084	38,646	58,719	37,653	48,126.25	39,316
Norwegian.....	12	61,133	42,128	70,339	42,334	44,835.00	11,723
Panamanian.....	12	543	539	1,055	535	574.56	359
Swedish.....	6	30,273	18,235	31,491	23,187	22,793.75	20,733
United States.....	74	452,341	342,821	557,434	341,218	400,254.94	186,713
Total, July, 1932.....	174	919,884	670,854	1,113,079	681,986	789,486.28	362,717
Total, July, 1931.....	207	1,070,388	780,413	1,290,498	790,441	908,341.63	500,136
Total, July, 1930.....	230	1,129,916	837,604	1,839,381	842,686	947,428.30	575,964

* Includes 2 naval vessels totaling 10,970 tons displacement (tolls \$5,435) in transits and tolls but not in tonnage.

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	32	173,381	130,306	214,879	130,027	\$162,882.50	230,045
Danish.....	4	16,490	10,807	17,570	10,899	13,508.75	25,937
Danzig.....	1	6,127	5,263	8,939	5,007	6,585.00	11,447
Dutch.....	3	16,623	12,684	20,781	12,842	15,855.00	23,215
French.....	2	12,352	7,197	13,707	7,621	8,996.25	15,573
German.....	12	39,319	26,549	42,837	26,905	32,419.78	43,650
Italian.....	2	15,436	8,895	18,730	11,239	11,118.75	10,513
Japanese.....	5	27,794	20,119	32,863	19,792	25,148.75	24,375
Norwegian.....	13	71,499	49,748	82,588	49,805	62,185.00	111,462
Panamanian.....	12	462	451	872	478	544.30	718
Swedish.....	2	9,322	5,142	9,068	6,606	6,427.50	11,520
United States.....	64	367,803	267,585	439,107	266,837	333,570.50	388,809
Total, July, 1932.....	152	756,608	544,751	901,941	548,058	679,242.08	897,264
Total, July, 1931.....	199	1,040,313	755,273	1,267,382	763,270	940,296.82	1,366,667
Total, July, 1930.....	258	1,308,979	959,584	1,640,726	999,696	1,233,083.52	1,826,083

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Brazilian.....	1	3,656	2,797	4,969	3,062	\$3,496.25	2,277
British.....	64	356,959	257,911	434,174	262,401	320,202.13	301,064
Colombian.....	1	307	302	405	308	368.40	630
Danish.....	9	44,255	31,077	51,245	31,706	35,692.08	31,740
Danzig.....	3	20,846	16,659	28,231	15,957	17,182.68	11,447
Dutch.....	7	41,317	30,946	51,315	31,219	34,968.99	26,399
French.....	4	23,617	14,660	26,530	15,288	18,325.00	17,307
German.....	23	76,573	50,125	84,154	51,155	61,889.78	60,994
Italian.....	5	40,708	25,714	50,411	30,503	32,142.50	12,395
Japanese.....	14	74,878	58,765	91,582	57,445	73,275.00	63,691
Norwegian.....	25	132,632	91,876	152,977	92,139	107,020.00	123,185
Panamanian.....	24	1,005	990	1,927	1,013	1,118.86	1,077
Swedish.....	8	39,595	23,377	40,559	29,793	29,221.25	32,253
United States.....	138	820,144	610,406	996,541	608,055	733,825.44	575,522
Total, July, 1932.....	326	1,676,492	1,215,605	2,015,020	1,230,044	1,468,728.36	1,259,981
Total, July, 1931.....	406	2,110,701	1,535,686	2,557,880	1,553,711	1,848,638.45	1,866,803
Total, July, 1930.....	488	2,438,895	1,827,188	3,030,107	1,842,382	2,180,511.82	2,402,047

* Includes 2 naval vessels totaling 10,970 tons displacement (tolls \$5,485) in transits and tolls but not in tonnage.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 5, 1932.

No. 1108.

MENACE TO NAVIGATION.

Panama Canal, Pacific entrance.—The S. S. *Steel Seafarer* reports at 8 p. m., August 4, a partly submerged wreckage 40 feet long, 10 feet wide, apparently a derelict hull of a barge.

Position: Latitude 7° 06' N., longitude 81° 44' W.

H. BURGESS,
Governor.

Comparison of Canal Traffic in July, 1932, with July Traffic in Previous Years.

Commercial traffic through the Canal during the month of July, 1932, with 326 transits, aggregating 1,676,492 net tons (Panama Canal measurement), and carrying 1,259,981 long tons of cargo, was the lowest July traffic since 1922. In comparison with July, 1931, commercial traffic for the past month declined 80 transits (19.7 per cent); 434,209 net tons (20.6 per cent); and 606,822 tons of cargo (32.5 per cent). In comparison with July, 1930, there was a decrease of 162 transits (33.2 per cent); 762,403 net tons (31.3 per cent); and 1,142,066 cargo tons (47.5 per cent).

The peak month for July traffic was reached in 1929, when 527 vessels, aggregating 2,468,280 net tons, and carrying 2,598,162 tons of cargo, made Canal transit. In comparison with these high figures last month's traffic decreased 38.1 per cent in transits, 32.1 per cent in net tonnage (Panama Canal measurement), and 51.5 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of July each year from 1915 to 1932, inclusive, and for comparison the monthly averages for the corresponding fiscal year ending June 30 preceding:

Calendar year.	Month of July.			Fiscal year.	Average per month for fiscal year.		
	Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.		Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.
1915.	166	542,676	715,253	1915.	102	361,197	465,567
1916.	145	482,202	624,061	1916.	63	199,687	257,843
1917.	181	557,411	664,924	1917.	150	483,213	588,213
1918.	169	497,489	584,998	1918.	172	547,839	627,669
1919.	158	510,808	568,172	1919.	169	510,416	576,385
1920.	225	856,798	886,814	1920.	206	712,170	781,208
1921.	206	810,613	708,982	1921.	241	951,323	966,601
1922.	251	1,127,871	1,211,100	1922.	223	951,455	907,075
1923.	474	2,310,027	2,337,784	1923.	331	1,550,482	1,630,656
1924.	422	2,036,097	2,097,154	1924.	436	2,179,073	2,249,559
1925.	418	1,951,295	1,969,654	1925.	389	1,904,596	1,996,570
1926.	456	2,154,821	2,185,527	1926.	433	2,064,549	2,169,787
1927.	509	2,406,955	2,450,468	1927.	456	2,185,651	2,312,351
1928.	509	2,318,395	2,291,955	1928.	538	2,454,886	2,469,226
1929.	527	2,468,280	2,598,162	1929.	534	2,468,483	2,555,250
1930.	488	2,438,895	2,402,047	1930.	515	2,498,385	2,502,519
1931.	406	2,110,701	1,866,803	1931.	461	2,316,012	2,090,233
1932.	326	1,676,492	1,259,981	1932.	376	1,668,785	1,650,667
				(2).	355	1,857,949	1,523,998

* Canal opened August 15, 1914.

* Average for 10½ months.

* Average for 7 months of calendar year.

Notaries Public in the Canal Zone.

The following is a list of notaries public commissioned in the Canal Zone as of August 9, 1932. The list gives, by towns, the names, where stationed, and the date of expiration of commission:

ANCON.

Boyd, Oscar S., Municipal Division, October 23, 1934.
 French, A. W., Gorgas Hospital, May 14, 1935.
 McDougall, J. B., District Attorney's Office, March 29, 1935.
 Norris, R. N., Municipal Division, August 11, 1933.
 Ohlson, E. F., Gorgas Hospital, January 18, 1934.
 Sheibley, F. H., District Court, October 27, 1932.
 Stutzman, M. A., Land Office, June 26, 1934.
 Walker, James J., District Court, November 22, 1934.

BALBOA.

Hyde, W. H., Port Captain, March 6, 1933.
 Illwitzer, P. G., Balboa Storehouse, October 12, 1932.
 Kalar, J. D., Port Captain, April 13, 1935.
 Kelley, Thomas H., Mechanical Division, August 18, 1933.
 Murray, P. E., Magistrate's Court, October 13, 1932.
 Prager, J. F., Balboa Storehouse, December 13, 1932.
 Smith, Walter R., Balboa Storehouse, September 4, 1934.

BALBOA HEIGHTS.

Attaway, E. F., Administration Building, Room 316, October 28, 1933.
 Barnes, J. O., Administration Building, Room 377, October 17, 1932.
 Boggs, W. B., Administration Building, Room 262, August 4, 1934.
 Buehler, G. H., Administration Building, Room 205, August 17, 1934.
 Daniels, W. L., Quarry Heights, July 13, 1935.
 Fenton, John A., Administration Building, Room 203, July 28, 1933.
 Schecker, C. A., Administration Building, Basement, January 19, 1933.
 Sims, Walter H., Quarry Heights, December 1, 1933.
 Taylor, R. G., Administration Building, Room 318, April 30, 1933.
 Uhler, H. L., Administration Building, Room 310, January 12, 1933.
 Ungar, J., Administration Building, Room 301, February 2, 1935.
 Wang, Frank H., Administration Building, Room 305, May 16, 1935.

COROZAL.

Grimm, G. L., Corozal Hospital, October 8, 1932.
 Lefever, John E., Corozal, February 28, 1934.
 West, Charles E., Albbrook Field, July 23, 1933.

CRISTOBAL-MOUNT HOPE.

Agnew, Harold A., United Fruit Co., September 4, 1932.
 Campbell, J. S., District Court, January 28, 1935.
 Clarke, V. J., Commissary Division, January 14, 1935.
 Concklin, A. W., Commissary Division, July 28, 1934.
 Ellis, Edward E., Coaling Plant, May 24, 1933.
 Flood, Arthur S., Customs Office, November 15, 1934.
 Fuller, Mrs. Maude W., Coco Solo, December 9, 1933.
 Kaufer, L. A., Cristobal Shops, June 14, 1935.
 MacSparran, E. S., Receiving and Forwarding Agency, December 5, 1933.
 Neely, Marion, U. S. Fleet Air Base, Coco Solo, October 12, 1934.
 Raymond, J. G., Commissary Division, January 12, 1935.
 Scarborough, W. W., Clubhouse (gold), January 21, 1933.
 Slocum, E. L., Chase National Bank, January 29, 1933.
 Walsh, M. H., Customs Office, August 5, 1935.
 Ward, Mrs. Marie L., Receiving and Forwarding Agency, August 2, 1935.
 Wood, Emory B., Cristobal Storehouse, January 28, 1934.

GATUN.

Cotton, Arthur E., Clubhouse (gold), May 16, 1933.

PARAISO.

Holzapfel, A. F., Dredging Division, September 30, 1932.
 Kimble, W. I., Dredging Division, August 5, 1935.

PEDRO MIGUEL.

Cauthers, R. A., Municipal Division, June 16, 1933.
 Rader, T. C., Pacific Locks, January 30, 1933.
 Wright, A. M., Dredging Division, February 2, 1933.

MADDEN DAM.

Evans, Jerome, Madden Dam Commissary, December 30, 1934.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, August 6, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Silverwheat ² .	31	20.20	31	6.25	31	13.19	31	14.30	British	Silver Line, Ltd.	456.3	62.0	21.6	New York, N. Y.	Belawan Deli, Sum.	(*) General.	4,450	6,618
West Cape.	23	2.10	31	7.15	31	14.31	31	15.55	American	McCormick S. S. Co.	409.5	54.2	17.0	Albany, N. Y.	Tacoma, Wash.	General.	2,179	4,960
Durazo.	23	21.25	31	8.15	31	15.28	31	16.40	German	Hamburg-American Line	226.0	34.0	13.3	Cristobal, C. Z.	Guayaquil, Ecuador	General.	2,179	4,960
Santa Ana.	30	16.10	31	11.10	31	17.22	31	23.30	American	Panama Mail S. S. Co.	369.0	51.6	23.5	New York, N. Y.	San Francisco, Cal.	General, coffee.	3,374	4,011
Real ¹ .	30	18.55	31	6.35	31	13.19	31	14.15	Panama	Hans Elliot.	62.0	17.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	46	22
Sun ² .	31	21.10	1	6.10	1	12.54	1	14.15	American	Sun Oil Co.	480.6	66.0	21.8	Chester, Pa.	Los Angeles, Calif.	Ballast.	9,620	6,476
S-15 ⁴ .			1	8.20	1	15.02			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		
S-16 ⁴ .			1	8.35	1	15.10			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		
S-17 ⁴ .			1	8.35	1	15.10			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		
Adriatic.	1	12.45	1	14.30	1	20.55	1	22.10	British	Alfred Holt & Co.	459.0	58.0	23.1	Philadelphia, Pa.	Yokohama, Japan.	General.	1,885	5,907
Port Hobart ² .	1	15.45	1	16.00	1	22.54	2	6.11	British	Con'ly & Dom. Line.	467.0	59.6	23.2	London, England	Norborne, Aus. lia.	General.	4,490	7,271
Chewink ⁵ .			1	7.15	1	13.27			American	U. S. Navy	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		
Retriever ⁶ .			1	7.15	1	13.27			American	U. S. Navy	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		
Taira.	1	18.05	2	6.25	2	13.54	2	15.30	British	Shaw, Savill & Albion.	477.0	63.0	26.5	London, England	Auckland, N. Z.	General.	2,733	8,149
Kagan.	2	15.05	2	15.30	2	21.39	2	22.38	American	Amer.-Hawaiian Line.	404.0	53.0	18.0	Boston, Mass.	Seattle, Wash.	General.	1,857	4,921
U. S. Grant ⁷ .	2	4.05	3	6.20	3	13.18	3	17.18	American	U. S. Army.	490.0	55.0	26.7	New York, N. Y.	San Francisco, Cal.	General.	221	
Dorothy.	3	2.40	3	7.05	3	14.44	3	16.15	American	Luckenbach Line	448.9	60.2	21.0	Boston, Mass.	Seattle, Wash.	General.	3,000	6,861
Sapelo ¹ .	2	12.25	3	8.08	3	15.10			American	U. S. Navy	461.6	60.0	18.0	Norfolk, Va.	Los Angeles, Calif.	General.	6	
Manizales.	7	20.20	3	9.20	3	16.45	3	18.00	German	Grace Line.	216.0	33.0	11.6	Cristobal, C. Z.	Buenaventura, Col.	Ballast.	1,132	741
West Ira.	3	13.20	3	13.30	3	20.16	3	21.30	American	Pac.-Arg.-Brazil Line.	410.5	54.2	16.6	Rosario, Argentine.	Los Angeles, Calif.	General.	527	5,011
Lobos ² .	3	4.10	3	14.05	3	21.35	3	22.38	British	Pacific Steam Nav. Co.	405.6	54.2	19.0	Hull, England	Valparaiso, Chile.	General.	3,098	4,756
Bronxville ² .	3	17.40	3	17.55	4	10.46	4	13.20	Norwegian	Fern Line.	415.0	54.2	26.0	Houston, Tex.	Yokohama, Japan.	Scrap, rail, cotton	7,643	5,058
Q. M. C. No. 1 ⁶ .	3	16.05	4	6.08	4	13.24	4	14.30	American	U. S. Army.	477.6	63.0	19.8	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	2,460	7,304
Tacoma.	3	16.05	4	6.08	4	13.24	4	14.30	German	Hamburg-American Line	477.6	63.0	19.8	Hamburg, Germany	Vancouver, B. C.	General.	2,460	7,304
Rio de Janeiro.	4	1.10	4	7.15	4	13.55	4	15.00	Japanese	Oaka Shosen Kaisha	461.2	62.0	22.0	Buenos Aires, Arg.	Kobe, Japan.	(*) General.	2,148	7,626
Eleanor.	4	6.30	4	8.20	4	16.07	4	17.55	American	Arrow Line.	410.5	54.3	22.0	Baltimore, Md	Seattle, Wash.	General.	4,982	4,788
Christenson.	4	6.30	4	8.20	4	16.07	4	17.55	British	Arrow Line.	410.5	54.3	22.0	Baltimore, Md	Seattle, Wash.	General.	4,982	4,788
Logician.	3	17.35	4	9.20	4	16.47	4	17.55	British	T. & J. Harrison	420.3	54.0	20.9	Liverpool, England	Vancouver, B. C.	Ballast.	6,052	4,688
Lake Oswego ² .	4	10.00	4	10.10	4	17.12	4	18.20	American	Ford Motor Co.	251.0	43.6	19.0	Chester, Pa.	Richmond, Calif.	Auto. parts.	2,120	1,698
City of Kobe.	4	8.00	4	12.05	4	18.54	4	20.00	British	Amer.-Manchurian Line	367.1	49.7	19.4	Philadelphia, Pa.	Shanghai, China.	General.	957	3,836
Santa Barbara ² .	4	5.25	4	14.05	4	20.21	5	11.23	American	Grace Line	466.0	64.0	23.3	New York, N. Y.	San Antonio, Chile.	General.	1,824	6,635
Ardenvohr ² .	4	15.20	4	15.25	4	22.25	5	8.00	British	Trinder, Anderson & Co.	415.0	56.0	25.5	New York, N. Y.	Brisbane, Australia	Gen., asphalt.	8,158	5,432
Orindno Maru.	4	23.10	5	6.05	5	14.09	5	15.30	Japanese	Tatsunuma Kisen Kaisha	400.0	54.0	25.1	Boca Grande, Fla.	Shanghai, China.	Phosphate, oil.	7,379	4,343
President Van Buren.	5	00.55	5	7.15	5	14.52	5	21.30	American	Dollar Line.	502.0	62.3	26.4	Boston, Mass.	Round the world.	General.	3,032	12,023
Nueva Panama ² .	5	14.55	5	14.55	5	20.40	6	1.10	Panama	Hans Elliot.	108.5	20.6	7.6	Cristobal, C. Z.	Buenaventura, Col.	General.	50	101
¹ Tanker.									² Motor schooner.							³ Cotton, coffee, quebracho, etc.		
² Motor ship.									⁴ Submarine.							⁵ Transport.		
³ Motor ship.									⁶ Launch.							⁷ Transport.		
⁴ Motor ship.									⁸ Mine sweeper.							⁹ Cotton, rosin, and general.		

° Cotton, coffee, quebracho, etc.

° Cotton, resin, and general.

° Transport.

° Mine sweeper.

° Submarine.

° Motor schooner.

° Motor ship.

° Tanker.

Point Sur.....	6 8.35	6 8.45	6 16.05	6 17.15	American	Swayne & Hoyt.....	324.0	46.2	22.0	Houston, Tex.....	Seattle, Wash.....	Lumber, corn.....	3,896	3,981	2,612
Salvador.....	7-30 15.15	6 8.50	6 16.05	6 17.30	British	Pacific Steam Nav. Co.....	215.0	33.5	13.3	Cristobal, C. Z.....	Champerico, Guatemala.....	General.....	791	1,270	735
Tuscaloosa City.....	6 9.10	6 9.30	6 16.38	6 17.45	American	Ishtman S. S. Lines.....	424.2	56.0	19.3	Baltimore, Md.....	Seattle, Wash.....	General, steel.....	3,694	7,611	5,450
Steel Traveler.....	6 12.45	6 12.50	6 19.21	6 23.44	American	Norton, Lilly & Co.....	424.0	56.2	23.0	Baltimore, Md.....	Philippine Islands.....	General.....	3,506	7,698	5,500
San Simon.....	5 11.23	6 13.24	6 21.16	6 22.40	American	Quaker Line.....	410.0	54.0	17.9	New York, N. Y.....	Seattle, Wash.....	General.....	2,201	6,373	4,016
Oregonian.....	6 17.35	6 17.50	7 10.50	7 11.55	American	Amer-Hawaiian Line.....	404.0	53.9	17.6	Boston, Mass.....	Portland, Oreg.....	General.....	2,012	7,654	4,800

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Rioyos Maru ¹⁰	31 2.00	31 6.54	31 13.10	31 13.10	Japanese	Kawasaki Kisen Kaisha.....	416.6	56.0	16.0	Moji, Japan.....	New York, N. Y.....	General.....	1,911	6,911	4,900
Panama.....	31 11.50	31 12.27	31 19.25	31 19.25	American	Amer-Hawaiian Line.....	407.7	53.7	25.0	Portland, Oreg.....	Boston, Mass.....	General.....	5,818	7,097	5,065
Los Angeles ¹	31 17.05	1 6.20	1 14.10	1 14.10	French	Union Oil Co.....	435.0	56.2	22.0	Los Angeles, Calif.....	Baltimore, Md.....	Gas oil.....	9,800	7,193	4,903
Ville de Verdun.....	1 7.50	1 8.44	1 16.00	1 22.10	French	French Line.....	409.3	53.5	22.1	Noumea, N. Caled.....	Marsilles, France.....	Gasoline.....	3,510	7,003	5,629
Daylight ¹⁰	1 10.10	1 10.55	1 19.35	1 19.35	American	Stand. Vac. Transp. Co.....	430.5	66.0	29.0	Los Angeles, Calif.....	New York, N. Y.....	Gasoline.....	13,060	9,798	6,725
Nueva.....	1 15.45	1 16.57	2 10.55	2 10.55	Panamanian	Grace Line.....	103.6	20.6	9.7	Buenaventura, Col.....	Cristobal, C. Z.....	Coffee.....	215	226	101
Santa Clara.....	1 18.21	2 6.19	2 13.15	2 20.15	American	Grace Line.....	483.3	63.9	29.5	San Antonio, Chile.....	New York, N. Y.....	General.....	4,119	11,680	7,442
Wilhelm A. Rie.....	1 18.38	2 7.25	2 15.40	2 16.20	Danzig	Anglo-American Oil Co.....	525.5	65.4	29.4	Talara, Peru.....	Fawley, England.....	Crude oil.....	15,542	12,171	8,592
Beskow.....	2 6.00	2 8.07	2 16.05	3 1.30	Dutch	Royal Neth. S. S. Co.....	400.6	58.3	26.0	Corral, Chile.....	Hamburg, Germany.....	General.....	8,141	7,817	6,097
President Har.....	2 8.20	2 9.15	2 16.40	2 16.40	Norwegian	Pechelbronn, Strasbourg.....	477.1	63.0	29.0	Talara, Peru.....	Pl. de Boue, France.....	Crude oil.....	12,730	9,444	6,483
Fraschmidt ¹⁰	2 10.15	2 11.11	2 18.10	2 18.10	British	Anglo-Equatorial Oilfields.....	440.8	57.6	27.0	La Libertad, Peru.....	Philadelphia, Pa.....	Crude oil.....	9,802	7,555	5,049
El Ato ¹⁰	2 11.15	2 12.15	2 19.30	2 19.30	American	Lockenbach Line.....	446.0	56.0	28.0	Seattle, Wash.....	Boston, Mass.....	General.....	7,181	8,552	6,236
Winnipeg.....	2 14.02	2 14.53	2 22.00	3 12.20	French	French Line.....	479.3	59.8	26.5	Vancouver, B. C.....	Le Havre, France.....	General.....	6,600	10,619	7,592
Solana ¹⁰	3 2.55	3 6.09	3 14.10	3 14.10	American	Harold Products Corp.....	419.3	56.5	27.0	San Francisco, Cal.....	New York, N. Y.....	(*).....	9,157	7,063	5,025
Silvermaple ¹⁰	3 3.50	3 7.14	3 14.25	3 14.25	British	Silver Line, Ltd.....	425.6	58.3	19.0	Los Angeles, Calif.....	Cebu, India.....	General.....	37	8,216	6,087
Hawaiian.....	3 7.35	3 8.26	3 15.45	3 15.45	American	Amer-Hawaiian Line.....	404.6	53.9	24.0	Seattle, Wash.....	Boston, Mass.....	Grain, general.....	5,212	6,768	4,767
Innerton.....	3 9.55	3 10.48	3 18.10	3 18.10	British	R. Chapman & Son.....	400.1	52.3	24.0	Vancouver, B. C.....	London, England.....	Grain, general.....	7,557	5,740	4,087
American Star.....	2 16.30	3 14.18	3 21.35	3 21.35	American	Charles Nelson Co.....	386.8	52.2	24.0	Portland, Oreg.....	New York, N. Y.....	Lumber, general.....	9,885	5,699	4,167
Margarita ¹⁰	2 3.....	3.....	3.....	3.....	Panamanian	Manuel Cambra.....	386.8	52.2	24.0	Panama, R. P.....	Cristobal, C. Z.....	Ballast.....	9,885	5,699	4,167
Paris ¹⁰	2 3.....	3.....	3.....	3.....	Panamanian	Manuel Cambra.....	386.8	52.2	24.0	Panama, R. P.....	Cristobal, C. Z.....	Ballast.....	9,885	5,699	4,167
Willmote ¹⁰	3 15.05	3 15.53	3 23.20	4 2.10	American	Williams S. S. Line.....	390.0	54.2	27.6	Seattle, Wash.....	New York, N. Y.....	Lumber, general.....	7,250	6,162	4,433
Tulsga ¹⁰	3 16.15	3 17.03	4 11.35	4 12.20	American	Associated Oil Co.....	431.0	59.2	27.6	San Francisco, Cal.....	New York, N. Y.....	Gas oil.....	10,009	7,817	5,112
Lothgill ¹⁰	3 9.30	4 6.15	4 14.23	4 19.45	British	Royal Mail S. P. Co.....	485.6	62.3	29.0	Vancouver, B. C.....	Rotterdam, Holland.....	General.....	9,918	10,803	7,606
S-12 ¹¹	.....	4 7.13	4 15.30	4 15.30	American	U. S. Navy.....	231.0	20.0	.....	Balboa, C. Z.....	Cristobal, C. Z.....	General.....	9,918	10,803	7,606
S-13 ¹¹	.....	4 7.13	4 15.30	4 15.30	American	U. S. Navy.....	231.0	20.0	.....	Balboa, C. Z.....	Cristobal, C. Z.....	General.....	9,918	10,803	7,606
S-10 ¹¹	.....	4 7.19	4 15.30	4 15.30	American	U. S. Navy.....	231.0	20.0	.....	Balboa, C. Z.....	Cristobal, C. Z.....	General.....	9,918	10,803	7,606
Sadie ¹¹	.....	4 8.55	4 15.30	4 15.30	American	Lieutenant, Hazell.....	231.0	20.0	.....	Balboa, C. Z.....	Cristobal, C. Z.....	General.....	9,918	10,803	7,606
Mallard.....	.....	4 8.55	4 15.30	4 15.30	American	U. S. Navy.....	187.0	38.0	.....	Balboa, C. Z.....	Cristobal, C. Z.....	General.....	9,918	10,803	7,606
Retriever ¹¹	.....	4 13.17	4 20.30	4 20.30	Danish	Holm & Wonsild.....	490.8	67.8	29.4	Talara, Peru.....	Rotterdam, Holland.....	Naphtha.....	14,476	10,750	7,867
Danmark ¹⁰	4 12.30	4 13.17	4 20.30	4 20.30	Danish	Holm & Wonsild.....	490.8	67.8	29.4	Talara, Peru.....	Rotterdam, Holland.....	Naphtha.....	14,476	10,750	7,867
Santa Teresa.....	4 9.25	4 14.30	4 21.55	5 22.16	American	Panama Mail S. S. Co.....	369.2	51.6	24.3	San Francisco, Cal.....	New York, N. Y.....	General.....	2,140	5,726	4,086
Europa ¹⁰	5 6.35	5 8.44	5 15.31	5 20.15	Danish	East Asiatic Co.....	465.4	62.2	23.0	Vancouver, B. C.....	Hull, England.....	General.....	9,134	11,226	8,274
Reina del Pacifico ¹⁰	5 2.40	5 9.27	5 17.35	5 21.30	British	Pacific Steam Nav. Co.....	550.1	76.3	28.2	Talcahuano, Chile.....	Liverpool, England.....	General.....	2,463	18,871	13,099
Tatsumi Maru ¹⁰	5 11.10	5 11.51	5 19.35	5 22.16	Japanese	Nippon Yusen Kaisha.....	445.0	58.0	26.7	Moji, Japan.....	Boston, Mass.....	(*).....	8,703	8,015	5,716
Australia ¹⁰	5 12.30	5 13.45	5 22.30	5 22.30	American	The Texas Co.....	569.4	70.3	30.6	Los Angeles, Calif.....	Providence, R. I.....	Gasoline.....	16,723	12,514	8,427

* Sugar, tea, silk, and general.

* Gasoline and lubricating oils.

* Lanch.

* Submarine.

* Cayuco.

* Motor schooner.

* Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.	Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.							Nature.	Tons.	
Steel Seafarer.	5	14 10	5	14 47	5	23 55	3 15	424.2	56.0	25.1	Hilo, T. H.	Baltimore, Md.	(*)	8,714	7,611
Cerigo.	5	15 00	5	15 54	6	8 50	8	227.2	34.4	13.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	1,123	1,372
Thodore.	5	17 00	5	17 53	6	12 05	6	425.5	55.2	30.0	Vancouver, B. C.	London, England	Wheat, general.	9,954	7,993
San Marcos.	5	23 40	6	6 55	6	14 25	6	410.5	54.2	24.0	Portland, Oreg.	Philadelphia, Pa.	Lumber, general.	6,842	6,755
Henry D.	6	7 45	6	8 58	6	16 50	6	356.0	51.6	26.0	Everett, Wash.	New York, N. Y.	Lumber.	5,470	5,367
Alaskan	6	11 39	6	11 39	7	9 05	7	62.0	18.0	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	40	46
Naru.	6	17 09	6	17 48	7	11 15	7	375.0	50.0	26.0	Iloilo, P. I.	New York, N. Y.	Silk, sugar, gen.	5,762	.....

17 Motor ship.

18 Motor schooner.

19 Sugar and canned pineapples.

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
July 31.	Capoa.	Anglo-Saxon Petroleum Co.	Curacao, D. W. I.	July 30.	No. 9664 ²¹	Pan American Airways.	San Salvador via waypts.
July 31.	Killing ²⁰	Merritt, Chapman & Lindsay	Kingston, Jamaica.	July 31.	Fortuna ²¹	United Fruit Co.	Colon, Rep. of Panama.
July 31.	No. 9673 ²¹	Pan American Airways	San Salvador via waypts.	July 31.	Santa Marta.	United Fruit Co.	New York via wayports.
July 31.	No. 9775 ²¹	Pan American Airways	Talca via wayports.	July 31.	Saramacca.	United Fruit Co.	New Orleans, La.
July 31.	Bolivar.	Colombian S. S. Line.	New York via wayports.	July 31.	Cristobal.	Panama R. R. S. S. Line.	New York via Haiti.
August 1.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.	July 31.	Bolivar.	Colombian S. S. Line.	New York via wayports.
August 1.	No. 659-M ²¹	Pan American Airways	Miami via wayports.	August 1.	No. 669-M ²¹	Pan American Airways	Miami via wayports.
August 1.	Meltonian ²¹	C. Hurston.	Grand Cayman, B. W. I.	August 1.	No. 145-M ²¹	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
August 2.	No. 145-M ²¹	United Fruit Co.	Medellin, Colombia.	August 1.	Quirigua.	United Fruit Co.	New York via Habana.
August 2.	Sirname.	Pan American Airways	New Orleans, La.	August 2.	No. 9673 ²¹	Pan American Airways	Talca via wayports.
August 3.	No. 9688 ²¹	Pan American Airways	Chicleiro via waypts.	August 2.	Killing ²⁰	Merritt, Chapman & Lindsay	San Salvador via waypts.
August 3.	Annetta I. ²¹	P. W. Hamilton.	Barraquilla, Colombia.	August 2.	Capoa.	Anglo-Saxon Petroleum Co.	Kingston, Jamaica.
August 3.	Buenaventura.	Panama R. R. S. S. Line.	New York via Haiti.	August 3.	Sirname.	United Fruit Co.	Port Limon and Bocas.
August 4.	Contessa.	Standard Fruit & S. S. Co.	New Orleans via Habana.	August 4.	No. 659-M ²¹	Pan American Airways	Chicleiro.
August 5.	Dora K.	Surgeon Brothers	Bocas, Rep. of Panama.	August 4.	Pastores.	Lykes Brothers S. S. Co.	Port Limon, Costa Rica.
August 5.	Velma Lykes.	Lykes Brothers S. S. Co.	Houston, Tex.	August 5.	No. 9688 ²¹	United Fruit Co.	Santo Domingo.
August 6.	Sirname.	United Fruit Co.	New York via Kingston.	August 6.	Contessa.	Standard Fruit & S. S. Co.	San Salvador via waypts.
August 6.	Sixola.	United Fruit Co.	New York via Kingston.	August 6.	Buenaventura.	Panama R. R. S. S. Line.	New Orleans via waypts.

* Other than ships passing through the Canal.

20 Motor schooner.

21 Yawl.

22 Air mail carrier.

23 Tug.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
August 6.....	Costa Rica.....	Royal Netherlands S. S. Co.....	Amsterdam via wayports.	August 6.....	Fortuna ²³	United Fruit Co.....	Colon, Rep. of Panama.
August 6.....	No. 145-M ²⁴	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	August 6.....	Anachucma ²⁴	A. Tagaropoulos.....	Colon, Rep. of Panama.
August 6.....	Fortuna ²³	United Fruit Co.....	Colon, Rep. of Panama.	August 6.....	Inapaquina ²⁴	A. Tagaropoulos.....	Colon, Rep. of Panama.
August 6.....	Anachucma ²⁴	A. Tagaropoulos.....	Colon, Rep. of Panama.				
August 6.....	Inapaquina ²⁴	A. Tagaropoulos.....	Colon, Rep. of Panama.				
PORT OF BALBOA.							
July 20.....	Fulton ^{25 27}	U. S. Navy.....	Puntarenas, Costa Rica.	August 1.....	Fulton ^{25 27}	U. S. Navy.....	San Diego, Calif.
August 1.....	Heiyo Maru ²⁵	Nippon Yusen Kaisha.....	Valparaiso, Chile.	August 2.....	Heiyo Maru ²⁵	Nippon Yusen Kaisha.....	Hongkong, China.
August 4.....	Coya.....	Grace Line.....	Tacoma, Wash.	August 3.....	Chares.....	Grace Line.....	San Francisco, Calif.
August 5.....	Chares.....	Grace Line.....	Valparaiso, Chile.	August 6.....	Doa Hermanos ²⁶	A. Valdez.....	Panama Bay, R. P.
August 6.....	Doa Hermanos ²⁶	A. Valdez.....	Panama Bay, R. P.	August 7.....	Pitre ²⁶	A. Valdez.....	Panama Bay, R. P.
August 6.....	Pitre ²⁶	A. Valdez.....	Panama Bay, R. P.				

* Other than ships passing through the Canal.

²⁷ Survey ship.²⁶ Motor schooner.²⁵ Motor ship.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 90 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of the Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.

The Hydrographic Office at Cristobal maintain at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometric comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Hours of Departure of Passenger Trains.

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sunday, 7.00 a. m., 12.15 p. m., 4.30 p. m.; Sunday only, 9.20 a. m., 4.00 p. m.

From Panama: Daily except Sunday, 7.05 a. m., 12.20 p. m., 4.35 p. m.; Sunday only, 7.05 a. m., 6.15 p. m.

The time required for passage from one terminal to the other is 1 hour and 45 minutes.

Binders for The Panama Canal Record.

Cardboard covers, punched and fitted with brass fasteners forming binders for THE PANAMA CANAL RECORD are offered for sale at 25 cents a set, for the benefit of those who wish to keep a file of the issues for ready reference. Orders may be addressed to The Panama Canal, Balboa Heights, Canal Zone, or The Panama Canal, Washington, D. C.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending August 6, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Orazio.....	Italian Line.....	August 1	August 1	.....	273
Quirigua.....	United Fruit Co.....	August 1	August 1	(²)	31
Adrastus.....	Alfred Holt & Co.....	August 1	August 1	19	(²)
Boskoop.....	Royal Netherlands S. S. Co.....	August 2	August 2	434½	19
Santa Clara.....	Grace Line.....	August 2	August 2	302	20
Winnipeg.....	French Line.....	August 2	August 3	87	251
Nueva Panama.....	United Fruit Co.....	August 2	August 5	241	50
Suriname.....	United Fruit Co.....	August 3	August 3	532	186
Lobos.....	Royal Mail Steam Packet Co.....	August 3	August 3	71	198
Tacoma.....	Hamburg-American Line.....	August 3	August 4	79	525
Logician.....	T. & J. Harrison.....	August 3	August 4	282	(²)
Santa Barbara.....	Grace Line.....	August 4	August 4	154	327
Lochgoll.....	Royal Mail Steam Packet Co.....	August 4	August 4	50	12
Santa Teresa.....	Panama Mail S. S. Co.....	August 4	August 5	958	56
Buenaventura.....	Panama R. R. S. S. Line.....	August 4	August 6	1,081	436
Tatsuno Maru.....	Nippon Yusen Kaisha.....	August 5	August 5	30	(²)
Pastores.....	United Fruit Co.....	August 5	August 5	239	15
Europa.....	Danish East Asiatic Line.....	August 5	August 5	(²)	10½
Reina del Pacifico.....	Pacific Steam Navigation Co.....	August 5	August 5	113	(²)
Contessa.....	Standard Fruit & S. S. Co.....	August 5	August 6	203	155
Velma Lykes.....	Lykes Brothers.....	August 5	August 6	283	36
San Simeon.....	Quaker Line.....	August 5	August 6	160	89
Theodore Roosevelt.....	Fred Olsen Line.....	August 6	August 6	(²)	10
Cerigo.....	Hamburg-American Line.....	August 6	.....	1,122	.....
Salvador.....	Pacific Steam Navigation Co.....	.....	August 6	.....	791
Sixaola.....	United Fruit Co.....	August 6	.....	264	.....
Suriname.....	United Fruit Co.....	August 6	.....	65	.....
Costa Rica.....	Royal Netherlands S. S. Co.....	August 6	.....	191	.....
Tai Ping.....	Barber S. S. Line.....	August 6	.....	54	.....

¹ No cargo discharged.² No cargo laded.³ Two packages.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending August 6, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Antigua.....	United Fruit Co.....	July 24	July 24	698	105
Cali.....	North German Lloyd.....	July 24	July 24	.....	97
Tai Yang.....	Barber-Wilhelmsen Line.....	July 25	July 25	.....	5
Jutlandia.....	East Asiatic Co.....	July 27	July 28	379	.....
Virginia.....	Panama-Pacific Line.....	July 29	July 29	7	.....
San Mateo.....	United Fruit Co.....	July 29	July 29	6	.....
Santa Ana.....	Panama Mail S. S. Co.....	July 31	July 31	108	9
Los Angeles.....	Union Oil Co.....	July 31	August 1	263	.....
Santa Clara.....	Grace Line.....	August 1	August 2	29	1
American Star.....	Charles Nelson & Co.....	August 2	August 3	808	.....
U. S. Grant.....	U. S. Government.....	August 3	August 3	8	5
Sapelo.....	U. S. Government.....	August 3	August 5	6	.....
Santa Barbara.....	Grace Line.....	August 4	August 5	137	134
Santa Teresa.....	Panama Mail S. S. Co.....	August 4	August 4	224	10
Charcas.....	Grace Line.....	August 5	August 6	109	650

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., August 17, 1932. No. 3.

Commercial Traffic Through the Panama Canal in July, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of July, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for July, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	56	334,582	252,581	408,458	251,510	\$292,952.40	147,619
United States to Far East:							
British.....	6	36,061	22,006	37,865	22,289	27,507.50	27,233
Japanese.....	9	47,084	38,646	58,719	37,653	48,126.25	39,316
Norwegian.....	1	4,222	2,487	4,302	2,450	3,108.75	4,315
United States.....	3	18,954	15,473	22,279	15,187	19,053.95	20,658
Total.....	19	106,321	78,612	123,165	77,579	97,796.43	91,522
Europe to Canada:							
British.....	7	42,763	27,628	45,320	28,010	33,411.56	3,211
Danish.....	1	8,076	5,689	10,110	6,170	7,111.25	80
Dutch.....	1	7,551	5,776	9,399	5,814	7,220.00	2,196
French.....	1	7,468	4,374	7,706	4,591	5,467.50	931
German.....	3	19,753	12,690	21,685	13,049	15,862.50	11,072
Italian.....	2	15,899	11,596	20,012	12,485	14,495.00	1,576
Norwegian.....	4	21,536	12,156	20,359	12,538	15,195.00	2,200
Swedish.....	2	10,393	6,211	10,514	7,890	7,763.75	6,004
Total.....	21	133,439	86,120	145,114	90,547	106,526.56	27,270
Europe to South America:							
British.....	2	13,133	9,048	17,757	10,779	11,293.00	1,393
Danish.....	1	7,867	6,552	10,517	6,468	5,664.24	.....
Danzig.....	2	14,719	11,391	19,292	10,950	10,597.68	.....
Dutch.....	2	11,347	7,657	12,898	7,793	7,720.87	988
German.....	2	9,527	5,897	10,153	6,031	7,371.25	3,481
Italian.....	1	9,373	5,223	11,669	6,779	6,528.75	306
Norwegian.....	1	7,214	6,034	9,816	5,937	5,194.08	.....
Swedish.....	1	5,039	2,751	4,896	3,548	3,438.75	3,211
Total.....	12	78,219	54,553	96,998	58,285	57,808.62	9,379
United States to South America:							
British.....	1	5,049	4,395	7,203	4,382	3,635.28	.....
United States.....	2	14,122	9,135	17,793	9,135	11,418.75	4,305
Total.....	3	19,171	13,530	24,996	13,517	15,054.03	4,305
Cristobal to South America:							
German.....	5	4,532	2,777	5,500	2,890	3,471.25	1,695
Panamanian.....	2	202	206	406	202	242.40	235
Total.....	7	4,734	2,983	5,906	3,092	3,713.65	1,930
Europe to Australasia:							
British.....	6	49,688	36,772	63,020	38,636	45,965.00	20,790
French.....	1	3,797	3,089	5,117	3,076	3,861.25	803
Swedish.....	1	6,190	3,278	5,841	4,083	4,097.50	.....
Total.....	8	59,675	43,139	73,978	45,795	53,923.75	21,593

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Europe to United States:							
British.....	1	6,465	5,393	8,955	5,422	\$4,654.80	
Danish.....	1	3,950	3,079	4,874	3,121	3,848.75	373
Dutch.....	1	5,796	4,829	8,237	4,770	4,173.12	
Norwegian.....	2	9,928	8,436	13,777	8,290	7,148.16	
Swedish.....	2	8,651	5,995	10,240	7,666	7,493.75	11,518
United States.....	1	8,619	7,026	11,247	6,954	6,205.68	
Total.....	8	43,409	34,758	57,330	36,223	33,524.26	11,891
United States to Australasia:							
British.....	1	6,600	4,552	7,120	4,578	5,690.00	7,664
United States to Philippine Islands:							
British.....	1	6,401	3,479	6,607	3,817	4,348.75	3,793
Danish.....	1	5,500	3,081	5,038	3,155	3,851.25	5,350
Norwegian.....	1	3,614	2,799	5,018	2,883	3,498.75	1,538
United States.....	3	31,639	25,233	42,434	25,165	31,541.25	4,373
Total.....	6	47,154	34,592	59,097	35,020	43,240.00	15,054
Canada to South America:							
British.....	1	7,717	6,514	11,941	6,270	5,556.24	
South America to Canada:							
Norwegian.....	1	4,375	2,431	4,000	2,485	3,038.75	527
United States.....	2	9,991	7,401	11,620	7,394	9,251.25	4,007
Total.....	3	14,366	9,832	15,620	9,879	12,290.00	4,534
United States to Hawaiian Islands:							
United States.....	2	10,695	7,308	11,875	7,272	8,107.65	642
Africa to South America:							
Norwegian.....	1	6,483	5,398	9,103	5,401	4,667.76	
United States to Central America:							
United States.....	3	4,733	4,011	7,070	4,013	3,407.76	
Canada to Australasia:							
British.....	1	4,139	3,254	5,448	3,336	4,067.50	3,478
Canadian intercoastal:							
British.....	1	4,121	3,278	5,752	3,551	4,097.50	2,000
Around the world:							
United States.....	2	19,006	14,653	24,658	14,588	18,316.25	5,109
Canada to United States:							
Norwegian.....	1	3,761	2,387	4,014	2,350	2,983.75	3,143
South America to United States:							
Brazil.....	1	3,656	2,797	4,969	3,062	3,496.25	2,277
Europe to Central America:							
German.....	1	3,442	2,212	3,979	2,280	2,765.00	1,096
South American intercoastal:							
Colombian.....	1	307	302	405	308	368.40	630
Danish.....	1	2,372	1,869	3,136	1,893	1,707.84	
Total.....	2	2,679	2,171	3,541	2,201	2,076.24	630
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,457
Panamanian.....	3	66	72	135	87	79.20	94
Total.....	5	1,507	1,358	2,433	1,391	1,686.70	1,551
Cristobal to Balboa:							
Panamanian.....	7	275	261	514	246	252.96	30
West Indies to Australasia:							
British.....	1					2,860.00	
West Indies to United States:							
British.....	1					2,625.00	
Grand total, July, 1932...	174	919,884	670,854	1,113,079	681,986	789,486.28	362,717
Grand total, July, 1931...	207	1,070,388	780,413	1,290,498	790,441	908,341.63	500,136
Grand total, July, 1930...	230	1,129,916	837,604	1,389,381	842,686	947,428.30	575,964

* Naval vessel of 5,720 tons displacement.

* Naval vessel of 5,250 tons displacement.

PACIFIC TO ATLANTIC.

United States intercoastal:							
United States.....	45	261,022	192,924	312,547	192,255	\$240,358.64	301,816
Canada to Europe:							
British.....	11	60,065	38,483	63,063	38,600	48,103.75	92,998
Danish.....	3	14,611	9,663	15,661	9,727	12,078.75	24,689
Dutch.....	1	8,260	6,197	10,220	6,385	7,746.25	10,205

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
French.....	1	7,110	3,865	8,062	4,295	\$4,831.25	8,714
German.....	3	20,295	13,360	22,941	13,928	16,700.00	25,212
Italian.....	1	6,063	3,672	7,061	4,460	4,590.00	9,035
Norwegian.....	6	29,217	17,588	28,845	17,876	21,985.00	44,099
Swedish.....	1	5,337	2,861	5,210	3,747	3,576.25	6,670
Total.....	27	150,964	95,689	161,063	99,018	119,611.25	221,712
South America to Europe:							
British.....	4	22,250	17,835	29,027	18,110	22,293.75	22,465
Danzig.....	1	6,127	5,268	8,939	5,007	6,585.00	11,447
Dutch.....	2	8,357	6,487	10,561	6,326	8,108.75	12,920
French.....	1	5,242	3,332	5,645	3,326	4,165.00	6,859
German.....	3	11,393	7,739	10,324	7,423	9,673.75	13,547
Italian.....	1	9,373	5,223	11,669	6,779	6,528.75	1,478
Norwegian.....	1	7,214	6,034	9,816	5,937	7,542.50	14,445
Swedish.....	1	3,985	2,281	3,858	2,859	2,851.25	4,850
Total.....	14	73,941	54,199	89,839	55,989	67,748.75	88,011
Philippines to United States:							
Japanese.....	3	16,553	11,271	18,524	11,096	14,088.75	19,928
Norwegian.....	2	11,943	6,371	11,578	6,635	7,963.75	10,613
United States.....	4	41,162	29,055	48,535	29,068	36,318.75	21,464
Total.....	9	69,658	46,697	78,637	46,799	58,371.25	52,005
United States to Europe:							
British.....	5	29,739	25,789	38,876	23,962	32,236.25	52,389
Norwegian.....	4	23,125	19,755	32,349	19,357	24,693.75	42,305
Total.....	9	52,864	45,544	71,225	43,319	56,930.00	94,694
Australasia to Europe:							
British.....	3	30,105	22,048	38,058	23,638	27,560.00	13,847
Hawaii to United States:							
United States.....	5	26,075	18,465	29,984	18,406	23,081.25	41,263
South America to United States:							
British.....	1	5,049	4,395	7,203	4,382	5,493.75	9,840
United States.....	3	17,412	10,510	20,887	10,509	13,137.50	7,989
Total.....	4	22,461	14,905	28,090	14,891	18,631.25	17,829
South America to Canada:							
British.....	2	12,995	11,192	20,830	10,554	13,990.00	28,346
Far East to United States:							
Japanese.....	2	11,241	8,848	14,339	8,696	11,060.00	4,447
Central America to United States:							
German.....	1	3,399	2,571	4,174	2,580	2,447.28	.....
United States.....	4	7,025	6,015	10,319	5,951	7,404.36	2,703
Total.....	5	10,424	8,586	14,493	8,531	9,851.64	2,703
Canadian intercoastal:							
British.....	2	6,648	5,357	8,957	5,497	6,696.25	6,694
United States to South America:							
United States.....	1	5,095	3,484	5,546	3,539	4,355.00	3,664
Canada to South America:							
United States.....	1	5,019	3,586	5,591	3,563	4,482.50	6,053
Canada to United States:							
United States.....	1	4,993	3,546	5,698	3,546	4,432.50	3,857
South America to Cristobal:							
German.....	5	4,232	2,879	5,398	2,974	3,598.75	4,891
Panamanian.....	2	202	206	406	202	242.40	413
Total.....	7	4,434	3,085	5,804	3,176	3,841.15	5,304
Australasia to Canada:							
British.....	1	4,354	3,273	5,439	3,330	4,091.25	2,318
Central America to Cristobal:							
British.....	3	2,176	1,934	3,426	1,954	2,417.50	1,148
United States to Central America:							
Danish.....	1	1,879	1,144	1,909	1,172	1,440.00	1,248
Balboa to Cristobal:							
Panamanian.....	10	260	245	466	276	301.90	305
Grand total, July, 1932...	152	756,608	544,751	901,941	548,058	679,242.08	897,264
Grand total, July, 1931...	199	1,040,313	755,273	1,267,382	763,270	940,296.82	1,366,667
Grand total, July, 1930...	258	1,308,979	989,584	1,640,726	999,696	1,233,083.52	1,826,083

MOVEMENTS OF OCEAN VESSELS. *Week ending at midnight, August 13, 1932.*

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Chester ^a	6	13.25	7	6.05	7	15.20	7	16.45	American.	U. S. Navy.	582.0	64.0	22.4	Hampton Rds., Va.	San Diego, Calif.	Ballast.	1,927	9,894	6,827
Tai Ping ^a	6	20.45	7	6.40	7	15.57	7	17.15	Norwegian.	Barber S. S. Line.	462.0	61.0	19.3	New York, N. Y.	Tsingtao, China.	General.	9	46	22
Real ^a	6	18.15	7	9.05	7	17.17	8	10.00	Panamanian	Haus Elliot.	62.0	17.0	.....	Christobal, C. Z.	Pro-Armuelles, R. P.	General.	.....	.....	.....
Florence.....	7	9.35	7	9.50	9	10.50	9	11.55	American.	Luckenbach Line.	401.0	52.3	25.0	Houston, Tex.	Seattle, Wash.	General.	5,712	6,002	4,621
Cargo.....	8	8.50	8	14.15	8	21.30	9	1.33	German.	Hamburg-American Line.	227.2	34.4	12.11	Christobal, C. Z.	Guayaquil, Ecuador.	General.	89	1,572	1,011
Herborg ^a	8	20.05	9	6.10	9	12.06	9	13.25	Norwegian.	Anglo-Saxon Pet. Co.	457.2	59.7	20.0	Liverpool, England.	Los Angeles, Calif.	Ballast.	8,214	8,719	.....
Damsterdijk ^a	8	16.30	9	20.00	9	13.41	9	15.00	Dutch.	Holland-America Line.	490.0	64.6	22.2	Rotterdam, Holland.	Vancouver, B. C.	General.	3,259	11,721	8,351
Fernmoor ^a	9	4.50	9	7.05	9	16.25	9	16.25	Norwegian.	Fern Line.	381.4	53.8	20.6	Galveston, Tex.	Osaka, Japan.	Cotton, general.	4,373	6,201	4,530
Gracia.....	9	10.30	9	10.45	9	17.16	9	18.32	British.	Donaldson Brothers.	415.5	54.0	20.2	Glasgow, Scotland.	Vancouver, B. C.	General.	268	6,809	4,842
Texas.....	9	12.55	9	13.05	9	20.10	9	21.15	American.	Amer-Hawaiian Line.	471.0	57.2	18.0	Boston, Mass.	Tacoma, Wash.	General.	1,630	9,154	6,966
Santa Clara.....	9	17.30	9	20.20	10	10.53	10	12.00	British.	W. R. Smith & Sons.	401.0	54.0	15.6	Sunderland, Eng.	Vancouver, B. C.	Ballast.	.....	6,784	5,107
Hokuroku.....	9	18.50	10	6.10	10	12.34	10	13.35	Japanese.	Osaka Shosen Kaisha.	446.0	60.6	19.0	Boston, Mass.	Shanghai, China.	General.	2,021	8,942	6,251
Paul Luckenbach.....	9	22.50	10	6.50	10	14.35	10	15.35	French.	Luckenbach Line.	471.0	59.2	17.0	Boston, Mass.	Seattle, Wash.	General.	2,046	9,027	6,539
Wyoming.....	10	3.45	10	12.00	10	18.15	10	19.30	French.	French Line.	473.0	61.0	21.4	Bayre, France.	Vancouver, B. C.	Steel, general.	867	10,440	7,027
Bodegraven.....	10	2.00	10	12.55	10	20.02	10	21.20	Dutch.	Royal Neth. S. S. Co.	400.0	58.6	20.0	Hamburg, Germany.	Corral, Chile.	General.	973	7,834	6,018
Pacific.....	10	15.30	10	15.35	10	22.40	11	00.01	British.	Furness-Pacific Line.	450.0	60.6	18.6	Glasgow, Scotland.	Vancouver, B. C.	General.	314	10,086	7,226
Grove ^a	11	6.30	11	6.35	11	15.50	11	15.25	British.	H. Hogarth & Sons.	336.0	48.0	14.0	Boston, Mass.	Peru.	Ballast.	.....	3,693	2,500
Baron.....	8	20.00	11	7.57	11	14.25	11	21.09	German.	Grace Line.	216.5	32.9	11.9	Christobal, C. Z.	Guayaquil, Ecuador.	General.	257	1,132	741
Manizates.....	11	8.00	11	8.15	11	16.01	11	22.40	British.	Andrew Weir & Co.	422.0	56.8	25.7	Sagua, Cuba.	Auckland, N. Z.	Sugar.	8,010	7,249	5,106
Deebank.....	11	8.00	11	8.15	11	16.01	11	22.40	British.	Andrew Weir & Co.	422.0	56.8	25.7	Sagua, Cuba.	Auckland, N. Z.	Sugar.	8,010	7,249	5,106
President.....	11	14.45	12	6.00	12	13.31	12	21.30	American.	Dollar Line.	615.6	81.3	27.8	New York, N. Y.	Manila, P. I.	General.	3,071	27,813	20,118
Coolidge.....	12	5.30	12	7.20	12	14.57	13	00.35	American.	Panama-Pacific Line.	586.4	80.3	27.0	New York, N. Y.	San Francisco, Cal.	General.	1,790	25,262	18,194
Pennsylvania.....	12	5.20	12	8.15	12	16.26	12	17.55	Japanese.	Kokusai Kisen Kaisha.	425.0	53.0	23.1	Pt. Tampa, Fla.	Yamato, Japan.	(⁹)	8,742	6,909	5,147
Yuri Maru.....	12	5.20	12	8.15	12	16.26	12	17.55	Japanese.	Kokusai Kisen Kaisha.	425.0	53.0	23.1	Pt. Tampa, Fla.	Yamato, Japan.	(⁹)	8,742	6,909	5,147
Alta.....	12	16.35	13	6.05	13	13.00	13	22.45	German.	North German Lloyd.	359.0	51.0	19.7	Hamburg, Germany.	Valparaiso, Chile.	General.	2,715	4,701	3,292
Betty ^a	11	11.45	13	6.05	13	14.27	14	5.18	Colombian.	Co. Naviera del Pac. S. A.	84.0	18.0	4.0	Cartagena, Col.	Buenaventura, Col.	Ballast.	.....	90	58
Canadian.....	12	19.30	13	7.10	13	14.30	13	16.05	British.	Can. Nat. Steamships.	400.0	52.0	20.9	Montreal, Canada.	Adelaide, Australia.	General.	3,016	5,956	4,172
Victor.....	13	6.45	13	8.35	13	15.18	13	16.03	American.	Williams S. S. Line.	415.0	56.0	18.0	Baltimore, Md.	Seattle, Wash.	General.	2,595	7,731	5,805
Port Huon.....	13	6.55	13	8.35	13	15.40	13	23.17	British.	Com'lth & Dom. Line.	477.0	63.0	18.0	London, England.	Wellington, N. Z.	General.	5,789	10,720	7,692
Tokoa.....	13	7.30	13	9.45	13	16.10	13	21.40	British.	N. Z. Shipping Co.	460.0	63.0	20.6	London, England.	Lyttelton, N. Z.	General.	1,368	10,582	7,491
Nevadan.....	13	13.25	13	13.30	13	19.50	13	21.20	American.	Amer-Hawaiian Line.	460.0	68.0	17.6	Boston, Mass.	Portland, Oreg.	General.	1,468	6,820	4,627
Nyhorn ^a	13	16.20	1	18.50	14	10.45	14	11.40	Norwegian.	Canadian Transp. Co.	381.0	53.0	14.6	Baltimore, Md.	Los Angeles, Calif.	Ballast.	1,495	6,475	4,568

^a Phosphate, scrap, and cotton.

^a Motor schooner.

^a Motor ship.

^a Cruiser.

^a Tanker.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Vermar.	7	3.37	7	6.18	7	13.45	7	13.45	American...	Calmar S. S. Corp.	410.0	54.2	24.2	Seattle, Wash.	New York, N. Y.	Lumber.	7,617	6,585	4,791
President Wilson.	7	5.30	7	7.20	7	14.25	7	23.45	American...	Dollar Line.	516.5	72.2	30.0	Manila, P. I.	New York, N. Y.	General.	4,423	15,286	10,568
Oshon.	7	5.00	7	8.16	7	15.10	7	15.00	American...	Amer.-Hawaiian Line.	407.7	57.7	24.0	Portland, Ore.	Boston, Mass.	General.	4,439	7,103	4,991
Bossett.	7	6.45	7	9.20	7	16.10	7	16.10	American...	Isthmian S. S. Lines.	421.2	58.2	22.0	Seattle, Wash.	Baltimore, Md.	Lumber, general.	5,074	5,450	4,138
Point Palm.	7	5.27	7	9.40	7	17.15	7	17.15	American...	Swayne & Hoyt.	338.5	32.2	23.0	Portland, Ore.	Mobile, Ala.	General.	5,672	7,708	4,138
St. Mich.	7	5.27	7	10.18	7	17.45	7	21.10	American...	U. S. Army.	440.0	38.0	24.5	San Francisco, Cal.	Brooklyn, N. Y.	Army supplies.	295		
Sancl.	6	17.51	7	10.48	7	18.50	7	18.50	American...	Sun Oil Co.	480.6	66.0	23.0	Los Angeles, Calif.	Chester, Pa.	Gasoline.	13,594	9,619	6,540
Pont Bonita.	6	17.51	7	10.48	7	18.50	7	19.45	American...	Swayne & Hoyt.	324.0	46.2	19.0	Portland, Ore.	Lake Charles, La.	General.	2,332	3,984	2,617
Katragi	7	11.50	7	13.02	7	21.35	7	23.19	Japanese.	Kokusai Kaisha.	433.6	60.0	25.0	Manila, P. I.	New York, N. Y.	General.	5,774	8,820	6,408
Maru.	7	15.30	7	16.18	8	11.00	8	11.00	Norwegian.	Canadian Transp. Co.	390.5	54.7	24.3	Vancouver, B. C.	New York, N. Y.	Lumber, general.	7,156	8,447	4,757
Bromoy.	7	17.20	8	18.04	8	11.25	8	11.25	American.	McCormick S. S. Co.	385.0	55.1	23.4	Seattle, Wash.	Philadelphia, Pa.	Lumber, general.	5,318	7,056	4,964
Felix Taussig.	7	22.20	8	6.05	8	13.44	8	21.25	Sweden.	Johnson Line.	426.0	56.0	26.0	Vancouver, B. C.	Stockholm, Sweden.	General.	8,546	7,591	5,681
Buenos Aires.	7	22.30	8	7.10	8	13.00	8	15.00	American.	Union Oil Co.	435.0	56.0	26.0	Los Angeles, Calif.	Tiverton, R. I.	Gasoline.	10,000	7,432	5,193
Dorocho.	8	6.00	8	8.18	8	16.00	8	18.40	American.	Isthmian S. S. Lines.	425.0	61.2	26.0	Hilo, T. H.	Philadelphia, Pa.	Sugar.	8,565	7,161	5,480
Atlanta City.	8	7.00	8	9.26	8	16.25	8	22.00	German.	Hamburg-American Line.	460.5	61.1	27.1	Vancouver, B. C.	Hamburg, Germany.	General.	7,641	9,267	6,834
Seattle.	8	12.50	8	13.37	8	20.00	11	7.57	German.	Grace Line.	216.5	32.9	14.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	826	1,132	741
Manizales.	8	11.51	9	6.28	8	13.58	9	14.45	American.	Panama-Pacific Line.	574.4	80.3	30.0	San Francisco, Cal.	New York, N. Y.	General.	6,527	24,506	17,565
J. L. Luckenbach.	8	20.21	9	7.15	9	14.40	9	14.40	American.	Luckenbach Line.	448.9	60.2	27.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	7,148	9,294	6,861
Victoria Maru.	8	20.55	9	8.10	9	16.25	9	16.25	Japanese.	Kokusai Kaisha.	385.0	51.0	27.0	Ilolo, P. I.	New York, N. Y.	Sugar.	7,200	6,250	4,700
Peter Maersk.	9	1.45	9	9.04	9	16.45	9	18.30	Danish.	Isbrandtsen Moller Co.	441.4	57.0	24.0	Ilolo, P. I.	New York, N. Y.	General.	7,147	7,723	5,928
Barbara Cates.	9	2.00	9	9.48	9	18.16	9	18.15	American.	Sudden & Christenson.	409.8	54.2	24.0	Seattle, Wash.	Baltimore, Md.	Lumber, general.	7,236	6,604	4,852
Southern Sun.	9	7.50	9	10.54	9	19.25	9	19.25	American.	Shir Oil Co.	480.5	66.0	30.0	Los Angeles, Calif.	Savannah, N. J.	Gasoline.	13,863	9,716	6,544
Bradburn.	9	11.00	9	12.19	9	21.20	9	23.15	British.	Sir W. R. Smith & Sons.	400.0	54.2	25.0	N. Westminster, B. C.	Cardiff, Wales.	Wheat, general.	7,936	6,969	5,373
Fernbank.	9	12.00	9	13.11	9	21.40	9	21.40	Norwegian.	Canadian Transp. Co.	382.7	53.4	25.4	Vancouver, B. C.	Avonmouth, Eng.	Lumber, general.	7,492	6,112	4,265
Scotsburg.	9	16.35	9	16.32	10	11.45	10	11.45	American.	Tampa Intercoastal Co.	436.1	56.5	31.0	Manila, P. I.	New Orleans, La.	(*)	9,155	8,696	6,316
Pacific Pioneer.	9	16.25	9	17.03	10	11.10	10	11.10	British.	Furness, Withy & Co.	452.0	60.0	27.0	Vancouver, B. C.	Glasgow, Scotland.	General.	7,516	9,630	6,943
Memphis.	9	17.50	10	6.28	10	13.05	10	13.05	American.	U. S. Navy.	555.0	55.0	19.0	Balboa, C. Z.	Cristobal, C. Z.	Silk, general.	2,606	9,407	6,777
Kwato Maru.	10	5.00	10	6.56	10	14.57	10	19.45	Japanese.	Osaka Shosen Kaisha.	480.0	61.6	30.0	Penang, Malay Pen.	New York, N. Y.	Crude oil.	14,822	10,236	7,109
Koll.	10	5.00	10	8.31	10	16.05	10	16.05	Norwegian.	Standard Shipping Co.	487.4	66.0	30.0	Loibitos, Peru.	Halifax, N. S.	Sugar.	8,275	6,903	5,155
Australind.	10	9.45	10	10.26	10	18.00	10	21.55	British.	Colonial Sugar Co.	491.5	54.0	25.0	St. John, N. B.	St. John, N. B.	Lumber, general.	6,200	10,491	7,601
Bessie J.	11	1.00	11	6.45	11	13.55	11	13.55	American.	Amer.-Hawaiian Line.	410.5	58.2	23.0	Townsville, Auslia.	Boston, Mass.	Ballast.	16		14
Bessie J.	11	1.00	11	6.45	11	13.55	11	13.55	American.	Capit. F. Kariger.	16.7	8.7		Balboa, C. Z.	Gaun, C. Z.	General.	5,127	7,329	5,233
Jeff Davis.	11	5.53	11	8.05	11	15.25	11	21.25	American.	Roosevelt S. S. Co.	385.6	58.0	24.0	Manila, P. I.	New York, N. Y.	General.	205	252	101
Nueva Panama.	11	13.00	11	14.05	11	20.00	14	6.00	Panamanian	Hans Elliot.	108.5	20.6	9.4	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	986	1,105	698
Cal.	12	8.35	12	10.20	12	18.00	14	6.10	German.	North German Lloyd.	216.5	32.9	16.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	205	252	101
Duchosa.	12	17.15	12	17.56	13	13.40	13	21.37	Italian.	Nav. Libera-Tristina.	417.3	57.1	27.0	Vancouver, B. C.	Trieste, Italy.	General.	7,216	8,734	6,144
S-15.	12	21.00	13	6.10	13	13.45			American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	Coffee, silver.	584	1,273	706
Acuyuta.	12	21.00	13	6.10	13	14.04			British.	Pacific Steam Nav. Co.	215.7	33.6	14.0	Champerco, Guat.	Cristobal, C. Z.	General.			
F. J. Luckenbach.	13	11.00	13	11.46	13	18.25	13	18.25	American.	Luckenbach-Gulf Co.	446.0	56.1	26.0	Portland, Ore.	Mobile, Ala.	General.	2,500	8,508	6,179
Norman Star.	13	12.15	13	13.00	13	20.50	13	22.53	British.	Blue Star Line.	415.6	56.3	20.0	N. Westminster, B. C.	Rotterdam, Holland	Fruit, lead, gen.	5,553	7,521	5,423
Republic.	13	12.40	13	13.45	13	22.50	14	12.05	American.	U. S. Army.	615.0	68.0	30.0	Manila, P. I.	Brooklyn, N. Y.	Army supplies.	1,418		

10 Sugar, hemp, and lumber.

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

Launch.

Motor ship.

MOVEMENTS OF OCEAN VESSELS.—Continued.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.		
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.
August 7.....	No. 141-M ¹¹	Pan American-Grace Airways...	Chiclayo via wayports.	August 7.....	Sixola.....	United Fruit Co.....
August 7.....	No. 9664 ¹¹	Pan American Airways.....	San Salvador via wayports.	August 7.....	Surtinane.....	United Fruit Co.....
August 7.....	Bogota.....	Colombian S. S. Line.....	New York via wayports.	August 8.....	Bogota.....	Colombian S. S. Line.....
August 8.....	Pastores.....	United Fruit Co.....	Port Limon, Costa Rica.	August 8.....	No. 659-M ¹¹	Pan American Airways.....
August 8.....	No. 669-M ¹¹	Pan American Airways.....	Miami via wayports.	August 8.....	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways
August 8.....	No. 945-M ¹¹	Pan American-Grace Airways...	Miami via wayports.	August 8.....	Pastores.....	United Fruit Co.....
August 9.....	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	August 8.....	Costa Rica.....	Royal Netherlands S. S. Co.....
August 9.....	Ancon.....	Panama, P. R. S. S. Line.....	New York via Haiti.	August 9.....	No. 144-M ¹¹	Pan American-Grace Airways...
August 10.....	Copenname.....	United Fruit Co.....	New Orleans, La.	August 9.....	No. 9664-M ¹¹	Pan American Airways.....
August 10.....	Franklin K. Lane.....	Standard Shipping Co.....	Aruba, D. W. F. I.	August 10.....	Pearl Marie ¹²	G. I. Bryan.....
August 10.....	No. 9635 ¹¹	Pan American Airways.....	Colon, Rep. of Panama.	August 10.....	Copenname.....	United Fruit Co.....
August 10.....	No. 300-N ¹¹	Pan American-Grace Airways...	Chiclayo via wayports.	August 11.....	No. 669-M ¹¹	Pan American Airways.....
August 11.....	No. 669-M ¹¹	Pan American Airways.....	Barraquilla, Colombia.	August 11.....	Franklin K. Lane.....	Standard Shipping Co.....
August 11.....	Troja.....	Hamburg-American Line.....	Hamburg via wayports.	August 12.....	Troja.....	United Fruit Co.....
August 12.....	Cefalu.....	Standard Fruit & S. S. Co.....	New Orleans via Habana.	August 12.....	No. 945-M ¹¹	Hamburg-American Line.....
August 12.....	Calamates.....	United Fruit Co.....	New York via Habana.	August 12.....	No. 145-M ¹¹	Pan American-Grace Airways...
August 12.....	Calamates.....	Elders & Fyffes, Ltd.....	Avonmouth via waypts.	August 12.....	Eupatoria.....	Uraba, Medellin & Cent. Airways
August 12.....	Ariguan.....	Hamburg-American Line.....	Tampico via wayports.	August 13.....	Cefalu.....	Standard Fruit & S. S. Co.....
August 13.....	Eupatoria.....	Royal Netherlands S. S. Co.....	Port Limon, Costa Rica.	August 13.....	Ariguan.....	Elders & Fyffes, Ltd.....
August 13.....	Costa Rica.....	Spanish S. S. Line.....	Barcelona via wayports.	.....	.....	.....
August 13.....	Magalanes.....	United Fruit Co.....	Port Limon, Costa Rica.	.....	.....	.....
August 13.....	Copenname.....	United Fruit Co.....	New York via Kingston.	.....	.....	.....
August 13.....	Metopan.....	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	.....	.....	.....
August 13.....	No. 145-M ¹¹	Spain S. S. Line.....	Barcelona via wayports.	.....	.....	.....
August 13.....	Marques de Omillas.....	.....	.....	.....	.....	.....

¹¹ Air mail carrier. ¹² Motor schooner.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.
August 7.....	Chiriqui.....	United Mail S. S. Co.....	San Francisco, Calif.	August 7.....	Chiriqui.....	United Mail S. S. Co.....
August 10.....	Coquet ¹³ ¹⁴	T. J. Sullivan.....	San Francisco, Calif.	August 13.....	Plus Ultra ¹¹	Com. Ecuadorean de Transp.....
August 12.....	Plus Ultra ¹¹	Com. Ecuadorean de Transp.....	Esmeraldas, Ecuador.	.....	.....	.....

¹³ Motor ship. ¹⁴ Yacht.¹¹ Other than ships passing through the Canal.

San Francisco, Calif.
Bahia de Caraquez, Ecu.

Tanker Traffic Through the Panama Canal in July, 1932.

During the month of July, 1932, 51 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 318,531 tons, on which tolls of \$280,646.76 were collected. Cargo amounted to 293,358 tons, comprised of 290,146 tons of mineral oils, 2,762 tons of cottonseed oil, and 450 tons of whale oil.

In point of net tonnage tanker traffic decreased 3.9 per cent compared with the corresponding month a year ago, while cargo tonnage decreased 3.2 per cent.

Tank ships comprised 15.6 per cent of the commercial transits through the Canal during July, 1932; made up 19.0 per cent of the total Panama Canal net tonnage; were the source of 19.1 per cent of the total tolls collected; and carried 23.3 per cent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of July, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months, and for July, 1931:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	3	19,231	\$13,846.32	.....
Danish.....	1	7,867	5,664.24	.....
Danzig.....	2	14,719	10,597.68	.....
Dutch.....	2	11,042	7,950.24	.....
Norwegian.....	4	23,625	17,010.00	.....
United States.....	15	95,337	73,805.78	17,676
Total, July, 1932.....	27	171,821	128,874.26	17,676
Total, June, 1932.....	35	200,609	151,194.87	18,612
Total, May, 1932.....	28	165,233	127,098.97	42,090
Total, July, 1931.....	31	174,106	130,978.65	23,853
<i>Pacific to Atlantic.</i>				
British.....	7	41,931	44,816.25	85,376
Danzig.....	1	6,127	6,585.00	11,447
Dutch.....	1	5,246	5,627.50	9,230
Norwegian.....	5	30,339	32,236.25	56,750
United States.....	10	63,067	62,507.50	112,879
Total, July, 1932.....	24	146,710	151,772.50	275,682
Total, June, 1932.....	31	186,295	193,384.13	346,838
Total, May, 1932.....	27	171,013	180,032.05	311,699
Total, July, 1931.....	28	157,342	159,558.87	279,215

* Includes 2,762 tons cottonseed oil and 450 tons whale oil.

The following tabulation shows the tanker traffic through the Canal during July, 1932, classified according to trade route:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	13	78,447	\$57,674.90	2 4,042
United States to South America.....	1	5,049	3,635.28	.....
United States to Far East.....	1	8,271	9,925.20	13,634
Canada to South America.....	1	7,717	5,556.24	.....
Europe to United States.....	5	30,808	22,181.76	.....
Europe to South America.....	5	35,046	25,233.12	.....
North Africa to South America.....	1	6,483	4,667.76	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	10	63,067	62,507.50	112,879
United States to Europe.....	8	47,012	50,026.25	89,495
South America to United States.....	1	5,049	5,493.75	9,840
South America to Canada.....	2	12,995	13,990.00	23,346
South America to Europe.....	3	18,587	19,755.00	35,122

* Includes 2,762 tons cottonseed oil and 450 tons whale oil. * 5,951 tons discharged on west coast United States.

* 458 tons discharged at Cristobal.

Of the tanker traffic passing through the Canal in July, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for July, 1931:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
July, 1932.....	14	90,498	\$65,158.56	.....
June, 1932.....	19	109,928	79,148.16	.....
May, 1932.....	13	77,053	58,134.85	10,129
July, 1931.....	20	110,878	80,548.08	5,126
<i>From Los Angeles.</i>				
July, 1932.....	13	79,629	79,953.75	145,435
June, 1932.....	18	107,415	110,863.75	206,242
May, 1932.....	16	97,318	100,862.50	188,278
July, 1931.....	17	94,842	92,598.87	156,763

Traffic by Commodities for July, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of July, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts.....	16	.....	16	249
Agricultural implements.....	29	.....	628	.....
Alfalfa meal.....	.....	668	.....	668
Ammonium compounds.....	84	.....	3,984	.....
Animal foods.....	543	416	543	416
Apparel, wearing (hats, shoes, clothing, etc.).....	269	.....	281	8
Asbestos.....	4	.....	259	.....
Asphalt and tar.....	22	25	305	471
Automobiles (and auto trucks).....	2,460	45	3,823	63
Automobile parts and accessories.....	1,117	51	2,390	57
Bags and bagging, textile.....	174	58	174	58
Bananas.....	.....	.....	47	2,963
Barks, miscellaneous.....	.....	28	.....	332
Barley.....	.....	.....	6	13,847
Beans, edible, dry.....	486	2,763	498	4,690
Beer.....	10	.....	21	1
Beverages, nonalcoholic.....	490	.....	518	1
Blood and tankage.....	518	.....	1,198	.....
Bones and bone meal.....	.....	.....	1,408	.....
Books and printed matter.....	170	12	170	12
Borax.....	.....	764	.....	4,480
Bran and pollards.....	.....	.....	.....	1,269
Bricks and tile.....	672	12	743	12
Canned and preserved goods:				
Fish.....	314	5,954	590	8,936
Fruit.....	297	11,857	435	26,591
Meat.....	9	26	521	91
Milk.....	7	443	442	661
Soup.....	1,069	45	1,070	45
Vegetables.....	1,256	2,902	1,359	3,045
Miscellaneous and unclassified.....	1,746	13,194	2,251	13,612
Carbon black.....	287	.....	336	.....
Celite.....	.....	779	.....	833
Cement.....	353	40	7,206	40
Chalk.....	.....	.....	504	.....
Charcoal.....	45	.....	60	.....

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Chemicals	2,292	202	4,627	370
Clay, china and fire	81	27	217	27
Clay, filtering		370		370
Clorox		761		761
Coal	1,693		1,943	
Cocoa and cocoa beans	187		526	824
Coconuts and products	82	775	82	842
Coffee	212	63	6,543	8,787
Coke		34	2,118	34
Cold storage and refrigerated products:				
Dairy products	20		317	4,515
Eggs		190		232
Fish			2	278
Lard	319		396	
Meats			1	6,779
Poultry	26		26	
Vegetables				41
Other and unclassified	240		256	257
Confectionery	508	8	513	8
Copra meal and cake				91
Corn	15,203		15,439	
Cotton, raw	182	545	33,265	11,496
Creosote			3	
Dextrine	9		9	
Drugs and medicines	1,100	35	2,461	46
Dyes			247	
Earthenware	87		259	
Eggs, dried		71		88
Electrical apparatus and appliances	720	14	896	14
Explosives	37		198	
Extract, quebracho			5	
Fertilizers		48	1,182	48
Fish, salted or dry cured			1	55
Floor coverings	470	460	481	462
Flour	234	7,686	715	10,197
Fruit, dried	26	5,071	169	10,182
Fruits, fresh		2,306	2	12,171
Furniture and household goods	802	46	809	46
General	16,746	5,464	42,238	16,972
Glass and glassware	4,748	14	5,615	296
Glue	39		39	
Groceries	1,427	6	1,701	6
Gums	5	13	5	31
Hair, all kinds		94		105
Hay		1,073		1,073
Hemp, unmanufactured		251	5	702
Honey		249		718
Hops		26		26
Horns and hoofs				96
Infusorial earth		415		533
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.)	29,255	1,061	43,673	1,151
Ivory nuts				238
Lard substitute	76		78	
Lime	45		62	
Liquors	111	42	607	535
Lumber	1,500	62,805	2,098	105,628
Machinery (other than electrical)	1,609	463	4,855	748
Malt	128		128	
Manufactured goods	3,102	612	4,634	1,736
Marble and granite	298		301	
Matches	129	70	177	70
Metals:				
Antimony		27		127
Copper	30	8,220	35	18,179
Gold and silver			96	23
Iron	192		482	
Lead		715		5,842
Scrap	71	107	16,930	301
Tin	216	56	216	1,438
Zinc	58	18	158	1,728
Other and unclassified	111	34	292	1,391
Milk, powdered		521	17	591
Molasses and syrups	334		334	
Newsprint			7,104	919
Nitrates	1,250		2,587	7,175
Nuts, edible (including meats)	44	148	376	201
Oats	1,430		1,430	4,524
Oils, mineral:				
Crude	65		65	91,484
Gas and fuel	40	10,471	40	10,471
Gasoline, benzine, and naphtha	58	101,961	58	164,760

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Oils, mineral—Continued:				
Kerosene.....	5,194		12,853	9,990
Lubricating and greases.....	8,301	18	12,479	23
Other and unclassified.....	19	2	119	2
Oils, vegetable:				
Coconut.....			20	1,033
Cottonseed.....	2,865		2,865	55
Linseed.....			32	4
Olive.....	11	7	675	7
Rapeseed.....				30
Wood.....		37		398
Other and unclassified.....	206	11	339	319
Oil, fish.....				608
Oil, whale.....	450		450	200
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		28	614	968
Oilseed cake and meal.....	371		371	1,933
Ores:				
Copper.....			3,000	831
Gold and silver.....				18
Iron.....			3	
Lead.....			7,500	751
Magnesite.....		550		550
Manganese.....		50	35	130
Tin.....				1,902
Zinc.....				2,072
Other and unclassified.....	150		150	407
Paints and varnishes.....	417	68	804	70
Paper and paper products *.....	5,714	5,748	13,173	5,974
Paper scrap.....	15		540	
Peanuts.....	591	39	591	55
Peas, dry.....		77	4	98
Peatmoss.....			131	
Phosphates.....	510	480	5,656	480
Plaster.....	24		24	
Porcelainware.....	30	184	266	1,736
Potash.....		575	477	1,819
Rags and waste.....	50		159	66
Railroad material.....	27		842	26
Rice.....	181		276	2,781
Rope and twine.....	144	25	187	25
Rosin.....	1,000		2,501	
Rubber:				
Manufactured.....	1,143	216	1,295	225
Raw.....				213
Scrap.....		86	180	104
Rye.....				1,000
Salt.....	262		3,211	
Sand.....	27		1,632	
Seeds (except oilseeds).....	5	225	180	594
Sewer pipe (concrete and terra cotta).....	269		304	
Shells, oyster.....	414		414	
Silk, raw.....		402	2	971
Skins and hides.....	27	985	62	2,420
Slag.....			810	
Slate.....	318		332	
Soaps and products.....	2,320	111	2,703	266
Soda and sodium compounds.....	1,003		1,884	
Soy beans.....	123		123	
Sugar.....	114	31,267	2,114	116,875
Sulphur.....	6,135		10,559	
Talc.....	20	30	20	42
Tallow.....				422
Tea.....			105	534
Textiles *.....	3,567	10	5,995	440
Tinplate.....	11,170	27	14,669	27
Tobacco and manufactures.....	935	17	3,287	51
Toilet preparations.....	144		210	
Turpentine.....	34		50	3
Vegetables, dry *.....	45	621	101	835
Wax, paraffine.....	115	52	574	52
Wheat.....		102		133,232
Wines.....		169	285	277
Wood pulp.....	152	3,786	2,514	4,186
Wool.....	31	5,026	31	6,839
Total, July, 1932.....	154,737	304,761	362,717	897,264
Total, July, 1931.....	183,353	415,206	500,136	1,366,667
Total, July, 1930.....	207,096	683,667	575,964	1,826,083

* Except as otherwise classified.

* Cotton, silk, wool, rayon goods.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 15, 1932.

No. 1111.

Aids to navigation, Gaillard Cut. Effective August 15, 1932, all center line ranges in Gaillard Cut will exhibit green electric lights.

H. BURGESS,
Governor.

Notice to Mariners and Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 15, 1932.

No. 1112.

Canal Zone, Pacific entrance, Ancon Hill. Information is furnished that four obstruction lights (red) have been installed on top of Ancon Hill, one on each of four radio masts.

H. BURGESS,
Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 17, 1932.

No. 1113.

Panama Canal, Gaillard Cut, aids to navigation. Effective August 16, 1932, floating light, electric, flashing red, marking the position of former beacon No. 4 at the entrance to Gaillard Cut, at Gamboa, was changed to light buoy No. 96, exhibiting same characteristics.

This buoy sits in 42 feet of water and marks the western bank of the Canal.

H. BURGESS,
Governor.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective August 17, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.16
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.50
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, in drums, Gulftriton Med. No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, Gulftriton No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, Gulftriton, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3.....	Lb.	.08
Grease, yellow, cup, No. 5.....	Lb.	.03
Soda, ash.....	Lb.	.10
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Merchandise Shipped to Canal Zone for Orders.

The Panama Railroad Company, a New York corporation, of which the stock is now owned by the United States Government, will warehouse "for orders" at its piers and warehouses at Balboa and Cristobal, Canal Zone, nonperishable and nondangerous merchandise, excepting alcoholic liquors.

The rates are as follows:

(a) For handling cargo from ship's side to storage place, \$1 per ton of 2,000 pounds or 40 cubic feet on general merchandise, and one-half of the transfer rates provided by Item 34, Panama Canal Tariff No. 10, on other commodities.

(b) For handling cargo from storage place to ship's side, *i. e.*, for delivering or reforwarding it, the same rates as for receiving and storing, as per (a), above. The minimum charge for handling any shipment taken out of storage is \$1.

(c) For storage: First 35 days free; thereafter, 3 cents per day or fraction thereof per ton of 2,000 pounds or $1\frac{1}{2}$ cents per day or fraction thereof per ton of 40 cubic feet.

Special rates on special commodities in large quantities may be obtained on request.

Various lines operating out of Cristobal and Balboa to the west coast of Central and South America will accept their proportion of the through rate for the haul beyond the Isthmus, as explained in the following paragraph:

By virtue of the Canal Zone for Orders arrangement shippers are enabled to consign cargo to the Isthmus and subsequently to reassign it to any port beyond the Isthmus to which there is a through rate from port of origin without sacrificing their right to the through freight rate. This means that when a shipment moves from, say, New York to the Canal Zone, usual local rates will be charged to Cristobal or Balboa, as the case may be; but should the owner wish to reforward to any other port to which there is a through rate from port of origin, he may do so upon payment of the receiving carrier's proportion of the through rate from port of origin to port of ultimate destination, and upon evidence that the shipment, or any part of it, has moved beyond the Isthmus, the initial carrier will refund the difference between its proportion of the through rate applicable and the local rate.

In addition to reassigning beyond the Isthmus, cargo billed Cristobal for Orders may be reassigned to Panama City or line points on the Panama Railroad on the basis of through rates from port of origin to Panama City. In this case the Panama Railroad Company's charges will be the difference between the rate charged to Cristobal by the ocean carrier and the through rate from port of origin to Panama City and the necessary adjustments with the ocean carrier will be made by the Panama Railroad Company without inconvenience to shippers or consignees. The handling charge from storage place to cars is the same as from storage place to ship's side.

Cargo deposited in Hold for Orders Warehouse, Cristobal, which consignees desire transferred to Hold for Orders Warehouse, Balboa, will be assessed a charge of \$1 per ton on general cargo and one-half the transfer rates on other commodities for handling from the warehouse into cars at Cristobal, and a second charge of the same kind for handling from cars into warehouse at Balboa. The same charge will again apply when the cargo is reforwarded from, or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on Hold for Orders cargo discharged from vessels at Balboa.

Cargo consigned to Hold for Orders, Balboa, arriving at Cristobal piers, and/or cargo consigned to Hold for Orders, Cristobal, on which by previous arrangement the destination has been changed to Hold for Orders, Balboa, prior to arrival of the vessel, will be assessed one handling charge of \$1 per ton on general cargo or one-half of the transfer rates on other commodities for handling from shipside across piers and into cars at Cristobal and from cars into the Hold for Orders Warehouse, Balboa. The same charge will apply when the cargo is reforwarded from or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on cargo moving in the opposite direction.

There are no special forms for use in shipping except the warehouseman's order to release the cargo for shipment ("Authority to Deliver Cargo from Storage on Piers"). Shipper takes out his bill of lading and consular invoice and the cargo moves as regular outward local.

Samples of the forms used, "Negotiable Warehouse Receipt," and "Authority to Deliver Cargo from Storage on Piers," will be supplied on request to the Panama Railroad Co., Balboa Heights, C. Z., or 24 State Street, New York City.

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OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., August 24, 1932. No. 4.

Cargo Through the Canal During July, 1932.

On pages 36 and 37 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in July, 1932. This cargo, segregated according to direction as compared with July, 1931, and the differences, are shown in the following tabulation:

	July, 1931.	July, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	500,136	362,717	-137,419
Pacific to Atlantic.....	1,366,667	897,264	-469,403
Total.....	1,866,803	1,259,981	-606,822

Cargo tonnage through the Canal continues to decline. With the exception of May, which showed a gain over several of the preceding months, the months have shown a succession of decreases in this feature since February. The total cargo tonnage passing through in the past month, 1,259,981 tons, was almost 145,000 tons lower than the previous low month of the current calendar year, and the smallest quantity in a month to have made the transit since September, 1922. Two large items of cargo, nitrates and ores, which in the past have accounted for heavy cargo tonnage from the Pacific to the Atlantic, fell off last month to 7,175 tons and 6,661 tons, respectively, which in comparison with July, 1931, is an aggregate loss of almost 180,000 tons. Shipments of lumber, another important item of cargo in this direction, declined over 131,000 tons.

As noted in the above table, the total decrease in cargo tonnage in comparison with July, 1931, was 606,822 tons, or 32.5 per cent. From the Atlantic to the Pacific the decrease was 137,419 tons (27.5 per cent), and from the Pacific to the Atlantic, 469,403 tons (34.3 per cent).

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the cargo originating in the Atlantic area, that coming from the United States accounted for 265,135 tons, or 73.1 per cent of the total moving from the Atlantic to the Pacific in the past month. In actual tonnage this was a decrease of 84,981 tons, or 24.3 per cent, in comparison with the amount coming from the east coast of the United States in July, 1931. In cargo from Europe, which comprised 69,318 tons, or 19.1 per cent of the total in July, 1932, there was a decrease of 41,468 tons, or 37.4 per cent. In July, 1932, cargo coming from the United States and Europe made up over 92 per cent of the total moving from the Atlantic to the Pacific. In so far as the proportion of the total cargo is concerned, that from the United States formed a slightly

higher percentage than in July, 1931 (70.0 per cent), while the percentage from Europe was slightly lower (22.2 per cent in July, 1931).

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in the past month was reported routed as follows: 198,843 tons, or 54.8 per cent, to the United States; 95,061 tons, or 26.2 per cent, to Asia; 32,735 tons, or 9.0 per cent, to Australasia; and 16,012 tons, or 4.4 per cent, to South America. Tonnage to all these areas decreased in comparison with the corresponding month last year as follows: To the United States, 37,778 tons, or 16.0 per cent; to Asia, 18,390 tons, or 16.2 per cent; to Australasia, 29,216 tons, or 47.2 per cent; and to South America, 20,640 tons, or 56.3 per cent. In relation to the total cargo, the proportions destined to the United States and Asia were higher last month than in the corresponding month last year (when they were 47.3 per cent and 22.6 per cent, respectively), while those to South America and Australasia were lower (7.4 per cent and 12.4 per cent, respectively, in July, 1931).

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in July, 1932, 474,072 tons, or 52.8 per cent of the total, originated in the United States; 170,275 tons, or 19.0 per cent, in Canada; 139,490 tons, or 15.5 per cent, in South America; 49,825 tons, or 5.6 per cent, in Asia; and 16,165 tons, or 1.8 per cent, in Australasia. Tonnage from all these areas decreased in comparison with July, 1931, as follows: From the United States, 175,228 tons, or 27.0 per cent; from Canada, 22,234 tons, or 11.5 per cent; from South America, 189,530 tons, or 57.6 per cent; from Asia, 60,616 tons, or 54.9 per cent; and from Australasia, 21,794 tons, or 57.4 per cent. The percentages of the total cargo coming from the United States and Canada in the past month were somewhat higher than in July, 1931, when they were 47.4 per cent and 14.1 per cent, respectively, while from South America, Asia, and Australasia, the proportions of the total were lower. The percentages coming from the latter three areas in July, 1931, were 24.1 per cent, 8.1 per cent, and 2.8 per cent. Curtailed iron ore and nitrate shipments accounted for the relatively heavy decrease from South America, and light lumber shipments was the principal cause of the heavy decrease from the United States. Wheat, the main commodity exported from Canada via the Canal, showed only a small decrease in comparison with July, 1931, and kept tonnage from that area to the smallest decrease occurring in the principal areas in the Pacific.

Destination.—Segregated according to destination, 417,756 tons, or 46.6 per cent of the cargo moving from the Pacific to the Atlantic was destined to ports on the east coast of the United States and 414,730 tons, or 46.2 per cent of the total, was destined to European ports. These two areas absorbed almost 93 per cent of the cargo moving in this direction. Cargo destined to both the United States and Europe in the past month declined in comparison with July, 1931—to the United States it decreased 234,804 tons, or 36.0 per cent, while to Europe there occurred a decline of 197,940 tons, or 32.3 per cent. The percentage of the total cargo destined to these areas in the past month showed little change in comparison with July, 1931, that to the United States registering a slight decrease and that to Europe a small increase. Greatly reduced shipments in a number of leading commodities accounted for the decreased cargo tonnage to these two areas.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify about 88 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of July, 1932. The remaining 12 per cent consisted, for the most part, of manufactured goods in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for July, 1932, or July, 1931, are listed in the following tabulation:

Commodity.	July, 1931.	July, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Coal and coke.....	13,440	4,061	-9,379
Corn.....	1,652	15,439	+13,787
Cotton.....	29,939	33,265	+3,326
Creosote.....	14,867	3	-14,864
Iron and steel.....	98,988	43,673	-55,315
Machinery.....	8,867	4,855	-4,012
Oils, mineral.....	38,443	25,619	-12,824
Ores, various.....	576	10,688	+10,112
Paper.....	18,088	20,277	+2,189
Phosphates.....	20,469	5,656	-14,813
Scrap metal.....	6,512	16,930	+10,418
Sulphur.....	17,410	10,559	-6,851
Tinplate.....	20,210	14,669	-5,541

The above 13 commodity groups comprise 56.7 per cent of the total cargo moving from the Atlantic to the Pacific. Among these items there were recorded 5 increases as against 8 decreases. The most prominent gains were in the shipments of corn, ores, and scrap metal, while important losses occurred in the shipments of iron and steel, machinery, creosote, and phosphates.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify over 98 per cent of the cargo moving from the Pacific to the Atlantic during July, 1932. Commodities which aggregated more than 10,000 tons either during the past month or the corresponding month in 1931, are listed below:

Commodity.	July, 1931.	July, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	19,960	13,847	-6,113
Beans, edible.....	33,816	4,690	-29,126
Canned goods (fish, fruit, vegetables, etc.).....	51,474	52,991	+1,507
Coffee.....	10,723	8,787	-1,936
Cold storage (food products) *.....	22,163	12,102	-10,061
Cotton.....	11,234	11,496	+262
Flour.....	14,526	10,197	-4,329
Fruit, dried.....	8,824	10,182	+1,358
Fruit, fresh.....	21,708	12,171	-9,537
Lumber.....	236,876	105,628	-131,248
Metals, various.....	42,363	23,728	-18,635
Nitrates.....	134,116	7,175	-126,941
Oils, mineral.....	274,451	276,735	+2,284
Ores.....	58,876	6,661	-52,215
Paper.....	12,313	6,893	-5,420
Sugar.....	130,612	116,875	-13,737
Wheat.....	159,684	133,232	-26,452
Wool.....	10,645	6,839	-3,806

* Does not include fresh fruit.

The above 18 commodity groups comprise 92 per cent of the cargo moving from the Pacific to the Atlantic in July, 1932. With the exception of 4 slight increases, all of the commodities showed substantial losses. The most important losses occurred in the shipments of lumber, nitrates, and ores.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, July, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.					AUSTRALASIA.				ASIA.			Grand total.	Per cent of total cargo.							
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. †	Total, Australasia. †	Philippine Islands.	China.			Japan.	Far East. †	Total, Asia.				
NORTH AMERICA:																											
UNITED STATES—																											
North Atlantic ports.....	103,500	336	392	5,758	109,986	952	456	339	1,391	.....	3,138	3,260	.....	.....	.....	3,260	9,733	7,441	21,466	1,167	39,807	156,191	43.1				
South Atlantic ports.....	3,574	.....	.....	.....	377	3,951	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	258	622	4,713	92	5,685	9,636	2.6				
Gulf ports.....	47,663	.....	.....	.....	.....	47,663	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,404	232	21,054	25,952	3,47	241	99,308	27.4				
Total, United States.....	154,737	336	392	6,135	161,600	952	456	339	1,391	.....	3,138	3,260	.....	.....	.....	7,664	10,223	29,117	52,131	1,262	92,733	265,135	73.1				
East coast of Canada.....	3,143	2,000	.....	.....	.....	5,143	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,621	2.4				
Cristobal, C. Z. *	1,165	482	845	.....	.....	4,058	991	873	1,343	405	36	3,648	1,880	1,598	.....	3,478	.....	.....	.....	.....	.....	7,706	2.1				
West Indies.....	32	8	.....	.....	.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000	0.6				
Total, North America.....	159,077	2,056	3,181	392	6,135	170,841	1,943	1,329	1,682	1,796	36	6,786	9,544	1,598	.....	11,142	10,223	31,117	52,131	1,262	94,733	283,502	78.2				
EUROPE:																											
British Isles.....	401	3,577	.....	.....	.....	3,978	355	.....	.....	505	.....	860	.....	.....	.....	19,236	1,554	20,790	.....	.....	.....	25,028	7.1				
Belgium.....	6,961	208	415	.....	.....	7,584	400	.....	.....	84	200	684	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,268	2.3				
Denmark.....	65	42	.....	340	.....	447	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	447	0.1				
France.....	565	71	467	.....	.....	1,103	101	.....	.....	104	.....	205	.....	.....	.....	803	803	.....	.....	.....	.....	2,111	0.6				
Germany.....	7,569	489	455	.....	.....	8,513	90	30	250	150	.....	520	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,033	2.5				
Holland.....	914	86	.....	.....	.....	1,000	25	175	65	205	.....	470	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,470	0.4				
Italy.....	1,015	72	446	.....	.....	1,533	166	.....	.....	53	.....	219	.....	.....	.....	.....	.....	.....	.....	.....	.....	328	0.6				
Norway.....	380	.....	434	.....	.....	814	145	.....	.....	270	.....	415	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,229	0.3				
Spain and Portugal.....	15	.....	.....	.....	.....	15	.....	.....	.....	50	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	65	.....				
Sweden.....	12,306	121	657	.....	.....	13,375	194	763	.....	839	2,796	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,171	4.5				
Europe †.....	378	10	51	.....	.....	439	290	.....	.....	2,087	2,377	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,816	0.7				
Total, Europe.....	30,569	4,567	2,891	774	.....	38,801	2,766	175	858	1,521	3,276	8,596	.....	.....	.....	19,236	2,357	21,593	.....	.....	.....	328	69,318	19.1			
East coast of South America.....	9,148	59	.....	11	.....	9,218	.....	630	.....	.....	630	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,848	2.7				
Egypt.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....				
Far East.....	48	.....	.....	.....	.....	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48	.....				
Grand total.....	198,843	6,682	6,072	1,177	6,135	218,909	4,709	2,134	2,540	3,317	3,312	16,012	9,544	20,834	2,357	32,735	10,223	31,445	52,131	1,262	95,061	362,717	100.0				
Per cent of total cargo:																											
July, 1932.....	54.8	1.9	1.7	0.3	1.7	60.4	1.3	0.6	0.7	0.9	0.9	4.4	2.6	.....	.....	5.8	0.6	9.0	.....	.....	.....	26.2	100.0	.....			
July, 1931.....	47.3	3.6	1.6	0.5	4.6	57.6	4.4	0.6	0.4	1.1	0.9	7.4	4.0	.....	.....	5.6	2.8	12.4	.....	.....	.....	22.6	100.0	.....			
July, 1930.....	44.4	5.7	2.5	0.2	6.0	53.4	5.2	0.4	0.4	2.2	6.2	14.4	3.7	.....	.....	7.7	0.1	11.5	.....	.....	.....	20.7	100.0	.....			

* General cargo not routed so as to allow segregation between definite ports.

† Includes both local and transit cargo.

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, July, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.							EUROPE.													Grand total.	Per cent of total cargo.		
	UNITED STATES.				NORTH AMERICA.			EUROPE.																
	North Atlan- tic ports.	South Atlan- tic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Cen- tral America.	Cristobal, C. Z. ¹	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.	Europe. ²			Total, Europe.	East coast of South America.	Egypt.	Africa.
NORTH AMERICA:																								
West coast of U. S.	272,298	2,932	29,531	304,761	2,227	1,226	8,043	316,257	58,907	4,420	82,404	5,795	3,675	507	770	435	124	39,026	154,587	3,142	86,474,072	52.8		
West coast of Canada.	1,207			360	1,567	6,484	130	2,008	10,365	89,973	3,913	5,381	5,778	4,721	203	339		3,588	44,778	158,673	1,237	170,275	19.0	
West coast of Cen. Am.	99			2,702	2,801	1	1,657	30	4,489				269	338					33	640		5,129	0.6	
Bahia, C. Z.							305	305																
Hawaiian Islands	32,810			9,193	42,003			42,003														42,003	4.7	
Total, N. Amer.	306,414	2,932	41,786	351,132	6,484	2,358	3,364	10,081	373,419	148,879	8,333	5,463	46,893	10,854	3,878	846	770	435	3,745	83,804	313,900	4,379	86,691,784	77.1
SOUTH AMERICA:																								
Chile.	943			943			264	454	1,661	9,561	666	888	4,672	1,841	919	1,297	306	143		9,181	29,474	590		
Colombia.	2,076			2,076		4,654	4	6,734	11,232	9	30		55	61	16					11				
Ecuador.	10,053			10,053		1,179	40	32,153	24,992	204	802	11,477	812	9,689	80				100	8,920	57,080	171		
Peru.	3,767			3,767	28,346		5	83	260											41	301			
W. coast of S. Amer. ¹	78			78																				
Total, S. America	16,917			16,917	28,346	6,142	458	51,863	34,822	900	1,690	16,204	2,714	10,635	1,377	306	147	100	18,142	87,037	590			
AUSTRALASIA:																								
Australia.	160			160	1,483				1,643															
New Zealand.	409			409	266		54		729	13,793										13,793				
Total, Australasia	569			569	1,749		54		2,372	13,793										13,793				
ASIA:																								
Philippine Islands.	37,508			37,508																				
China.	2,001			2,001			197	69	2,267															
Japan.	7,551			7,551			259	47	7,857															
Far East.	1,045			1,045			103		1,148															
Total, Asia.	48,105			48,105			559	117	49,814															
Grand total.	372,005	2,932	42,819	417,756	36,579	2,358	10,119	10,656	477,468	197,494	9,233	7,153	63,097	13,568	14,513	2,223	1,076	582	3,845	101,946	414,730	4,980		
Per cent of total cargo:																								
July, 1932.	41.5	0.3	4.8	46.6	4.0	0.3	1.1	1.2	53.2	22.0	1.0	0.8	7.1	1.5	1.6	0.2	0.1	0.1	0.4	11.4	46.2	0.6		
July, 1931.	42.3	1.0	4.5	47.8	4.2		1.7	0.5	54.2	20.2	0.8	0.8	1.9	2.6	0.7	0.4	0.3	0.5		16.7	44.9	0.3	0.6	
July, 1930.	56.4	0.1	3.3	59.8	2.3		1.5	3.4	67.0	17.3	0.2	0.2	1.3	1.5	1.1	0.1	0.5			10.3	32.5	0.5		

¹ General cargo not routed so as to allow segregation between definite ports.

² Includes both local and transit cargo.

³ Includes Sweden.

¹ General cargo not routed so as to allow segregation between definite ports.² Includes both local and transit cargo.³ Includes Sweden.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, August 20, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Calvi	12	18.00	14	6.10	14	15.03	14	16.21	German.	North German Lloyd.	216.0	32.0	12.5	Cristobal, C. Z.	Buenaventura, Col.	General.	400	1,105	698
Nueva Panama	11	30.00	14	6.00	14	13.54	14	15.01	Panamanian	Hans Elliot.	108.0	20.0	8.0	Cristobal, C. Z.	Buenaventura, Col.	General.	50	226	101
Point Salinas	14	3.50	14	6.15	14	13.55	14	15.01	American.	Swayne & Hoyt.	386.0	52.0	24.6	Houston, Tex.	Seattle, Wash.	General.	5,751	5,705	4,167
Mobile City	14	6.20	14	7.00	14	13.35	14	17.14	American.	Isthmian S. S. Lines.	395.0	55.0	18.0	Baltimore, Md.	Tacoma, Wash.	Steel, general.	2,902	7,330	5,241
Tsuyama Maru	14	7.35	14	8.10	14	16.10	14	17.25	Japanese.	Nippon Yusen Kaisha.	445.0	58.0	19.0	Norfolk, Va.	Kobe, Japan.	Coffee, (✓)	4,728	7,956	5,681
Santa Elisa	13	11.15	14	11.15	14	16.35	14	23.25	American.	Panama Mail S. S. Co.	360.0	51.0	23.8	New York, N. Y.	San Francisco, Cal.	Coffee, general.	2,874	5,351	4,325
Nabrtton	14	11.40	14	11.55	14	18.50	14	19.28	British.	R. Chapman & Son.	412.0	55.0	16.6	Oran, Africa.	Vancouver, B. C.	Ballast.	6,823	8,437	4,797
Bente	14	13.15	14	13.25	14	19.52	14	21.20	Danish.	"Itaca," Buenos Aires.	390.0	53.0	18.0	Ostermoor, Germ'y.	La Libertad, Ecua.	Ballast.	6,012	4,097	
Maersk	14	8.15	14	14.25	14	21.13	14	22.20	German.	North German Lloyd.	521.0	64.0	23.1	Bremen, Germany.	Tacoma, Wash.	General.	4,386	11,007	7,698
Northern	14	17.40	14	17.50	15	11.07	15	12.20	American.	Sun Oil Co.	480.0	66.0	22.6	Chester, Pa.	Los Angeles, Calif.	Ballast.	1,602	6,289	4,722
Brandanger	14	18.45	15	6.15	15	13.04	15	23.21	Norwegian.	General S. S. Corp.	381.0	53.0	17.7	Buenos Aires, Arg.	Vancouver, B. C.	General.	1,602	6,289	4,722
W. S. Miller	14	20.35	15	7.25	15	13.55	15	15.00	American.	Shell Oil Co.	435.0	56.0	22.0	New York, N. Y.	San Francisco, Cal.	Ballast.	7,470	5,144	
Mercury Sun	15	6.00	15	8.20	15	15.10	15	16.00	American.	Shell Oil Co.	480.0	65.0	20.5	Baltimore, Md.	Los Angeles, Calif.	Ballast.	9,713	6,536	
Loosibank	15	6.45	15	9.35	15	16.12	15	17.15	British.	Bank Line Ltd.	426.0	57.0	19.2	Boston, Mass.	Shanghai, China.	General.	2,862	7,623	5,412
Rotterdam	15	11.16	15	17.50	16	11.50	16	13.18	Dutch.	American Pet. Co.	470.0	63.0	19.0	Amsterdam, Holl'd.	Talara, Peru.	Ballast.	9,197	9,362	
Tasmania	15	18.55	16	6.10	16	14.38	16	15.32	British.	N. Z. Shipping Co.	484.0	62.0	23.0	Liverpool, England.	Fremantle, Auslia.	General.	2,654	4,486	6,301
Ryoyo Maru	15	19.55	16	7.10	16	15.26	16	16.48	Japanese.	Kawasaki Kisen Kaisha	415.0	56.0	15.0	Kobe, Japan.	Kobe, Japan.	Ballast.	6,911	4,900	
Asatoka	15	21.10	16	8.25	16	16.15	16	17.38	American.	McCormick S. S. Co.	409.0	54.0	17.0	Philadelphia, Pa.	Seattle, Wash.	Steel, iron, gen.	1,355	6,627	4,993
Canadian	16	9.40	16	9.50	16	17.24	16	22.10	British.	Can. Nat. Steamships.	430.0	56.0	30.0	Montreal, Canada.	Auckland, N. Z.	Cement, cattle.	7,265	7,680	5,518
Stensby	16	13.45	16	13.50	16	19.43	16	21.20	Danish.	West India Trading Co.	350.0	50.0	18.11	Alborg, Denmark.	Corinto, Nicaragua	General.	2,395	4,917	3,531
Kentuckian	16	14.20	16	14.35	16	21.05	16	22.18	American.	Amer-Hawayan Line.	414.0	53.0	18.6	Portland, Mass.	Portland, Oreg.	General.	1,979	7,049	4,941
Japan Arrow	16	16.10	16	19.55	17	11.43	17	13.05	American.	Stand. Vac. Transp. Co.	464.0	62.0	19.6	Pasadena, N. J.	Los Angeles, Calif.	Ballast.	10,084	7,388	
Knute Nelson	16	15.10	17	6.10	17	13.58	17	22.54	Norwegian.	Fred Olsen & Co.	435.9	56.2	18.0	Oslø, Norway.	Vancouver, B. C.	General.	2,348	8,016	5,854
India	16	21.40	17	7.50	17	14.32	17	16.00	Danish.	East Asiatic Co.	470.3	63.7	19.1	Copenhagen, Den.	Vancouver, B. C.	Ballast.	11,157	8,336	
Susan V.	16	22.55	17	8.25	17	15.17	17	16.15	American.	Luckenbach Line.	434.3	57.7	20.0	Boston, Mass.	Seattle, Wash.	General.	2,800	7,947	5,688
Lukenbach	17	11.55	17	12.00	17	18.34	17	19.35	American.	Sun Oil Co.	425.0	57.2	18.0	Fall River, Mass.	San Francisco, Cal.	Ballast.	7,481	5,095	
S. C. T. Dodd	17	11.55	17	12.00	17	18.34	17	19.35	American.	Ramon Corpello.	425.0	57.2	18.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	7,481	5,095	6
Gen. Wm. M.	17	11.55	17	12.00	17	18.34	17	19.35	American.	Ramon Corpello.	425.0	57.2	18.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	7,481	5,095	6
Graham	17	14.20	17	14.20	17	21.12	17	22.12	American.	U. S. Army.	156.0	32.0	10.0	Cuba.	Balboa, C. Z.	Ballast.	4,386	2,877	
Fukko Maru	17	19.05	18	6.10	18	13.15	18	14.30	Japanese.	United Ocean & Tr. Co.	350.0	50.0	14.0	Yokohama, Japan.	Los Angeles, Calif.	Ballast.	4,386	2,877	
Western Queen	17	9.00	18	10.55	18	19.15	18	20.15	British.	A. Arthur.	70.0	19.7	9.0	Swva, S. Sea Islands	Swva, S. Sea Islands	Ballast.	4,953	9,300	6,307
Shervin	18	11.15	18	11.20	18	17.47	18	19.00	British.	Kerr S. S. Co.	450.0	61.4	20.9	Boston, Mass.	Belawan Deli, Sum.	Gasoline, etc.	6,813	8,978	6,062
Patrick Henry	18	13.00	18	13.40	18	21.10	18	22.30	American.	Lykes Bros., Ripley Co.	439.6	60.2	24.0	New Orleans, La.	Manila, P. I.	Gasoline, etc.	6,813	8,978	6,062

* Tanker.

* Motor ship.

* Mine planter.

* Yacht.

* Cotton, rosin, and general.

* Paper, sulphur, and general.

* Cotton, rosin, and general.

	18	6.00	18	15.05	18	21.52	19	12.05	American...	Grace Line...	433.3	63.9	23.6	New York, N. Y.	San Antonio, Chile.	General.	2,815	11,080	7,442
Santa Clara...	18	6.00	18	15.05	18	21.52	19	12.05	American...	Grace Line...	433.3	63.9	23.6	New York, N. Y.	San Antonio, Chile.	General.	2,815	11,080	7,442
Selota *	18	14.45	18	10.31	18	10.35	19	12.05	American...	U. S. Navy	149.3	30.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Glenard...	18	14.45	18	10.31	18	10.35	19	12.05	British...	Glenroy Co.	376.6	52.3	13.1	Cardiff, England.	Makatea Island.	Ballast.	5,080	3,529	
Hundager *	18	13.10	18	18.15	19	13.39	19	15.50	Norwegian...	Westal, Larsen & Co.	398.0	54.7	16.0	Havre, France.	Vancouver, B. C.	Ballast.	8,854	5,287	
San Gabriel	18	12.50	19	5.58	19	16.15	19	17.30	American...	States S. S. Co.	336.0	52.3	14.1	Philadelphia, Pa.	Seattle, Wash.	General.	1,580	5,735	4,075
Pilgrim *	7-15	21.25	19	6.05	19	15.53			American...	D. C. Starr	75.0	20.0	11.0	Boston, Mass.	Tahiti, S. Sea Is.	Ballast.		73	52
President	19	3.10	19	7.20	19	15.40	19	21.44	American...	Dollar Line...	592.0	62.0	25.0	New York, N. Y.	Round the world.	General.	2,749	12,583	9,207
Garfield	19	4.20	19	8.23	19	16.58	19	18.40	Norwegian...	Canadian Transp. Co.	381.2	51.0	20.2	Mobile, Ala.	Vancouver, B. C.	(*)	3,170	6,083	4,610
Chr. Knudsen	17	22.50	19	9.33	19	18.01	19	19.10	German...	North German Lloyd	315.8	46.0	20.2	Hamburg, Germany	Champerico, Guat.	General	636	3,512	2,471
Atlica...	19	14.05	20	6.03	20	13.12	20	14.30	British...	Anglo-German Oilfields.	400.0	57.6	21.8	Philadelphia, Pa.	La Libertad, Ecua.	Ballast.	7,555	5,049	
El Aleo	20	5.23	20	7.15	20	14.35	20	15.50	American...	Calmor S. S. Corp.	400.0	54.0	19.6	Baltimore, Md.	Seattle, Wash.	General.	4,200	6,581	4,795
Portman	13	14.05	20	7.15	20	15.52	20	17.43	British...	Pacific Steam Nav. Co.	215.7	33.6	15.3	Cristobal, C. Z.	Champerico, Guat.	General.	5,575	1,273	7,706
Aspirita	20	11.00	20	11.10	20	17.51	20	19.25	American...	Isthmian S. S. Lines	433.0	53.0	19.0	Baltimore, Md.	Honolulu, T. H.	Steel, general.	2,287	7,011	5,450
Steel Inventor.	20	18.20	20	18.45	21	12.33	21	14.00	American...	Nelson Line...	330.0	53.0	23.6	Wilmington, Del.	Seattle, Wash.	Coal, corn, gen.	5,637	5,657	4,133
Nelson	20	18.20	20	18.45	21	12.33	21	14.00	American...	Nelson Line...	330.0	53.0	23.6	Wilmington, Del.	Seattle, Wash.	Coal, corn, gen.	5,637	5,657	4,133
Traveler...	20	18.20	20	18.45	21	12.33	21	14.00	American...	Nelson Line...	330.0	53.0	23.6	Wilmington, Del.	Seattle, Wash.	Coal, corn, gen.	5,637	5,657	4,133

* Tanker.

* Tug.

** Salt, sulphur, phosphate, and general.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Odenwald ..	13	21.00	14	6.03	14	14.20	14	10.00	German ..	Hanbing-American Line	399.5	54.3	26.3	Valparaiso, Chile.	Hamburg, Germany	General.	7,856	6,603	4,979
American ..	13	23.55	14	7.20	14	15.00	14	15.00	American ..	Amer-Hawaiian Line.	404.6	53.9	22.0	Portland, Ore.	Boston, Mass.	General.	3,512	6,777	4,761
Havsten ..	14	6.45	14	8.11	14	16.15	14	19.15	Norwegian ..	Rapen & Hoenneben.	420.8	55.5	24.4	Estero Bay, Calif.	Cesse, France.	Crude oil.	8,176	6,643	4,426
Beneruchan ..	14	10.00	14	10.52	14	18.00	14	18.00	British ..	A. B. Graham	429.0	55.9	27.3	Fraser River, B. C.	London, England.	Wheat, lumber.	8,696	6,526	4,228
Malaren *	14	17.10	15	6.26	15	13.55	15	15.35	Swedish ..	Transatlantic S. S. Co.	337.2	45.6	21.0	Callao, Peru.	Lands End, Eng. *	Sugar.	4,906	4,013	2,851
Selota *	15	7.30	15	6.36	15	13.35	15	15.55	American ..	U. S. Navy	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.				
Innesmoor ..	15	7.30	15	8.15	15	15.55	15	15.55	British ..	W. L. Conyn & Co.	375.0	52.6	26.0	Vancouver, B. C.	Antwerp, Belgium.	Wheat.	7,405	6,055	4,615
Benjamin ..	16	00.45	16	6.55	16	14.42	16	22.30	Norwegian ..	Fred Olsen & Co.	452.0	59.5	28.0	Vancouver, B. C.	Oslo, Norway.	Wheat, general.	9,011	9,081	6,140
Franklin ..	16	7.15	16	7.55	16	16.10	16	19.45	British ..	Canadian Transp. Co.	423.3	53.8	26.4	Chemainus, B. C.	Avonmouth, Eng.	General.	7,733	7,100	4,996
Springbank ..	16	7.15	16	7.55	16	16.10	16	19.45	British ..	Canadian Transp. Co.	423.3	53.8	26.4	Chemainus, B. C.	Avonmouth, Eng.	General.	7,733	7,100	4,996
Edward ..	16	7.40	16	9.00	16	17.20	16	17.20	American ..	Luckenbach Line.	436.6	57.2	26.5	Seattle, Wash.	Boston, Mass.	General.	6,633	8,543	6,427
California ..	16	8.40	16	9.40	16	18.10	16	18.10	American ..	Standard Oil Co.	513.5	63.2	30.0	Los Angeles, Calif.	London, England.	Gasoline.	15,326	11,719	8,619
Astakana ..	16	12.35	16	13.24	16	19.55	17	1.00	German ..	North German Lloyd	239.6	47.0	23.0	Talcahuano, Chile.	Hamburg, Germany	General.	2,848	3,491	2,310
Tanager ..	16	13.35	16	14.25	16	21.45	16	21.45	Norwegian ..	Wesfal, Larsen & Co.	393.1	54.0	26.0	Vancouver, B. C.	Havre, France.	General.	7,381	6,858	5,308
Montanian ..	16	20.42	17	6.23	17	13.45	17	13.45	American ..	Amer-Hawaiian Line.	401.0	53.0	21.3	Seattle, Wash.	Boston, Mass.	General.	3,640	6,756	4,775
Hollywood ..	17	00.05	17	7.37	17	15.55	17	15.55	American ..	McCormick S. S. Co.	410.5	54.3	24.3	Seattle, Wash.	Santa Fe, Arg.	General.	6,435	6,582	5,003
Bright ..	17	7.00	17	8.43	17	17.05	17	17.05	American ..	Stand. Vac. Transp. Co.	430.5	65.0	30.0	Los Angeles, Calif.	New York, N. Y.	Fuel oil.	14,050	9,822	6,749
Santa Maria ..	17	4.56	17	9.13	17	15.30	17	19.25	American ..	Grace Line	465.0	64.0	23.3	Valparaiso, Chile.	New York, N. Y.	General.	2,609	10,026	6,630
Canadian ..	17	16.30	17	17.10	18	11.35	18	23.05	British ..	Can. Nat. Steamships	430.0	56.0	25.0	Auckland, N. Z.	Montreal, Canada.	General.	5,348	7,680	5,568
Constructor.	17	12.47	18	6.21	18	13.38	18	22.15	American ..	U. S. Navy	448.0	58.2	24.0	San Francisco, Cal.	Boston, Mass.	Navy supplies.	437		
Chamouth ..	17	16.40	18	7.19	18	13.58	18	14.55	British ..	M. S. Dalglish	400.0	53.2	25.0	Carnis, Australia.	St. Johns, N. B.	Sugar.	7,160	5,958	4,114
Elmworth ..	18	6.10	18	7.56	18	15.55	18	21.17	American ..	Isthmian S. S. Lines	424.2	56.2	26.0	Seattle, Wash.	Avonmouth, Eng.	Grain, general.	7,842	7,611	5,497
Steel Worker ..	18	6.10	18	7.56	18	15.55	18	21.17	American ..	Isthmian S. S. Lines	424.2	56.2	26.0	Seattle, Wash.	Avonmouth, Eng.	Grain, general.	7,842	7,611	5,497
Gen. G. W.	18	6.10	18	7.56	18	15.55	18	21.17	American ..	Isthmian S. S. Lines	424.2	56.2	26.0	Seattle, Wash.	Avonmouth, Eng.	Grain, general.	7,842	7,611	5,497
Getty ..	18	14.45	18	15.24	18	15.40			American ..	U. S. Army	99.0	22.0		Balboa, C. Z.	Cristobal, C. Z.	General.	10,428	10,002	6,743
Schwaben ..	18	14.45	18	15.24	18	15.40			American ..	U. S. Army	99.0	22.0		Balboa, C. Z.	Cristobal, C. Z.	General.	10,428	10,002	6,743
Steel Exporter.	18	16.30	19	6.16	19	13.40	19	13.40	German ..	North German Lloyd	511.3	63.8	23.0	Vancouver, B. C.	Hamburg, Germany	General.	7,160	5,958	4,114
Molava ..	18	23.00	19	7.10	19	11.35	19	14.35	British ..	Isthmian S. S. Lines	425.0	56.2	26.0	Port Allen, T. H.	East coast, U. S. A.	Sugar.	8,420	7,611	5,450
Molava *	18	23.00	19	7.10	19	11.35	19	14.35	British ..	Donaldson Bros.	337.0	53.7	23.0	Vancouver, B. C.	Glasgow, Scotland.	General.	5,422	6,719	4,979

* For orders.

** Motor ship.

** Tug.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Floreana ¹⁴	14	19 00	19	8 02	19	16 00	19	16 20	Colombia...	A. Tagaropulos & Co....	150 0	27 2	7 3	Tunaco, Colombia.	Cristobal, C. Z....	Ballast.....	.....	410	307
David McKelby ¹⁵	19	3 35	19	9 00	19	16 20	19	16 20	American	Tidewater Oil Co.....	430 0	59 2	23 0	San Francisco, Cal.	New York, N. Y....	Gasoline.....	9 325	7 629	5 325
Hofuku Maru ¹⁶	19	2 50	19	9 38	19	17 50	19	19 45	Japanese	Kokusu Kisen Kaisha...	355 0	51 0	27 0	Mambaru, P. I....	East coast, U.S.A...	Sugar.....	8 000	6 212	4 710
San Rafael.....	19	8 25	19	10 23	19	18 25	19	18 25	American	States S. S. Co.....	410 0	54 4	25 0	Portland, Ore.	Philadelphia, Pa...	Lumber, general	7 522	6 484	4 675
Nebraska.....	19	8 45	19	10 58	19	19 48	20	00 45	British	Royal Mail S. P. Co....	449 4	58 3	25 0	Vancouver, B. C...	Rotterdam, Holl'd	Fruit, general	6 005	8 878	6 588
Svenor ¹⁷	19	10 05	19	11 30	19	21 17	20	00 05	Norwegian	Aulo-Saxon, Pet. Co....	460 5	59 5	27 0	Los Angeles, Calif.	Londs End, Eng'ls	Gasoline.....	10 503	8 301	5 502
Castana ¹⁸	19	11 00	19	11 33	19	23 10	19	23 10	American	U. S. Tankship Corp...	300 0	54 2	26 0	Honolulu, T. H....	Albany, N. Y....	Molasses.....	8 519	6 205	4 286
Santa Cecilia.....	19	4 05	19	12 34	19	22 10	20	12 18	American	Panama Mail S. S. Co...	363 0	51 0	26 0	San Francisco, Cal.	New York, N. Y....	General.....	3 388	5 797	4 188
Robin Gray.....	19	12 10	19	13 02	20	8 45	20	8 45	American	Isthmian S. S. Lines...	424 8	55 2	24 4	Honolulu, T. H....	Baltimore, Md....	Sugar, pineapples	7 601	7 472	5 542
Nueva Panama ¹⁴	19	14 10	19	14 52	19	23 20	21	6 00	Colombia...	Hans Elliot.....	108 5	23 6	10 0	Buenaventura, Col.	Cristobal, C. Z....	Coffee.....	214	226	101
Durazzo.....	19	15 45	19	16 29	20	11 20	21	9 05	German	Hamburg-American Line	227 5	34 4	14 0	Guayaquil, Ecuador	Cristobal, C. Z....	General.....	756	1 632	1 041
Vinemoor ¹⁴	19	7 40	20	6 12	20	14 05	20	14 05	British	Canadian Transp. Co...	375 0	52 6	26 0	Vancouver, B. C...	London, England...	General.....	7 521	6 099	4 691
Aldington Court ¹⁴	19	21 40	20	6 59	20	15 00	20	15 00	British	Comyn & Co.....	405 6	55 5	25 4	Vancouver, B. C...	Antwerp, Belgium	Wheat, lumber...	8 700	6 939	5 251
Elizabeth Kellogg ¹⁵	20	9 10	20	11 08	20	18 50	20	18 50	American	Spencer Kellogg & Son...	391 9	51 2	24 0	Hankow, China...	New Orleans, La...	Coconut oil.....	5 485	5 410	3 804
Spencer Kellogg ¹⁵	20	14 25	20	15 06	20	22 30	20	22 30	American	Republic Croosling Co...	391 0	51 3	27 0	S'attle, Wash.....	New York, N. Y....	Tar, gas oil.....	8 000	5 601	3 902

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.	Arrivals.		Departures.	
		Line.	Date.	Vessel.	Line.
August 14.....	Martinique.....	Colombian S. S. Line	August 14.....	Metapan.....	United Fruit Co.....
August 14.....	No. 144-M ¹⁶	Pan American-Grace Airways	August 14.....	Coppename.....	United Fruit Co.....
August 14.....	Dakarlan.....	Leyland S. S. Line	August 14.....	Costa Rica.....	Royal Netherlands S. S. Co...
August 14.....	No. 9673 ¹⁶	Pan American Airways	August 14.....	Anco.....	Panama R. R. S. S. Line
August 15.....	San Juan No. 2 ¹⁷	Cukra Development Co.	August 14.....	Martinique.....	Colombian S. S. Line
August 15.....	Calamares.....	United Fruit Co.....	August 15.....	Marques de Camillas.	Spanish Line.....
August 15.....	Flandre.....	French Line.....	August 15.....	No. 669-M ¹⁶	Pan American Airways
August 15.....	No. 659-M ¹⁶	Pan American Airways	August 15.....	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways
August 15.....	Crawford Ellis.....	United Fruit Co.....	August 15.....	Calamares.....	United Fruit Co.....
August 16.....	Magdalena ¹⁸	Hamburg-American Line	August 15.....	Dakarlan.....	Leyland S. S. Line

¹⁶ Air mail carrier. ¹⁷ Tug. ¹⁸ Motor ship.

* Other than ships passing through the Canal.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
August 16.....	No. 145-M ¹⁹	Uraba, Medellin & Cent. Airways	Medellin via wayports.	August 15.....	Magallanes.....	Spanish Line.....	New York via wayports.
August 16.....	Camden ¹	United Fruit Co.....	Curacao, D. W. I.	August 16.....	No. 300-N ¹⁹	Pan American-Grace Airways.....	Talara via wayports.
August 17.....	Saramacca.....	United Fruit Co.....	New Orleans, La.	August 16.....	No. 9673 ¹⁹	Pan American Airways.....	San Salvador via waypts.
August 17.....	Pearl Marie ²⁰	G. I. Bryan.....	Bluefields, Nicaragua.	August 17.....	Crawford Ellis.....	United Fruit Co.....	New Orleans via waypts.
August 17.....	No. 9688 ¹⁹	Pan American Airways.....	San Salvador via wayports.	August 17.....	Flandre.....	French Line, C. G. T.....	Havre via wayports.
August 17.....	No. 945-M ¹⁹	Pan American-Grace Airways.....	Chileayo via wayports.	August 17.....	Camden.....	United Fruit Co.....	Santa Marta, Colombia.
August 17.....	Memphis ²¹	U. S. Navy.....	High seas.	August 17.....	Magdalena.....	Hamburg-American Line.....	Pto. Barrios and Limon.
August 17.....	Guayaquil.....	Panama Railroad S. S. Line.....	New York via Haiti.	August 17.....	Saramacca.....	United Fruit Co.....	Port Limon via Bocas.
August 18.....	No. 669-M ¹⁹	Pan American Airways.....	Miami via wayports.	August 17.....	Memphis ²¹	U. S. Navy.....	High seas.
August 19.....	Contessa.....	Standard Fruit & S. S. Co.....	New Orleans via Habana.	August 18.....	San Juan No. 2 ²³	Cukra Development Co.....	Bluefields, Nicaragua.
August 19.....	Veragua.....	United Fruit Co.....	New York via wayports.	August 19.....	No. 144-M ¹⁹	Pan American-Grace Airways.....	Buenaventura, Colombia.
August 20.....	Santa Marta.....	United Fruit Co.....	Port Limon, Costa Rica.	August 19.....	No. 945-M ¹⁹	Uraba, Medellin & Cent. Airways.....	Buenaventura, Colombia.
August 20.....	No. 945-M ¹⁹	Pan American-Grace Airways.....	Buenaventura, Colombia.	August 19.....	No. 145-M ¹⁹	United Fruit Co.....	Medellin, Colombia.
August 20.....	No. 145-M ¹⁹	Pan American-Grace Airways.....	Medellin, Colombia.	August 19.....	Veragua.....	United Fruit Co.....	Port Limon, Costa Rica.
August 20.....	Annetta I. ²²	P. W. Hamilton.....	Colon, Rep. of Panama.	August 20.....	Annetta I. ²²	P. W. Hamilton.....	Colon, Rep. of Panama.
August 20.....	Inapaguina ²²	A. Tagaropulos.....	Colon, Rep. of Panama.	August 20.....	Inapaguina ²²	A. Tagaropulos.....	Colon, Rep. of Panama.
August 20.....	Fortuna ²⁰	United Fruit Co.....	Colon, Rep. of Panama.	August 20.....	Contessa.....	Standard Fruit & S. S. Co.....	New Orleans and waypts.
1 Tanker.			21 Cruiser.	22 Motor boat.	23 Tug.		
			20 Motor schooner.	PORT OF BALBOA.			
August 14.....	Real ²⁴	Hans Elliot.....	Darien, Rep. of Panama.	August 15.....	Real ²⁴	Hans Elliot.....	Panama Bay, R. P.
August 16.....	Real ²⁴	Hans Elliot.....	Darien, Rep. of Panama.	August 17.....	Real ²⁴	Hans Elliot.....	Panama Bay, R. P.
August 18.....	Real ²⁴	Hans Elliot.....	Darien, Rep. of Panama.	August 18.....	Real ²⁴	Hans Elliot.....	Panama Bay, R. P.
August 19.....	Real ²⁴	Hans Elliot.....	Darien, Rep. of Panama.	August 19.....	Real ²⁴	Hans Elliot.....	Panama Bay, R. P.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending August 20, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
President Wilson	Dollar Line.	August 7	August 7	500	(²)
Sixola.	United Fruit Co.		August 7		114
Suriname.	United Fruit Co.		August 7		526
Bogota.	Colombian S. S. Line.	August 7	August 7	151	523
Katsuragi Maru.	Kokusai Kisen Kaisha.	August 7	August 7	32	(²)
Cerigo.	Hamburg-American Line.		August 8		90
Costa Rica.	Royal Netherlands S. S. Co.		August 8		1
Pastores.	United Fruit Co.	August 8	August 8	(¹)	266
Buenos Aires.	Johnson S. S. Line.	August 8	August 8	(¹)	38
Seattle.	Hamburg-American Line.	August 8	August 8		148
Damsterdijk.	Holland-America Line.	August 8	August 9		230
Manizales.	Grace Line.	August 8	August 11		913
Bodegraven.	Royal Netherlands S. S. Co.	August 10	August 10	(¹)	105
Wyoming.	French Line.	August 10	August 10	(¹)	42
Pearl Marie.	R. Feuillebois.	August 10	August 10	(¹)	29½
Kwanto Maru.	Osaka Shosen Kaisha.	August 10	August 10		3½
Ancon.	Panama R. R. S. S. Line.	August 10		2, 675	
Coppename.	United Fruit Co.	August 10	August 10		382
Franklin K. Lane.	Standard Shipping Co.	August 10	August 11	10, 150	(²)
Jeff Davis.	Roosevelt S. S. Co.	August 11	August 11	216	(²)
Troja.	Hamburg-American Line.	August 11	August 12	73	17
Nueva Panama.	United Fruit Co.	August 11		230	
Calamares.	United Fruit Co.	August 12	August 12	361	13
Cefalu.	Standard Fruit & S. S. Co.	August 12	August 13	253	202
Alda.	Roland Line.	August 12	August 13	38	115
Cali.	North German Lloyd.	August 12		986	
Arguani.	Elders & Fyffes, Ltd.	August 12	August 13	5	(²)
Acajutla.	Pacific Steam Navigation Co.	August 13		562	
Costa Rica.	Royal Netherlands S. S. Co.	August 13		3	
Marques de Comillas.	Spanish Line.	August 13		1	
Metapan.	United Fruit Co.	August 13		305	
Coppename.	United Fruit Co.	August 13		6	
Santa Elisa.	Panama Mail S. S. Co.	August 13		549	
Eupatoria.	Hamburg-American Line.	August 13	August 13	(¹)	1, 135
Duchess D'Aosta.	Navigazione Libera-Triestina.	August 13	August 13	(¹)	132
Magallanes.	Spanish Line.	August 13		132	
Ancon.	Panama R. R. S. S. Line.		August 14		870
Nueva Panama.	United Fruit Co.		August 14		47
Cali.	North German Lloyd.		August 14		239
Costa Rica.	Royal Netherlands S. S. Co.		August 14		143
Metapan.	United Fruit Co.		August 14		183
Coppename.	United Fruit Co.		August 14		331
Santa Elisa.	Panama Mail S. S. Co.		August 14		692
Martinique.	Colombian S. S. Line.	August 14	August 14	20	1, 002
Odenwald.	Hamburg-American Line.	August 14	August 14	26	(²)
Donau.	North German Lloyd.	August 14	August 14	63	220
Dakarian.	Leyland S. S. Line.	August 14	August 15	353	(²)
Marques de Comillas.	Spanish S. S. Line.		August 15		566½
Calamares.	United Fruit Co.	August 15	August 15	61	20
Crawford Ellis.	United Fruit Co.	August 15	August 16	1, 267	(²)
Flandre.	French Line.	August 15	August 17	50	364
San Juan No. 2.	Cukra Development Co.	August 15	August 18	(¹)	58
Benjamin Franklin.	Fred Olsen & Co.	August 16	August 16	(¹)	230
Knute Nelson.	Fred Olsen & Co.	August 16	August 17	171	(²)
Askania.	North German Lloyd.	August 16	August 17	73	24
Magdalena.	Hamburg-American Line.	August 16	August 17	101	5
Camden.	United Fruit Co.	August 16	August 17	5, 704	(²)
Saramacca.	United Fruit Co.	August 17	August 17	481	67
Santa Maria.	Grace Line.	August 17	August 17	319	1
Attika.	North German Lloyd.	August 17	August 17	54	118
Canadian Constructor.	Canadian National Steamships.	August 18	August 18	(²)	328
Santa Clara.	Grace Line.	August 18	August 18	114	471
Schwaben.	North German Lloyd.	August 18	August 19	44	97
San Gabriel.	States S. S. Line.	August 18	August 19	148	(²)
Guayaquil.	Panama R. R. S. S. Line.	August 18		965	
Veragua.	United Fruit Co.	August 19	August 19	136	½
Santa Cecilia.	Panama Mail S. S. Co.	August 19	August 20	1, 931	43
Contessa.	Standard Fruit & S. S. Co.	August 19	August 20	231	108
Nebraska.	Royal Mail Steam Packet Co.	August 19	August 20	(⁴)	31
Nueva Panama.	United Fruit Co.	August 19		239	
Saramacca.	United Fruit Co.	August 20		84	
Santa Marta.	United Fruit Co.	August 20		317	
Annetta I.	P. W. Hamilton.	August 20		22	
Durazzo.	Hamburg-American Line.	August 20		756	
Acajutla.	Pacific Steam Navigation Co.		August 20		581

¹ No cargo discharged.² No cargo laded.³ Two packages.⁴ One package.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending August 20, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Salvador.....	Pacific Steam Navigation Co.....	August 6	August 6		1
Point Bonita.....	Swayne & Hoyt.....	August 6	August 7	672	
St. Mihil.....	U. S. Government.....	August 7	August 7	36	6
Chiriqui.....	United Fruit Co.....	August 7	August 7	320	6
California.....	Panama-Pacific Line.....	August 8	August 9	4	
Cerigo.....	Hamburg-American Line.....	August 8	August 8		57
Peter Maersk.....	Isbrandtsen Moller Co.....	August 9	August 9	2	
Manizales.....	Grace Line.....	August 11	August 11		125
Plus Ultra.....	Cia. Ecuadorean de Transpt.....	August 12	August 12	218	
Republic.....	U. S. Government.....	August 13	August 13		22
Aida.....	North German Lloyd.....	August 13	August 13	92	
Santa Elisa.....	Panama Mail S. S. Co.....	August 14	August 14	135	3
Brandanger.....	General S. S. Corp.....	August 15	August 15	124	4
Chaumont.....	U. S. Government.....	August 17	August 17	8	
Knute Nelson.....	Fred Olsen & Co.....	August 17	August 17	258	
Santa Maria.....	Grace Line.....	August 17	August 17	36	3
Santa Clara.....	Grace Line.....	August 18	August 19	70	475
President Garfield.....	Dollar Line.....	August 19	August 19	1	2
Santa Cecilia.....	Panama Mail S. S. Co.....	August 19	August 19	145	39

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective August 20, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

Lubricating Oils.

THE PANAMA CANAL, SUPPLY DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 7, 1931.

To all concerned.—For the information of all concerned there is submitted herewith a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils together with a statement of the purpose for which they are generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list.

R. R. WATSON,
Chief Quartermaster.

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, M-2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, H-2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, EH-2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, UH-2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive for preserving boiler tubes.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division.)

Insulating.—Transformer (Electrical Division.)

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

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OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., August 31, 1932.

No. 5.

Special-Demand Quarantine Service.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 25, 1932.

To steamships agents and others concerned:

1. The Panama Canal is tentatively making available, for the convenience of shipping, a special-demand quarantine service for the quarantine and immigration inspection of arriving vessels and their personnel. The special-demand service, in so far as is practicable, will be available for vessels immediately upon their arrival in Panama Canal waters at any time during the 24 hours.

2. When for any reason a vessel desires expeditious dispatch, a request for special-demand service from the authorized agent or the master of the vessel must be addressed to the Chief Quarantine Officer in time to reach that officer between the hours of 8 a. m. and 4 p. m. on the day before such service is desired.

3. Special-demand service between sunrise and sunset will be furnished at a tariff of \$25 for passenger vessels and \$15 for freight vessels. When furnished between sunset and sunrise, an additional charge of \$5 will be made, where immigration service is required.

4. Special inspection between sunset and sunrise will not be made of vessels from ports subject to yellow fever quarantine.

5. Special-demand quarantine is an additional service offered by The Panama Canal and does not affect or change procedure already in force.

6. The institution of the above service will be immediately effective and remain in effect until such time as made permanent, modified, or discontinued. The special-demand service will not absolutely guarantee prompt clearance of a vessel since clearance will still depend upon compliance by vessels and their personnel with existing Panama Canal rules and regulations relative to quarantine and immigration.

H. BURGESS,
Governor.

Net Tonnage of Vessels Transiting the Panama Canal During the Fiscal Year 1932.

During the fiscal year ended June 30, 1932, there were 4,506 transits of the Panama Canal by commercial vessels, comprised of 4,497 merchant vessels, yachts, etc., and 9 navy vessels of foreign nations, the latter paying tolls on the basis of displacement tonnage. Fifty-four and one-tenth (54.1) per cent of the 4,497 commercial transits on which tolls were levied on net tonnage were by vessels of from 4,000 to 6,000 net tons, Panama Canal measurement. Six and six-tenths (6.6) per cent were by vessels under 1,000 net tons, and three and one-tenth (3.1) per cent by vessels over 10,000 net tons. The average tonnage of all transits was 5,254 net tons as compared with 5,036 net tons for the preceding fiscal year, an increase of 218 tons, or four and three-tenths (4.3) per cent.

Vessels of Danzig registry (all tank ships) averaged the highest net tonnage with 7,403; the Italian were second with 7,156 tons, and French third with 5,686 tons. The lowest recorded average by nationality was made by Colombian vessels, with 162; the next lowest was

by Costa Rica with 331, and the third lowest was by Panamanian vessels with 795. Thirteen of the 19 nationalities represented in Canal traffic during both 1931 and 1932 showed increases in the average net tonnage per vessel.

The British liner *Empress of Britain*, of 27,503 net tons, Panama Canal measurement, was the largest commercial vessel transiting during the year, and the largest to have transited since the opening of the Canal.

The following tabulation shows the 4,497 commercial transits in groups according to net tonnage, Panama Canal measurement, segregated by nationality, together with the average tonnages and the per cent which the total of each group formed to the total number of transits for the fiscal years 1932 and 1931:

Nationality.	Number of transits in net tonnage groups.													Panama Canal net tonnage.	Average Panama Canal net tonnage.	
	20 to 99, inclusive.	100 to 999, inclusive.	1,000 to 1,999, inclusive.	2,000 to 2,999, inclusive.	3,000 to 3,999, inclusive.	4,000 to 4,999, inclusive.	5,000 to 5,999, inclusive.	6,000 to 6,999, inclusive.	7,000 to 7,999, inclusive.	8,000 to 8,999, inclusive.	9,000 to 9,999, inclusive.	10,000 and over.	Total.		Fiscal year 1932.	Fiscal year 1931.
Belgian.....		1			1	2	4	4	3				15	82,487	5,499	5,182
British.....	1	61	5	13	29	353	235	105	105	58	42	34	1,047	5,905,997	5,641	5,436
Chilean.....	1	2			1	1							5	8,856	1,771	4,169
Colombian....	1	32											33	5,350	162	149
Costa Rican..		1											1	331	331	
Danish.....	1		5	3	2	31	44			19			105	561,492	5,348	5,095
Danzig.....						2	2	6	8	15			33	244,300	7,403	6,849
Dutch.....		23		3	18	9	17	17	15	13			117	553,085	4,727	4,629
Finnish.....						1							1	4,460	4,460	
French.....		1			12	16	21		35				80	454,890	5,686	5,545
German.....		60	58	27	23	18	66	53	26			1	337	1,280,999	3,801	3,827
Greek.....					10	6							16	61,544	3,847	3,871
Honduran.....				4									4	10,060	2,515	
Italian.....					3	6	15	12	8		23		67	479,441	7,156	6,989
Japanese.....						71	54	49	5				179	980,349	5,477	5,284
Norwegian....		1	6	5	40	102	125	22	9	1			311	1,530,459	4,921	4,817
Panamanian..	62	29						11					102	81,130	795	2,301
Peruvian.....		1	2										3	3,367	1,122	3,544
Spanish.....						2			2				2	8,470	4,235	2,831
Swedish.....			4	3	7	57	34	9					114	538,989	4,728	4,759
United States.	7	13	33	143	46	612	511	354	37	36	13	107	1,917	10,790,751	5,629	5,216
Yugoslav.....						5	3						8	38,612	4,827	4,628
Total....	73	227	113	206	192	1,299	1,131	648	246	142	78	142	4,497	23,625,419	5,254	5,036
Per cent of total, fiscal year, 1932..	1.6	5.0	2.5	4.6	4.3	29.9	25.2	14.4	5.5	3.1	1.8	3.1	100.0			
Per cent of total, fiscal year, 1931..	0.8	4.7	4.4	5.5	5.2	31.4	21.9	14.5	5.3	2.7	1.7	1.9	100.0			

* Nine naval vessels (7 British, 1 French, and 1 German), paying tolls on displacement tonnage, are not included.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 27, 1932.

No. 1119.

Panama, Gulf of Panama, Perlas Islands, Isla Pedro Gonzales, shoal reported. The following Notice to Mariners is quoted from the Notices to Mariners issued by the Hydrographic Office, Washington, D. C.:

The commanding officer of the U. S. S. *Fullton* reports that 2 shoals, each having a least depth of 6½ fathoms, have been developed by wire drag operations in the vicinity of Isla Pedro Gonzales, of the Perlas Islands. These shoals are located in the following positions:

- (a) Latitude 8° 25' 49" N., longitude 79° 05' 05" W.
(b) Latitude 8° 21' 57" N., longitude 79° 07' 38" W.

See Notice to Mariners No. 1101, dated July 18, 1932, for information concerning shoal in same vicinity.

H. BURGESS,
Governor.

CANAL WORK IN JULY, 1932.

The following is the report of the Governor to the Secretary of War, of Canal work in the month of July, 1932.

BALBOA HEIGHTS, C. Z., August 18, 1932.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operation of The Panama Canal during the month of July, 1932:

TRANSITS AND TOLLS.

During the month 326 commercial vessels and 6 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 33 vessels belonging to the United States Army and Navy, and 4 transits of vessels solely for repairs, on which no tolls were collected, making a total of 369 transits for the month, or a daily average on all traffic of 11.90.

Tolls on the 326 commercial vessels amounted to \$1,468,728.36, and on the launches to \$40.21, a total of \$1,468,768.57, or a daily average on all traffic of \$47,379.63.

The number of vessels passing through the Canal last month was the lowest recorded for a single month since February, 1923, when the number was the same as last month (326). The daily average of commercial vessels in July, 10.52, was the lowest since December, 1922, when it was 9.81. Tolls collected last month were the lowest for a month since February, 1923.

In comparison with the first 7 months of the calendar year 1931, commercial traffic this year shows a decrease of 10.0 per cent in transits, 15.4 per cent in net tonnage (Panama Canal measurement), 21.1 per cent in cargo tonnage, and 16.2 per cent in tolls collected; in comparison with the first 7 months of the calendar year 1930, there occurred a decrease of 28.3 per cent in transits, 24.3 per cent in net tonnage (Panama Canal measurement), 36.6 per cent in cargo tonnage, and 26.2 per cent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of July in the two preceding years and in 1932 are shown in the following tabulation:

	July, 1930.	July, 1931.	July, 1932.
Commercial vessels.....	488	406	326
Launches (under 20 tons).....	10	5	6
Noncommercial vessels:			
United States Government.....	33	34	33
Panamanian Government.....	2		
For repairs.....		2	4
Total.....	533	447	369

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	2	4	6
Pedro Miguel.....	27	18	45
Miraflores.....	27	18	45
Total.....	56	40	96

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, for the commercial traffic transiting the Canal each month from the beginning of the calendar year 1932, to the end of July, 1932, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January...	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February...	431	358	2,134,866	1,878,177	1,930,219	1,645,393	1,915,902.78	1,647,797.06
March.....	439	363	2,211,934	1,864,896	1,915,507	1,643,952	1,964,434.22	1,645,366.81
April.....	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,634.67
May.....	428	357	2,184,959	1,956,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June.....	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,848,638.45	1,468,728.36
Total.	3,033	2,487	15,374,682	13,005,640	13,515,011	10,667,990	13,596,325.91	11,392,972.03

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for July in the years 1930, 1931, and 1932, and comparison with the monthly averages for the fiscal year 1932:

	July, 1930.	July, 1931.	July, 1932.	Average per month for fiscal year 1932.
Number of vessels.....	488	406	326	376
Panama Canal net tonnage.....	2,438,895	2,110,701	1,676,492	1,968,785
United States net tonnage.....	1,827,188	1,535,686	1,215,605	1,433,982
Registered gross tonnage.....	3,030,107	2,557,880	2,015,020	2,397,578
Registered net tonnage.....	1,842,382	1,553,711	1,230,044	1,448,846
Tolls.....	\$2,180,511.82	\$1,848,638.45	\$1,468,728.36	\$1,725,614.75
Tons of cargo carried.....	2,402,047	1,866,803	1,259,981	1,650,667

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for fiscal year 1932.
	July, 1930.	July, 1931.	July, 1932.	
Number of transits.....	15.74	13.10	10.52	12.31
Panama Canal net tonnage.....	78,674	68,087	54,080	64,550
Tolls.....	\$70,339.09	\$59,633.50	\$47,378.33	\$56,577.53
Tons of cargo carried.....	77,485	60,219	40,645	54,120

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of July in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for fiscal year 1932.
	July, 1930.	July, 1931.	July, 1932.	
Panama Canal net tonnage.....	4,998	5,199	5,174	5,254
United States net tonnage.....	3,744	3,782	3,752	3,827
Registered gross tonnage.....	6,209	6,300	6,219	6,398
Registered net tonnage.....	3,775	3,827	3,796	3,866
Tolls.....	\$4,468.26	\$4,553.30	\$4,505.30	\$4,595.51
Tons of cargo (including vessels in ballast).....	4,922	4,598	3,889	4,405
Tons of cargo (laden vessels only).....	5,802	5,244	4,532	5,154

NOTE.—In computing the above averages, vessels paying on displacement tonnage were not considered except in the average tolls per vessel.

NATIONALITY OF VESSELS.

Fourteen nationalities were represented in the commercial traffic through the Canal in July, 1932. Vessels of United States registry, with 138, led in the number of transits, while those flying the British flag, with 64, were second. Vessels of these two nationalities made up 62 per cent of the total transits for the month. Norway, Panama, and Germany were next with 25, 24, and 23, respectively.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of July, 1932, was 1,259,981 tons, a decrease of 606,822 tons, or 32.5 per cent, in comparison with July, 1931. Cargo from the Atlantic to the Pacific aggregated 362,717 tons, compared with 367,741 tons in the previous month, and 500,136 tons in July, 1931. From the Pacific to the Atlantic, cargo amounted to 897,264 tons, as compared with 1,036,817 tons in the previous month, and 1,366,667 tons in July, 1931.

From the Atlantic to the Pacific, iron and steel products, totaling 43,673 tons, comprised the leading commodity, followed by cotton with 33,265 tons, mineral oils with 25,619 tons, paper with 20,277 tons, scrap metal with 16,930 tons, corn with 15,439 tons, tinplate with 14,669 tons, ores with 10,688 tons, and sulphur with 10,559 tons. Increases were made in shipments of scrap metal, paper, ores, cotton, and corn, while iron and steel, mineral oils, sulphur, and tinplate decreased.

From the Pacific to the Atlantic mineral oils formed the leading commodity in July, 1932, with shipments totaling 276,735 tons, followed by wheat with 133,232 tons, sugar with 116,875 tons, lumber with 105,628 tons, canned goods with 52,981 tons, and metals with 28,728 tons. Except for very slight increases in mineral oils

and canned goods, all of these items showed substantial decreases in comparison with July, 1931. There was a decrease of 469,403 tons, or 34.3 per cent in cargo routed in this direction in comparison with July, 1931, while from the Atlantic to the Pacific there was a decrease of 137,419 tons, or 27.5 per cent.

Total cargo through the Canal in the past month was the lowest since September, 1922.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden vessels and \$0.72 per ton for vessels in ballast, computed on the basis of the Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both the Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.894 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.718 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of July, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of the Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Brazilian.....	\$3,496.25	\$3,656.00	\$159.75	.....	\$0.956	.....
British.....	320,202.13	350,778.80	30,576.67	.....	.896	\$0.718
Colombian.....	368.40	307.00	.....	\$61.40	1.200	.....
Danish.....	35,692.08	40,159.40	4,467.32	.....	.832	.720
Danzig.....	17,182.68	14,958.40	.....	2,224.28	1.075	.720
Dutch.....	34,968.99	36,900.20	1,931.21	.....	.892	.720
French.....	18,325.00	23,617.00	5,292.00	.....	.776	.....
German.....	61,889.78	75,213.40	13,323.62	.....	.812	.720
Italian.....	32,142.50	40,705.00	8,565.50	.....	.790	.....
Japanese.....	73,275.00	74,878.00	1,603.00	.....	.979	.....
Norwegian.....	107,020.00	119,006.40	11,986.40	.....	.840	.712
Panamanian.....	1,118.86	927.40	.....	191.46	1.199	.753
Swedish.....	29,221.25	39,595.00	10,373.75	.....	.738	.....
United States.....	733,825.44	780,677.20	46,851.76	.....	.919	.720
Total.....	1,468,728.36	1,601,382.20	135,130.98	2,477.14	.894	.718
Net increase for all traffic.....	.....	.....	132,653.84	.....	.....	.....

* Includes \$5,485 collected on 2 naval vessels at 50c per displacement ton.

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$30,370.16
United States foreign trade.....	16,481.60
Total.....	46,851.76

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in July, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
Brazilian.....	.62	.....	.62
British.....	.46	1.33	.92
Colombian.....	2.05	.....	2.05
Danish.....	.33	1.57	.93
Danzig.....	.....	1.87	1.87
Dutch.....	.23	1.40	.87
French.....	.15	1.26	.73
German.....	.47	1.22	.83
Italian.....	.07	.68	.30
Japanese.....	.84	.88	.85
Norwegian.....	.43	1.56	1.25
Panamanian.....	.97	1.62	1.33
Swedish.....	.68	1.24	.81
United States.....	.52	1.07	.80
Averages, July, 1932.....	.50	1.20	.85
Averages, July, 1931.....	.59	1.33	1.00
Averages, July, 1930.....	.72	1.40	1.15

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of July, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	25	159,648	\$114,946.56	.....	.....	.....
Laden.....	2	12,173	13,927.70	24	146,710	\$151,772.50
All others—						
Ballast.....	14	32,598	23,164.71	2	8,230	5,961.60
Laden.....	129	715,168	631,747.45	123	600,954	521,029.90
Noncargo-carrying ships:						
Yachts.....	2	297	214.86	2	283	203.76
Naval.....	2	.....	5,485.00	.....	.....	.....
All others.....	.....	.....	.....	1	381	274.32
Total.....	174	919,884	789,486.28	152	756,608	679,242.08
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	97	543,488	492,833.46	87	458,779	416,579.78
Motor.....	63	375,552	290,353.60	53	296,925	261,896.72
Motor schooner.....	10	547	579.36	9	240	287.50
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	4	297	5,699.86	3	664	478.08
Total.....	174	919,884	789,486.28	152	756,608	679,242.08

Of the 184 steam driven cargo-carrying vessels, 148 were oil burning, 33 coal burning, and 3 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of July, 1932. If tolls had been assessed against these vessels at commercial rates, the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Ammunition ships.....	1	4,405	\$5,506.25	1	3,434	\$5,151.00
Cargo ships.....	.....	.....	.....	.....	.....	.....
Cruisers.....	1	7,050	3,525.09	.....	.....	.....
Destroyers.....	4	4,860	2,430.00	5	6,059	3,029.50
Launches.....	1	10	7.50	.....	.....	.....
Mine sweepers.....	2	1,900	950.00	.....	.....	.....
Salvage boats.....	2	40	30.00	1	20	15.00
Submarines.....	3	2,628	1,314.00	.....	.....	.....
Transports.....	1	3,992	4,990.00	.....	.....	.....
Tugs.....	2	2,000	1,000.00	1	1,000	500.00

1 Indicates displacement tonnage.

1 Indicates United States net tonnage.

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Army vessels:						
Launches.....	2	20	\$15.00			
Mine planters.....	1	1,208	604.00	1	1,208	\$604.00
Transports.....	2	9,218	11,522.50	2	9,672	12,090.00
Total, U. S. Government.....	22		31,894.25	11		21,389.50
Vessels for repairs:						
Lighthouse tender.....	1	29	20.88	1	29	20.88
Tankers.....	1	1,669	1,251.75	1	1,669	1,251.75
Grand total.....	24		33,166.88	13		22,662.13

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of July, 1932, carried cargo as follows: Atlantic to Pacific, 5,534 tons; Pacific to Atlantic, 2,076 tons; total, 7,610 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of July, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tons of cargo.	Tolls.
Atlantic to Pacific.....	5	31		\$26.46
Pacific to Atlantic.....	1	13	20	13.75
Total.....	6	44	20	40.21

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of July, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	29,008	16,782	45,790
Local cargo shipped..... tons..	5,530	352	5,882
Transit cargo arriving..... tons..	1,269,005	1,295,880	2,564,885
Transit cargo clearing..... tons..	1,275,854	1,282,673	2,558,527
Cargo received for transshipment..... tons..	19,903	1,322	21,225
Cargo transhipped..... tons..	20,360	879	21,239
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	85	34	119
Number of releases issued.....	659	154	813
Tons received.....	1,002	286	1,288
Tons withdrawn.....	955	365	1,320
Packages received.....	4,094	1,866	5,960
Packages withdrawn.....	6,183	2,206	8,389
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	14		14
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,056		3,056
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	38	3	41
Panama Railroad Steamship Line..... tons..	1		1
U. S. Army, including vessels..... tons..	33		33
Individuals and companies, including galley coal for ships..... tons..	96		96
Transferred to Navy..... tons..	3		3
Total sales and issues..... tons..	3,227	3	3,230
Coal on hand, July 1, 1932..... tons..	43,281		43,281
Coal on hand, August 1, 1932..... tons..	40,054		40,054
Coal received from Navy..... tons..		3	3
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls..	3,982.20	4,840.14	8,822.34
Panama Railroad Steamship Line..... bbls..	14,199.80		14,199.80
Panama Railroad Company..... bbls..	489.90	490.24	980.14
U. S. Army and Navy..... bbls..	617.30	114.44	731.74
Individuals and companies..... bbls..		371.32	371.32
Total sales and issues..... bbls..	10,289.20	5,816.14	25,105.34

¹ Includes 1,540 tons additional on inventory adjustment.

	Cristobal.	Balboa.	Total.
Fuel oil on hand, August 1, 1932..... bbls..	20,584.27	35,495.47	56,079.74
Diesel oil received, borrowed from Union Oil Co..... bbls..	206.33		206.33
Diesel oil issued during July, 1932..... bbls..	206.33	3,655.30	3,861.63
Diesel oil on hand, August 1, 1932..... bbls..	2,914.35	30,248.64	33,162.99
Miscellaneous transfers..... bbls..	403.98	831.81	1,235.79
Gasoline and kerosene pumped for The Panama Canal..... bbls..	6,291.93	18,834.94	25,126.87
Gasoline pumped for individuals and companies..... bbls..	1,485.08	10,774.06	12,259.14
Oil pumped for Individuals and companies:			
Receipts..... bbls..		87,165.68	87,165.68
Issues..... bbls..	131,145.23	56,912.84	188,058.07
Oil pumped for U. S. Navy..... bbls..	4,420.00	15,350.00	19,770.00
Total fuel oil, gasoline, and kerosene handled..... bbls..	163,241.75	199,340.77	362,582.52
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	10	4	14
Measured for Panama Canal net tonnage.....	3	1	4
Remeasured for Panama Canal net tonnage.....	9	1	10
Panama Canal net tonnage corrected.....	4	6	10
U. S. equivalent tonnage corrected.....	7	5	12
Services of harbor equipment:			
Tugs, total operating hours.....	207½	101½	309
Launches, total operating hours.....	846	986½	1,832½
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$6,790.00	\$3,281.25	\$10,071.25
Pilotage.....	13,647.00	5,032.00	18,679.00
Seamen.....	7,856.00	6,704.00	14,560.00
Launch service.....	1,317.00	1,862.50	3,179.50
Wharfage.....	11,398.31	3,211.40	14,609.71
Ships measured.....	20.00	10.00	30.00
Right of basin.....	59.53	13.25	72.78
Miscellaneous.....	159.65	112.50	272.15
Clearances issued.....	201	167	368
Bills of health issued.....	197	181	378

* Includes 8,949 barrels borrowed from U. S. Navy.

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal..	332	2,415,871	1,470,971	344	2,181,914	1,331,299
Vessels entering port but not transiting Canal..	67	363,072	206,225	7	46,942	27,132
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	97	661,740	399,786	90	647,917	383,170
<i>Ships clearing.</i>						
All vessels, including those transiting Canal..	381	2,441,807	1,487,663	336	2,169,679	1,321,943
Vessels clearing port but not transiting Canal..	66	377,371	216,022	7	50,983	29,125
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	98	678,730	408,079	89	641,165	378,965

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.		
	First class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:						
From Atlantic ports.....	1,010	370	1,380	142	198	340
From Pacific ports.....	133	68	201	159	137	296
Total disembarking.....	1,143	438	1,581	301	335	636
Embarking:						
For Atlantic ports.....	1,295	564	1,859	96	148	244
For Pacific ports.....	214	81	295	257	207	464
Total embarking.....	1,509	645	2,154	353	355	708
Remaining on board:						
From Atlantic to Pacific ports.....	2,161	2,438	4,599	2,188	2,218	4,406
From Pacific to Atlantic ports.....	1,055	1,664	2,719	1,079	1,605	2,684
From Atlantic to Atlantic ports.....	1,599	50	1,649	22	117	139
From Pacific to Pacific ports.....						
Total remaining on board.....	4,815	4,152	8,967	3,289	3,940	7,229
Total arriving.....	5,958	4,590	10,548	3,590	4,275	7,865
Total departing.....	6,324	4,797	11,121	3,642	4,295	7,937

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.
Atlantic to Pacific.....	174	74	42.5
Pacific to Atlantic.....	152	51	33.6
Total.....	326	125	38.3

In addition to the aforesaid, 59 passenger-carrying vessels called at the port of Cristobal and 3 at Balboa without transiting the Canal, making a total of 187 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of July, 1932, 40 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of July, 1932, together with the total sales in the corresponding month in 1931 and 1930:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$940.71	\$3,305.62	\$9,426.93	\$83.85	\$2,798.05	\$16,555.16
Government vessels.....	76.40	1,018.28	2,185.56	36.61	410.74	3,727.59
P. R. R. vessels.....		418.24	63.25	571.33	4.70	1,057.52
Total sales, July, 1932.....	1,017.11	4,742.14	11,675.74	601.79	3,213.49	21,340.27
Total sales, July, 1931.....	1,760.17	7,933.09	20,926.83	1,443.33	7,802.57	39,870.99
Total sales, July, 1930.....	2,066.03	12,134.67	32,513.50	1,346.29	7,831.38	55,891.37
Sales at Balboa to:						
Commercial vessels.....	334.94	2,420.92	5,787.17	276.29	2,888.66	11,707.99
Government vessels.....	470.10	2,463.33	13,803.37	762.97	1,338.32	18,838.09
Total sales, July, 1932.....	805.05	4,884.25	19,590.54	1,039.26	4,276.98	30,596.08
Total sales, July, 1931.....	992.86	5,980.70	22,634.84	1,076.18	4,850.53	35,535.11
Total sales, July, 1930.....	1,033.86	2,533.24	23,558.41	524.88	11,584.38	39,234.77

The aggregate sales to commercial vessels during the month was \$28,263.15; to Government vessels, \$22,615.68; and Panama Railroad vessels, \$1,057.52, making the total sales to all vessels, \$51,936.35. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of July, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial. *					
	North.	South.	Total.	North.	South.	Total.	July, 1930.	July, 1931.	July, 1932.
Gatun.....	147	157	304	10	11	21	480	420	325
Pedro Miguel.....	147	169	316	16	18	34	503	437	350
Miraflores.....	147	168	315	16	18	34	501	434	349
Number of vessels put through locks.									
Gatun.....	153	175	328	24	36	60	559	466	338
Pedro Miguel.....	152	176	328	42	43	85	576	477	413
Miraflores.....	152	176	323	42	43	85	583	477	413

* Includes tolls paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	43	33	33
Panama Canal equipment.....	6	45	45
Launches under 20 tons measurement.....	7	3	3
Vessels for repairs.....	4	4	4

The total consumption of water for lockages, loss in leakage, and maintenance, was as follows in July, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
	<i>Cubic feet.</i>	<i>Cubic feet.</i>	<i>Cubic feet.</i>
Lockages.....	1,312,220,000	1,051,770,000	1,083,990,000
Leakage.....	30,000,000	45,000,000	40,000,000
Maintenance.....	1,840,000		67,640,000
Total, July, 1932.....	1,344,060,000	1,096,770,000	1,191,630,000
Total, June, 1932.....	1,415,500,000	1,100,180,000	1,185,660,000
Total, July, 1931.....	1,785,820,000	1,353,270,000	1,345,980,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of July, 1932, are shown in comparative form in the following tabulation:

	July.		July—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagros River at Alhajuela.....	3,335	2,651	6,302	1,359	2,825
Maximum momentary discharge for the month.....	11,630	12,845	* 56,300	785	
Gatun Lake watershed, total yield.....	10,242	6,560	14,663	2,677	7,098
Gatun Lake watershed, net yield.....	9,700	6,025	14,156	1,898	6,549
Draft on Gatun Lake for lockages and power.....	2,716	2,457			* 2,613

* July 20, 1903.

* Ten-year average, 1921 to 1930, inclusive.

The monthly mean discharge of the Chagres River at Alhajuela for July, 1932, was 2,651 c. f. s., which is 6 per cent below the 31-year average of 2,825 c. f. s. The maximum mean discharge on record for July is 6,302 c. f. s. in 1927 and the minimum, 1,359 c. f. s. in 1905. The maximum momentary discharge for the month was 12,845 c. f. s. at elevation 98.35 feet on the 6th, and the minimum was 1,618 c. f. s. at elevation 92.44 feet on the 16th. The maximum momentary discharge on record for July (1879 to 1932, inclusive) is 56,300 c. f. s. at elevation 108.73 feet on July 20, 1903. The minimum momentary discharge on record for July (1907 to 1932, inclusive) is 785 c. f. s. at elevation 91.65 c. f. s. on July 26-27, 1914. There were 2 rises of 5 feet or more during the month—on the 6th and 23d.

Gatun Lake varied in elevation during July from a maximum of 85.84 feet on the 29th to a minimum of 85.40 feet on the 15th, averaged 85.56 feet, and ended the month at elevation 85.64 feet. The total yield of the Gatun Lake watershed was 6,560 c. f. s. which is 8 per cent below the 19-year average of 7,098 c. f. s. The maximum total yield on record for July is 14,663 c. f. s. in 1927 and the minimum is 2,677 c. f. s. in 1914.

Miraflores Lake varied between elevations 54.27 feet on the 25th to 53.40 feet on the 16th, averaged 53.86 feet, and ended the month at elevation 54.16 feet.

SEISMOLOGY.

Slight seismic tremors were recorded on the 6th, 10th, 14th, and 21st.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 5,583,200 kilowatt hours, and the computed water consumption was 4,215,698,934 cubic feet. Continuous service was maintained at this station throughout the month.

The Miraflores Diesel-electric station had a gross generator output of 19,400 kilowatt hours, and the fuel oil consumption was 42.1 barrels. Diesel generators were in service 5 times during the month—once for engine test and four times for dry dock load.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 25 vessels during the month. There were 452 work orders issued during the month, as compared with 457 issued during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of July, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	5	24	25
United States Army and Navy.....	8	6	6
Panama Canal equipment.....	1		
At Balboa:			
Commercial.....		3	3
United States Army and Navy.....	4	5	3
Panama Canal equipment.....	1	5	4
Total.....	19	43	41
Vessels in dry dock.			
At Cristobal:			
Commercial.....		4	4
United States Army and Navy.....	1	2	3
At Balboa:			
Commercial.....		2	2
United States Army and Navy.....		2	
Panama Canal equipment.....		2	1
Total.....	1	12	10

Work was continued on the overhaul of the United States submarine *S-14*, and work was commenced on the overhaul of the *S-11*. Annual repairs on the United States Army's tug *General G. W. Getty* were completed during the month. The German cruiser *Karlsruhe* was docked for repairs to propeller and cleaning and painting.

MUNICIPAL ENGINEERING DIVISION.

On the Thatcher Highway project, a retaining wall was built at the bridge end of the east ferry approach road to support embankment between road and railroad tracks. The pavement adjacent to the bridge was completed. On the east ferry slip concrete was poured in the caissons from elevation -11 to elevation -6 around the columns which support the precast beams. The steel truss and gallows frame was carried from dock No. 14 and set in place by the crane *Hercules*. The concrete floor in the machinery room and the concrete counterweights were poured. Piling was all driven for both wings of the racks. About 80 per cent of the waling strips were placed, and one caisson was set at the end of the north wing. On the west ferry slip the steel truss and gallows frame was carried from dock No. 14 and set in place by the crane *Hercules*. The concrete floor in the machinery room and the concrete counterweights were poured. Piling was driven for the north wing of rack and the wales and sheeting were about 70 per cent in place.

In connection with the installation of oil lines to coaling dock, Cristobal, there were installed 484 feet of 6-inch pipe, 448 feet of 10-inch pipe, and 386 feet of 16-inch pipe. Work on numerous improvement projects in the Canal Zone and in the cities of Panama and Colon were carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 720,894,000 gallons.

DREDGING DIVISION.

East Culebra slide extension continued active during the month. Reference points showed movements of from 12 to 33 feet toward the Canal and vertical settlement of from 10 to 30 feet. The movement was more or less constant and uniform though somewhat accelerated during the latter part of the month. At station 1765 plus 00 a 32-foot shoal extended out into the prism a distance of about 20 feet. There was

also a general shoaling of the entire length of the Canal prism fronting this slide although not to such an extent as to interfere with navigation. A total of 39,450 cubic yards was removed from the front of this slide during the month.

Movement of West Cluebra slide on the 450-foot west base line showed an average of 1.1 feet toward the Canal between stations 1770 and 1794 with a maximum of 2.5 feet at station 1780. There were no north or south movements along this base line. Slide reference points showed no movement. A total of 20,750 cubic yards of material was removed from this slide during the month.

West Lirio slide showed increased activity between stations 1722 and 1730 during the latter part of the month. A total of 57,650 cubic yards of material was removed from this slide during the month.

There were numerous small bank breaks in the Cut during July. There was no interference with shipping on account of slides during the month.

The total excavation during July, 1932, was 750,600 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
East and West Cluebra slide (including extension).....	18,100	42,100	60,200
West Lirio slide.....	17,200	40,450	57,650
Maintenance.....	8,200	20,250	28,450
Canal prism, Pacific entrance—			
Project No. 1.....		50,400	50,400
Maintenance.....	198,900		198,900
Balboa inner harbor—			
Maintenance.....	355,000		355,000
Total.....	597,400	153,200	750,600

The ferry service at the north end of Pedro Miguel locks operated 31 days during the month. One thousand three hundred and sixty (1,360) single trips were made, and 231 Panama Canal, 43 U. S. Army, and 5,337 other vehicles, a total 5,611, were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and the contractor for July, 1932, was 288 gold and 840 silver employees.

The total excavation performed on the main dam by the contractor during the month consisted of 28,883 cubic yards of common, and 4,502 cubic yards of rock. Excavation was carried on south of levee; the main cut-off trench was completed to station 21 plus 00 (except for touching-up); excavation for the upstream apron and its cut-off trench was advanced to station 21 plus 10; excavation for the bucket bench and railway for concrete was completed; trestle was built up to the dam excavation; laying of track was started; excavation in the counterfort wall upstream wing was widened and deepened; excavation on the right bank was started. Common excavation was begun under the upstream apron by sluicing and hand mucking.

Work was continued during month on clay grouting area No. 1 (saddles 10 and 11), the following work having been accomplished: 1,360 lineal feet of hole drilled; 59 feet 10 inches of 4-inch standpipe set, 965 lineal feet of 2-inch grout pipe set, and 1,353.7 cubic yards of clay grout injected.

No concrete was placed during the month. The total placed to date is 2,785.7 cubic yards. A beginning was made on moving the slack-line excavator, which is one month behind schedule. The stringing of cables from the double-tension tower to the screening plant was started July 31.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on July 31, 1932, was 24,108, composed of 8,120 Americans, 2,787 of whom were men, 2,472 women, and 2,861 children; 185 Europeans, 79 of whom were men, 25 women, and 81 children; and 15,803 West Indians, 4,182 of whom were men, 2,848 women, and 8,773 children. The total number of persons in quarters on July 31, 1931, was 23,989.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of July 20, 1932, with a comparison of the working force for the preceding month and for July, 1931:

	Total employees.		As of July 20, 1932.		
	July, 1931.	June, 1932.	Gold.	Silver.	Total.
Operation and maintenance:					
Office.....	108	94	54	41	95
Electrical.....	415	342	155	186	341
Municipal Engineering.....	874	771	78	612	690
Lock operation.....	915	917	234	679	913
Dredging.....	1,109	1,083	170	823	993
Madden Dam.....	197	238	41	125	165
Mechanical.....	1,335	1,210	436	764	1,200
Marine.....	765	648	180	512	692
Fortifications.....	135	112	15	83	98
Total.....	5,913	5,415	1,363	3,825	5,188
Supply Department:					
Quartermaster.....	1,882	1,476	191	1,323	1,514
Commissary.....	1,562	1,476	229	1,234	1,463
Cattle Industry-Plantations.....	97	99	2	98	100
Hotel Tivoli.....	113	100	8	93	101
Hotel Washington.....	103	88	7	80	87
Transportation.....	302	304	78	218	296
Total.....	4,059	3,543	515	3,046	3,561
Accounting Department.....	211	199	191	5	196
Health Department.....	1,143	1,090	278	820	1,098
Executive Department.....	896	934	565	364	929
Total.....	2,250	2,223	1,034	1,189	2,223
Panama Railroad Company:					
General Manager.....	275	75	25	50	75
Transportation.....	176	308	72	252	324
Receiving and Forwarding Agency.....	988	536	72	448	520
Coaling Stations.....	254	118	23	66	89
Total.....	1,693	1,087	192	816	1,008
Grand total, July, 1931.....	13,915				
Grand total, June, 1932.....		12,268			
Grand total, July, 1932.....			3,104	8,876	11,980

Additions to the gold force on the Isthmus in July, 1932, were as follows: Employed in the United States, 3; employed on the Isthmus, 2; reemployed on the Isthmus, 1; total, 6. Separations from the gold force totaled 24, as follows: Resigned, 12; discharged, 10; retired 2. At the end of the month there were on file 700 applications from residents of the Isthmus for employment.

VITAL STATISTICS.

A total of 174 deaths occurred during the month of July, 1932, among the population of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon (30,000), total population 149,570, which is equivalent to an annual death rate of 14.03 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 32; diarrhea and enteritis, 16; organic diseases of the heart, 16; pneumonia (broncho and lobar), 14; syphilis, 10; and nephritis (acute and chronic), 9. There were 5 deaths from cancer, 1 from leprosy, and 1 from tetanus. There were 17 deaths among nonresidents, which are not included in the above statistics.

There were 293 live births and 15 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 24.78. Deaths among children under 1 year of age numbered 37, giving an infant mortality rate, based on the number of live births reported, of 120.28.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 115, of whom 18 were employees (4 white and 14 colored), 23 were members of employees' families (7 white and 16 colored), 1 was contractor's employee at Madden Dam, 6 were Canal Zone agriculturists, 34 were other civilian nonemployees, and 33 were Army and Navy personnel.

Of the 41 employees and members of employee's families, 14 were probably infected outside our sanitated areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were no deaths from malaria reported among residents.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$247,988.02, of which \$205,041.33 was for the Department of Operation and Maintenance, and \$43,946.69 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$19,223.56.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of June, 1932, as compared with June, 1931, with the figures for the fiscal year ended June 30, 1932, as compared with the fiscal year 1931.

It is impossible to submit the figures for the month of July at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	June, 1931.	June, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,821,436.48	\$1,534,860.03	\$24,644,550.39	\$20,706,568.49
Other receipts.....	232,680.81	257,977.70	3,856,868.50	3,198,620.95
Total transit revenues.....	2,104,117.29	1,792,837.73	28,501,418.89	23,905,189.44
Total transit expenses.....	1,074,850.49	1,264,453.24	13,902,705.50	12,710,383.56
Net transit revenues.....	1,029,266.80	528,384.49	14,598,713.09	11,194,800.88
3 % fixed capital charge.....	1,271,450.94	1,275,422.43	15,205,884.03	15,145,714.92
Surplus or (deficit).....	(242,184.14)	(747,037.94)	(607,170.94)	(3,950,914.04)
Business revenues.....	1,568,438.02	1,238,182.64	19,374,824.79	17,530,214.63
Business expenses.....	1,503,405.01	1,292,889.31	19,313,546.50	16,973,119.19
Net business revenues.....	65,032.98	(54,706.67)	561,278.29	557,095.44
3 % fixed capital charge.....	57,803.40	59,939.39	743,163.10	768,663.65
Surplus or (deficit).....	7,229.58	(114,696.06)	(183,889.81)	(211,568.21)
Combined revenues.....	3,672,553.31	3,031,020.37	48,376,243.63	41,435,404.07
Combined expenses.....	2,578,255.53	2,557,342.55	33,216,252.30	29,683,507.75
Net revenues.....	1,094,299.78	473,677.82	15,159,991.33	11,751,896.32
3 % fixed capital charge.....	1,323,234.34	1,335,411.82	15,951,052.13	15,914,378.57
Surplus or (deficit).....	(231,934.56)	(861,734.00)	(791,060.75)	(4,162,482.25)

() Indicates deficit.

Respectfully,

H. BURGESS,
Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 29, 1932.

No. 1123.

Colombia, Buenaventura River approach, Negrillas Rocks. The following message was received by the Port Captain, Balboa, from the Chief of Customs, Buenaventura:

Kindly inform mariners that bell buoy number one, Negrillas Rocks, will continue with one white flash every three seconds.

(Signed) Francisco A. Uribe, Chief of Customs.

NOTE.—Light List, 1932, gives position of buoy about two miles south of Negrillas Rocks, in latitude 3° 51' 40" N., longitude 77° 26' 30" W. Characteristics, Fl. W., period 10 seconds; flash 1 second, eclipse 9 seconds.

H. BURGESS,
Governor.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective August 29, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.25
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1932 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Ancon</i>	August 30....	September 4..	September 7..	September 11..	September 14..	September 19.
<i>Cristobal</i>	September 13..	September 18..	September 21..	September 25..	September 28..	October 3..
<i>Ancon</i>	September 27..	October 2....	October 5....	October 9....	October 12....	October 17..
<i>Cristobal</i>	October 11....	October 16....	October 19....	October 23....	October 26....	October 31..
<i>Ancon</i>	October 25....	October 30....	November 2....	November 6....	November 9....	November 14..
<i>Cristobal</i>	November 8....	November 13..	November 16..	November 20..	November 23..	November 28..
<i>Ancon</i>	November 22..	November 27..	November 30..	December 4....	December 7....	December 12..
<i>Cristobal</i>	December 6....	December 11..	December 14..	December 19..	December 22..	December 27..
<i>Ancon</i>	December 20..	December 25..	December 28..	January 1....	January 4....	January 9....

* Changed; previously scheduled for September 24.

Steamers sail at 4 p. m. standard time from Pier 65, North River, foot of West 25th St., New York.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, August 27, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.	Nationality.	Linc. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.									Nature.	Tons.	Gross.	Net.
Dobbin ¹	20	16.45	21	6.00	21	14.26	23	9.54	U. S. Navy	460.0	61.0	23.0	Brooklyn, N. Y.	San Diego, Calif.	Ballast.	32	226	101
Nueva Panama ²	19	23.20	21	6.00	21	12.50	21	14.15	Hans Elliot	108.0	20.0	8.0	Cristobal, C. Z.	Buenaventura, Col.	General	117	1,633	1,041
Durazo	20	11.20	21	9.05	21	15.51	21	17.30	Hamburg-American Line	226.0	31.0	14.0	Cristobal, C. Z.	Guayaquil, Ecuador	General	5,572	6,276	4,550
Somerville ³	21	20.30	22	6.15	22	13.09	22	14.10	Isbrandtsen Moller Co.	381.0	53.0	24.0	Baltimore, Md.	Yokohama, Japan	General			
Bonington	21	20.30	22	6.15	22	13.09	22	14.10	Isbrandtsen Moller Co.	381.0	53.0	24.0	Baltimore, Md.	Yokohama, Japan	General			
Court ⁴	21	21.45	22	7.20	22	14.44	22	15.45	Canadian Transp. Co.	405.0	56.0	13.0	South Shields, Eng.	Vancouver, B. C.	Ballast.		7,042	5,203
Lewis Luckenbach	22	1.45	22	8.45	22	16.34	22	18.00	Luckenbach Line	496.0	68.0	29.1	New Orleans, La.	Seattle, Wash.	General, grain.	10,311	11,487	8,762
Betty Maersk	21	22.00	22	10.20	22	16.55	22	18.38	A. P. Moller	299.0	41.0	12.0	Caña Blanca, Arg.	Paita, Peru	Ballast.	2,615	1,844	
West Nisus	22	8.20	22	11.38	22	18.45	22	20.25	Mc Cormick S. S. Co.	410.0	54.0	18.0	Buenos Aires, Arg.	Vancouver, B. C.	Coffee, general.	2,086	6,583	5,095
Tulsa ⁵	23	1.15	23	6.05	23	13.21	23	14.40	Associated Oil Co.	431.0	59.0	22.0	New York, N. Y.	San Francisco, Calif.	Ballast		7,817	5,112
Sunna ⁶	23	4.10	23	7.15	23	15.15	23	19.05	Canadian Transp. Co.	389.0	54.0	14.0	Gothenburg, Swed.	Los Angeles, Calif.	Ballast		6,775	5,148
Sage Brush	23	8.40	23	8.50	23	15.58	23	17.45	Shepard S. S. Co.	409.0	54.0	20.0	Boston, Mass.	Seattle, Wash.	General	5,264	6,602	4,824
Los Angeles ⁷	22	14.35	23	14.55	23	22.43	23	24.00	Union Oil Co.	435.0	56.0	16.0	Curaçao, D. W. I.	Los Angeles, Calif.	Ballast	1,135	7,193	4,903
Solana ⁸	23	20.00	23	20.05	24	10.37	24	12.10	Hartford Product Corp.	419.0	55.0	22.0	New York, N. Y.	San Francisco, Calif.	Ballast		7,060	5,025
Lechmon ⁹	21	6.15	24	6.00	24	13.08			U. S. Navy	555.0	55.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Lechmon ⁹	22	9.25	24	7.00	24	14.44	24	15.55	Royal Mail S. P. Co.	485.0	62.0	20.0	Rotterdam, Holland	Vancouver, B. C.	General	1,693	10,772	7,581
Californian ¹⁰	23	22.15	24	8.10	24	15.49	24	17.00	Amer-Kaisen Kaisha.	445.0	59.0	20.0	Boston, Mass.	Seattle, Wash.	General	4,127	8,567	6,020
Kurama Maru ¹¹	24	6.30	24	9.40	24	16.47	24	19.50	Kokusai Kisen Kaisha.	438.0	53.0	24.0	New York, N. Y.	Kobe, Japan	General	6,778	8,252	5,969
Athelduke ¹²	24	9.00	24	13.00	24	19.35	24	20.56	United Molasses Co.	475.0	63.0	19.0	New Orleans, La.	Los Angeles, Calif.	Ballast		9,589	6,416
Empire Star ¹³	24	13.00	24	13.10	24	20.25	24	21.00	Blue Star Line	440.0	56.0	17.0	River Tyne, Eng.	Vancouver, B. C.	Ballast		7,744	5,621
Hänschen V.	24	13.20	24	14.05	24	21.30	24	22.50	W. Tankerschiff Rhederei	520.0	70.0	21.0	Southampton, Eng.	Talara, Peru	Ballast		12,536	8,224
Robert	24	16.00	24	17.50	25	12.45	25	17.55	Luckenbach Line	445.0	58.0	16.0	Boston, Mass.	Portland, Oreg.	General	1,837	8,695	6,375
Orcada	24	14.30	25	6.05	25	13.46	25	14.40	Pacific Steam Nav. Co.	511.0	62.0	22.0	Liverpool, England	Valparaiso, Chile	General	1,296	12,417	8,305
Sands, No. 243 ¹⁴	24	13.30	25	8.10	25	15.47	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
Kings, No. 242 ¹⁵	24	13.30	25	8.10	25	15.47	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
Lawrence	24	13.30	25	8.10	25	15.42	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
No. 250 ¹⁶	24	13.30	25	8.10	25	15.42	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
Humphreys	24	13.30	25	8.10	25	15.42	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
No. 236 ¹⁷	24	13.30	25	8.10	25	15.42	29	13.10	U. S. Navy	310.0	31.0	11.0	Hampton Rds., Va.	San Diego, Calif.	General			
Sordani	25	7.15	25	9.15	25	17.02			Malaysian Mission	92.0	25.0	9.0	London, England	Auckland, N. Z.	Ballast		205	120
Cross ¹⁸	24	13.30	25	10.00	25	17.02	25	18.15	Hamburg-American Line	432.0	59.0	19.0	Hamburg, Germany	Vancouver, B. C.	General	1,187	8,454	6,344
San Francisco ¹⁹	25	12.35	25	12.45	25	19.44	25	20.54	San Oil Co.	430.0	66.0	22.0	Chester, Pa.	Los Angeles, Calif.	Ballast		9,619	6,456
Sunol ²⁰	25	12.35	25	12.45	25	19.44	25	20.54	San Oil Co.	430.0	66.0	22.0	Chester, Pa.	Los Angeles, Calif.	Ballast		9,619	6,456
Ruby Castle ²¹	25	18.10	25	20.50	26	10.44	26	12.00	Jas. Chambers & Co.	400.0	52.0	16.0	New York, N. Y.	Shanghai, China	General	1,526	6,805	5,077

* Iron, rosin, zinc, and cotton.

† Lubricating oil and grease.

‡ Yacht.

§ Destroyer-tender.

¶ Cruiser.

** Motor ship.

*** Tanker.

President Wilson.....	25	15.15	26	6.05	26	13.42	26	21.18	American.....	Dollar Line.....	516.0	72.0	27.8	New York, N. Y.....	San Francisco, Cal.....	1,536	15,236	10,503
California.....	26	5.00	26	7.08	26	14.23	27	00.54	American.....	Panama-Pacific Line.....	574.0	80.0	28.0	New York, N. Y.....	San Francisco, Cal.....	2,602	24,506	17,565
Herran F.....	26	00.35	26	8.20	26	17.05	26	18.27	American.....	Union Sulphur Co.....	410.0	54.0	22.0	Mobile, Ala.....	Bellingham, Wash.....	5,354	6,581	4,784
Gen. M. H. Sherman.....	26	1.00	26	8.45	26	17.48	26	19.10	American.....	Arrow Line.....	402.0	53.0	18.0	New York, N. Y.....	Seattle, Wash.....	4,000	6,575	4,912
King Edwin.....	26	2.20	26	8.56	26	18.28	26	19.55	British.....	Dodd, Thomson & Co.....	400.0	54.0	24.0	Galveston, Tex.....	Fremont, Calif.....	7,551	6,474	4,686
Deroche.....	26	10.50	26	11.00	26	19.17	27	4.00	American.....	United Oil Co.....	435.0	56.0	23.0	Tiverton, R. I.....	Los Angeles, Calif.....	7,452	5,199	
Carl Legden.....	26	9.05	26	15.15	26	22.02	26	23.25	German.....	Hamburg-American Line.....	409.0	54.0	17.1	Brooklyn, N. Y.....	Valparaiso, Chile.....	2,009	7,145	5,474
St. Michel.....	26	6.00	27	14.03	26	20.34	27	11.20	American.....	U. S. Army.....	437.0	58.0	20.0	Brooklyn, N. Y.....	San Francisco, Cal.....	279	12	
Islander.....	26	10.30	27	7.05	27	12.58	27	14.02	American.....	Harry Pogue.....	34.0	10.0	3.0	N. London, Conn.....	Los Angeles, Calif.....		6,925	4,982
New Jersey.....	26	20.25	27	6.15	27	12.57	27	19.03	American.....	Texas Co.....	386.0	56.0	19.0	Wilmington, Del.....	Los Angeles, Calif.....	5,411	6,596	4,125
Point Bevo.....	27	7.45	27	7.50	27	14.27	19	02	American.....	Seaway & Hoyt.....	386.0	52.0	22.0	New Orleans, La.....	Tacoma, Wash.....		6,596	4,125
Vernon City.....	27	8.05	27	8.20	27	15.25	27	18.10	British.....	Reardon Smith Line.....	400.0	54.0	14.0	Christiansburg, Va.....	Vancouver, B. C.....		9,716	5,389
Southern Sun.....	27	8.10	27	8.30	27	15.34	27	16.35	American.....	Sun Oil Co.....	480.0	66.0	23.0	Baltimore, Md.....	Los Angeles, Calif.....		6,979	5,644
Oshav.....	27	9.40	27	12.40	27	18.46	27	20.05	Norwegian.....	T. Lodding.....	465.0	59.0	19.0	Cardiff, Wales.....	Los Angeles, Calif.....		9,716	5,644
Birmingham City.....	27	13.25	27	18.35	28	11.10	28	12.10	American.....	Isthmian S. S. Lines.....	395.0	55.0	17.0	Baltimore, Md.....	Seattle, Wash.....	2,123	7,304	5,189

Sulphur and asphalt.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

President Hoover.....	21	5.30	21	7.05	21	14.45	21	23.20	American.....	Dollar Line.....	615.6	81.3	31.3	Manila, P. I.....	New York, N. Y.....	5,975	27,813	20,101
Minnesota.....	21	7.35	21	8.15	21	15.15	21	15.15	American.....	Amer-Hawaii Line.....	407.7	53.7	26.0	Portland, Ore.....	Boston, Mass.....	5,510	7,150	5,024
Charles R. McCormick.....	21	17.50	22	6.15	22	13.40	22	13.40	American.....	McCormick S. S. Co.....	417.0	53.0	23.0	Tacoma, Wash.....	New York, N. Y.....	7,165	7,082	5,167
Point Arena.....	21	22.20	22	7.10	22	14.45	22	14.45	American.....	Gulf-Pacific Line.....	324.0	46.2	22.0	San Francisco, Cal.....	Houston, Tex.....	4,221	3,934	2,612
Chesapeake.....	22	00.08	22	8.03	22	15.40	22	15.40	British.....	Anglo-American Oil Co.....	476.0	60.8	30.0	Los Angeles, Calif.....	Elizabethtown, Pa., Eng.....	12,876	9,151	6,465
Point Calista.....	22	1.54	22	8.45	22	16.05	22	16.05	American.....	Gulf-Pacific Line.....	386.5	52.2	23.0	Portland, Ore.....	Tampa, Fla.....	5,500	5,708	4,131
Virginia.....	22	11.42	23	6.22	23	13.30	23	13.55	American.....	Panama-Pacific Line.....	556.4	89.3	28.0	San Francisco, Cal.....	New York, N. Y.....	5,773	25,254	18,170
Halcyon.....	23	3.40	23	7.12	23	14.47	24	00.30	Dutch.....	Royal Neth. S. S. Co.....	361.4	49.8	8.0	Corral, Chile.....	Hamburg, Germany.....	5,103	5,117	3,807
Pacific Electric.....	23	5.00	23	8.16	23	15.50	23	15.50	British.....	Furness, Withy & Co.....	435.9	60.2	23.0	Vancouver, B. C.....	Manchester, Eng.....	8,509	9,641	6,989
Steel Age.....	23	7.00	23	8.45	23	16.50	23	16.50	American.....	Isthmian S. S. Lines.....	395.5	55.0	28.0	Kahului, T. H.....	East coast, U. S. A.....	8,539	7,330	5,245
Julia Luckenbach.....	23	10.20	23	11.03	23	18.05	23	22.25	American.....	Luckenbach Line.....	436.6	57.2	23.0	Seattle, Wash.....	Boston, Mass.....	7,290	8,543	6,402
Tai Ping Yang.....	23	5.30	23	13.23	23	19.55	24	8.45	Panamanian.....	Barber S. S. Line.....	460.0	60.5	23.0	Davao, P. I.....	New York, N. Y.....	3,742	9,866	6,955
Designat.....	23	13.25	23	14.09	23	21.45	23	21.45	British.....	T. & J. Harrison.....	419.8	54.6	26.0	Vancouver, B. C.....	Liverpool, England.....	7,803	6,691	4,648
Melmay.....	7-12	17.20	8-24	6.25	24	14.09	24	15.25	British.....	Canadian Transp. Co.....	421.4	59.2	26.0	Chenai, B. C.....	Garsion, England.....	8,063	8,337	5,950
Gen. Wm. M. Graham.....	24	6.32	24	6.32	24	26.35	24	16.35	American.....	U. S. Army.....	156.0	32.0		Balboa, C. Z.....	Cristobal, C. Z.....	7,314	6,569	4,761
Harpoon.....	8-23	18.29	24	7.21	24	26.35	24	16.35	American.....	Shapard S. S. Co.....	492.6	53.2	23.2	Portland, Ore.....	London, England.....	5,509	18,197	13,526
Ranghiti.....	23	19.40	24	12.08	24	19.05	24	19.05	British.....	N. S. Shipping Co.....	531.0	70.2	23.0	Wellington, N. Z.....	Cristobal, C. Z.....	13,675	9,620	6,476
S-10.....	24	14.20	24	14.20	24	21.50			American.....	U. S. Navy.....	231.0	29.0		Balboa, C. Z.....	Chesler, Pa.....			
Sun.....	24	17.10	25	6.12	25	13.55	25	13.55	American.....	Sun Oil Co.....	480.6	66.0	29.0	Los Angeles, Calif.....	Cristobal, C. Z.....			
Chewink.....	25	6.31	25	15.23					American.....	U. S. Navy.....	180.0	35.6		Balboa, C. Z.....	Cristobal, C. Z.....			
Launch.....	25	6.31	25	15.23					American.....	U. S. Navy.....	180.0	35.6		Balboa, C. Z.....	Cristobal, C. Z.....			
Losmar.....	24	20.25	25	7.12	25	15.30	25	15.30	American.....	Calmar S. S. Corp.....	409.8	52.2	26.0	Seattle, Wash.....	Baltimore, Md.....	7,333	6,581	4,795

Sugar and canned goods.

Tug.

Submarine.

Mine planter.

Motor ship.

Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Iwatean Maru.	25	01 30	25	8 25	25	16 05	25	18 05	Japanese.	Mitsui Bussan Kaisha.	385.0	51.0	26.0	Iloilo, P. I.	New York, N. Y.	General.	6,452	6,207	4,551
Villager ¹⁷ .	23	2 00	23	9 12	23	16 45	23	18 45	Norwegian.	Intercean S. S. Corp.	393.0	54.7	27.4	Vancouver, B. C.	Rotterdam, Holl'd.	General.	7,187	6,869	5,131
Georgian.	23	7 06	23	9 43	23	18 00	23	19 00	American.	Williams S. S. Corp.	434.3	57.7	25.0	Seattle, Wash.	Portland, Me.	Lumber, general.	7,319	7,930	5,945
S-17 ¹⁸ .	23	10 15	23	10 15	23	17 25	23	17 25	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	General.	950	1,132	741
Manizales.	23	9 54	23	10 44	23	19 00	23	6 05	German.	Grace Line.	216.5	32.9	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.			
Bacon	23	8 30	23	13 26	23	21 10	23	22 05	British.	H. Hogarth & Sons.	348.7	50.0	22.0	Conquimbo, Chile.	New York, N. Y.	Copper ore.	5,688	4,323	3,013
Balmory ¹⁷ .	23	12 35	23	13 55	23	21 30	23	14 25	German.	Hamburg-American Line.	227.2	34.4	14.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	933	1,372	1,011
Cerigo ¹⁷ .	23	12 22	26	6 09	26	13 55	26	13 55	Dutch.	American Pet. Co.	439.7	53.0	27.0	Talara, Peru.	Amsterdam, Holl'd.	Naphtha.	11,326	9,197	6,352
Oregon ¹⁷ .	25	22 10	26	7 14	26	14 45	27	03 30	French.	French Line.	470.3	61.2	27.5	Vancouver, B. C.	Le Havre, France.	General.	9,154	10,334	7,468
California ¹⁷ .	26	6 10	26	8 13	26	17 35	26	22 12	Italian.	Nav. Libera-Tristina.	523.0	64.0	25.0	Vancouver, B. C.	Genoa, Italy.	General.	5,174	13,787	9,856
Heliopolis ¹⁹ .	26	2 15	26	9 15	26	16 00	27	5 05	Belgian.	Baron Jean Empain.	204.8	28.6	14.0	Los Angeles, Calif.	Kingston, Jamaica.	Ballast.	366	1,270	778
Salvador.	26	20 00	27	6 45	27	13 40			British.	Pacific Steam Nav. Co.	215.0	33.5	14.3	Champerico, Guatemala.	Cristobal, C. Z.	General.	2,151	8,912	6,251
Sanyo Maru ¹⁷ .	27	7 20	27	8 19	27	15 05	27	21 05	Japanese.	Osaka Shosen Kaisha.	446.0	60.6	20.0	Penang, Malay Pen.	Baltimore, Md.	General.	366	1,270	778
Real ²⁰ .	27	7 20	27	9 33	27	16 50	28	8 55	Panamanian.	Haus Elliot.	62.0	18.0	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	42	46	22
Nueva																			
Panama ¹⁷ .	27	7 20	27	10 40	27	16 45	28	6 30	Panamanian.	Haus Elliot.	108.5	20.6	10.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	143	226	101
Swan.									American.	U. S. Navy.	187.0	35.0		Balboa, C. Z.	Cristobal, C. Z.	Tug.			
Mathew																			
Luckenbach.	27	16 50	27	17 32	28	13 40	28	13 40	American.	Luckenbach Gulf Co.	434.4	57.7	27.0	Portland, Oreg.	Mobile, Ala.	Lumber, general.	7,661	7,977	5,764

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.		Line.		Date.		Vessel.		Line.		For—	
August 21.	Stella Lykes		Lykes Brothers S. S. Co.		August 21.	Guayaquil		Panamá R. R. S. S. Line.		New York, N. Y.		
August 21.	No. 144-M ²¹ .		Pan American-Grace Airways.		August 21.	Santa Marta		United Fruit Co.		New York via wayp'gs.		
August 21.	Bolivar.		Colombian Line.		August 21.	Saramacca		United Fruit Co.		New Orleans, La.		
August 21.	No. 9664 ²¹ .		Pan American Airways.		August 21.	Bolivar.		Colombian Line.		New York via wayp'gs.		
August 21.	Veragua.		United Fruit Co.		August 22.	No. 669 ²¹ .		Pan American Airways.		Miami via wayp'gs.		
August 22.	No. 663-M ²¹ .		Pan American Airways.		August 22.	No. 9775 ²¹ .		Lykes Brothers S. S. Co.		Medellin via wayp'gs.		
August 22.	Magdalena ²¹ .		Hamburg-American Line.		August 22.	Stella Lykes		Lykes Brothers S. S. Co.		Soo. Domingo via wayp'gs.		
August 23.	No. 9775 ²¹ .		Uraba, Medellin & Cent. Airways.		August 22.	Veragua.		United Fruit Co.		New York via Habann.		
August 23.	Simon Bolivar.		Royal Netherlands S. S. Co.		August 23.	No. 9644 ²¹ .		Pan American Airways.		San Salvador via wayp'gs.		
August 24.	Cristobal.		Panamá R. R. S. S. Line.		August 23.	No. 9672 ²¹ .		Pan American Airways.		Lima via wayp'gs.		

* Other than ships passing through the Canal.

²¹ Air mail carrier.²² Motor ship.²³ Yacht.²⁴ Motor schooner.²⁵ Submarine.

* ARRIVALS.

* DEPARTURES.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
August 24.	Suriname.	United Fruit Co.	New Orleans, La.	August 24.	Simon Bolivar.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
August 24.	No. 9673 ²³ .	Pan American Airways.	San Salvador via waypts.	August 24.	Magdalena ²⁴ .	Hamburg-American Line.	Hamburg via wayports.
August 24.	Davision.	Leyland Line.	Liverpool via wayports.	August 24.	Suriname.	United Fruit Co.	Bocas and Port Limon.
August 24.	Maryland ²⁴ .	Zillah Pauline Bush.	Georgetown, G. Cayman.	August 25.	Davision.	Leyland Line.	Puerto Padre, Cuba.
August 24.	No. 300-N ²³ .	Pan American-Grace Airways.	Talara via wayports.	August 26.	No. 141-M ²¹ .	Pan American-Grace Airways.	Chiriquo via wayports.
August 24.	R. L. Husler ²³ .	Bodden Brothers.	Georgetown, G. Cayman.	August 26.	Globe Trotter ²⁴ .	Ernest Pollman.	St. Thomas via waypts.
August 25.	No. 659 ²¹ .	Pan American Airways.	Miami via wayports.	August 26.	No. 145-M ²¹ .	Pan American-Grace Airways.	Medellin via wayports.
August 25.	Atlas.	Pan American Vacuum Transp. Co.	Beaumont, Tex.	August 26.	Pearl Marie.	G. I. Bryan.	Colon, Rep. of Panama.
August 25.	Cefalu.	Standard Fruit & S. S. Co.	New Orleans, La.	August 27.	Cefalu.	Standard Fruit & S. S. Co.	New Orleans via waypts.
August 26.	Carare.	Elders & Fyffes, Ltd.	Avonmouth via wayports.	August 27.	Carare.	Elders & Fyffes, Ltd.	Avonmouth via Kingston.
August 27.	Simon Bolivar.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	August 27.	Atlas.	Standard Vacuum Transp. Co.	Beaumont, Tex.
August 27.	Quirigua.	United Fruit Co.	New York via Habana.	August 27.	Simon Bolivar.	Royal Netherlands S. S. Co.	Amsterdam via wayports.
August 27.	Suriname.	United Fruit Co.	Port Limon and Bocas.	August 27.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.
August 27.	Skaola.	United Fruit Co.	New York via Kingston.				
August 27.	No. 145-M ²¹ .	Pan American-Grace Airways.	Medellin and wayports.				
²¹ Air mail carrier. ²⁴ Sailer. ²³ Schooner. ²⁶ Motor ship.				PORT OF BALBOA.			
August 21.	Talamanca.	United Mail S. S. Co.	San Francisco, Calif.	August 21.	Talamanca.	United Mail S. S. Co.	San Francisco, Calif.
August 21.	Real ²⁷ .	Hans Elliot.	Darien, Rep. of Panama.	August 22.	Real ²⁷ .	Hans Elliot.	Panama Bay, R. P.
August 26.	Bokuyo Maru.	Nippon Yusen Kaisha.	Hongkong, China.	August 26.	Bokuyo Maru.	Nippon Yusen Kaisha.	Valparaiso, Chile.

* Other than ships passing through the Canal.

²⁷ Motor schooner.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Tolls Charges for Transit of the Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement. \$1 20
 2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement.72
 3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton.50
 4. Army and navy transports, colliers, hospital ships, and supply ships, the vessel to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton. 1.20
 5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
 6. Vessels returning from Gatun Lake or original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
 7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in the current tariff or supplements thereto.
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Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., September 7, 1932. No. 6.

Canal Traffic During August.

During the month of August, 1932, 314 commercial vessels and 7 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,440,848.87, and on the launches \$31.83, or a total tolls collection of \$1,440,880.70.

The daily average of commercial vessels was 10.13, and the daily average of tolls collected was \$46,479, as compared with an average of 10.52 transits and \$47,378.33 in tolls for the previous month, and an average of 12.58 transits and \$57,103.31 in tolls for the month of August, 1931. The average amount of tolls paid by each of the commercial transits was \$4,588.69 as compared with \$4,538.98 for the month of August, 1931.

Commercial traffic for the past month was the lowest of any month of the current calendar year to date both with respect to the number of transits and tolls collected. In comparison with August, 1931, it registered a decrease of 19.5 per cent in transits and 18.6 per cent in tolls collected. In addition to comprising the lowest month's traffic in the current calendar year, the vessels transiting last month were the lowest number for a month since December, 1922, and the amount of tolls collected was the lowest since February, 1923.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 8 months of the current calendar year, with the daily averages of transits and tolls, and the totals for the first 8 months of the calendar years 1931 and 1930:

	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	358	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
July.....	326	1,468,728.36	10.52	47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
Total, first 8 months of calendar year 1932.....	2,801	12,833,820.90	11.48	52,597.63
Total, first 8 months of calendar year 1931.....	3,423	15,866,528.62	14.09	63,236.74
Total, first 8 months of calendar year 1930.....	3,936	17,509,063.04	16.20	72,053.76

As compared with the first 8 months of the calendar year 1931, the corresponding period this year has had 622 fewer transits and \$2,532,707.72 less tolls, decreases of 18.2 per cent and 16.5 per cent, respectively; in comparison with the first 8 months of the calendar year 1930, the corresponding period this year showed a decrease of 1,135 transits and \$4,675,242.14 in tolls, losses of 28.8 per cent and 26.7 per cent, respectively.

MOVEMENTS OF OCEAN VESSELS. Week ending at midnight, September 3, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator).		Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.									Nature.	Tons.	Gross.	Net.
Santa Teresa.....	27	15.40	28	6.05	28	13.20	28	20.45	American.....	Panama Mail S. S. Co.	360.0	51.0	23.3	New York, N. Y.	General.....	2,624	5,726	4,086
Manizales.....	27	19.10	28	6.05	28	14.12	28	15.10	German.....	Cristobal, C. Z.	216.0	32.0	13.0	Guayaquil, Ecuador	General.....	130	1,132	741
Nueva Panama.....	27	16.45	28	6.30	28	13.22	28	14.25	Panamanian.....	Hans Elliot.	108.0	20.0	8.6	Buenaventura, Col.	General.....	65	226	101
Robert E.....	27	23.15	28	7.20	28	15.03	28	16.05	American.....	E. Texas Refining Co.	424.0	58.0	20.7	Vancouver, B. C.	Gasoline.....	6,053	7,333	5,182
Iowan.....	28	00.10	28	8.30	28	15.40	28	16.40	American.....	Johnson-Hayward Line.	407.0	53.0	17.4	Portland, Oreg.	General.....	1,939	7,079	5,028
Annie Johnson.....	28	9.15	28	9.25	28	16.26	29	13.55	Swedish.....	Arner-Hayward Line.	392.0	52.0	20.3	Vancouver, B. C.	General.....	2,495	6,650	4,919
Berganger.....	28	3.00	28	11.10	28	17.03	28	18.05	Norwegian.....	Westfall, Larsen & Co.	464.0	61.0	19.1	Vancouver, B. C.	Ballast.....	9,342	9,933	6,983
Peter Hurl.....	28	12.35	28	12.35	28	19.42	28	20.50	Danish.....	Waried Standard	321.0	70.0	18.0	Talara, Peru	Ballast.....	12,344	8,249	6,944
Raranga.....	28	15.55	28	16.00	29	11.01	29	12.00	British.....	Slaw, Savill & Albion.	478.0	63.0	26.0	Auckland, N. Z.	General.....	4,700	11,070	7,931
Henry S.....	28	17.05	28	19.45	29	12.06	29	13.25	American.....	Argonaut S. S. Co.	404.0	54.0	23.0	Seattle, Wash.	Grain, general.....	4,525	6,755	4,688
Real.....	27	16.50	28	8.55	28	16.34	28	16.34	Panamanian.....	Hans Elliot.	62.0	17.0	4.0	Bahoa, C. Z.	General.....	18	46	22
Pacific.....	28	12.30	29	6.10	29	14.03	29	15.15	British.....	Furness, Withy & Co.	420.0	58.0	18.1	Vancouver, B. C.	General.....	572	7,979	5,916
Koranton.....	29	7.35	29	7.45	29	14.42	29	16.00	British.....	R. Chapman & Son.	412.0	55.0	15.6	Vancouver, B. C.	Ballast.....	1,939	7,079	5,028
Harlem.....	29	6.20	29	11.50	29	13.09	29	19.00	Dutch.....	Royal Neth. S. S. Co.	361.0	49.0	17.2	Corral, Chile.	General.....	1,532	4,759	3,660
Cargo.....	25	21.30	29	14.25	29	21.30	29	22.40	German.....	Hamburg-American Line	227.0	34.0	14.0	Buenaventura, Col.	General.....	200	1,572	1,011
Comet.....	29	16.00	29	16.55	30	10.48	30	11.55	American.....	Standard Oil Co.	480.0	66.0	15.6	Los Angeles, Calif.	Ballast.....	9,820	6,750	6,750
Wm. A.....	29	19.45	30	6.10	30	12.55	30	14.10	American.....	McCormick S. S. Co.	394.0	55.0	18.0	Seattle, Wash.	General.....	1,902	6,983	5,099
Nebraska.....	30	4.30	30	7.00	30	13.47	30	14.50	American.....	Amcr-Hawaiian Line.	472.0	60.0	19.6	Seattle, Wash.	General.....	1,905	6,982	6,638
Dean Emery.....	30	14.50	30	14.55	30	22.55	30	22.55	American.....	Standard Shipping Co.	429.0	59.0	27.0	Bahoa, C. Z.	Crude oil.....	10,908	7,709	5,477
Harry Luckenbach.....	31	2.10	31	6.10	31	13.04	31	15.30	American.....	Luckenbach Line.	449.0	60.0	21.0	Seattle, Wash.	General.....	3,450	9,262	6,853
Viking II.....	31	6.55	31	7.20	31	14.12	31	15.30	Norwegian.....	Comp. Adm. del Guano.	376.0	48.0	17.0	Palta, Peru	Ballast.....	5,381	3,888	3,888
Javanese.....	31	7.05	31	8.30	31	14.57	31	16.10	British.....	Princes Line, Ltd.	441.0	69.0	22.5	Manila, P. I.	(?)	4,514	9,240	6,145
Feltre.....	30	20.05	31	10.25	31	16.55	31	18.05	Italian.....	Nax, Libera-Tristina.	430.0	55.0	19.7	Vancouver, B. C.	General.....	1,299	7,823	6,029
Washington.....	31	9.00	31	12.30	31	19.29	31	20.30	French.....	French Line.	470.0	61.0	17.5	Vancouver, B. C.	General.....	442	7,334	7,477
Zenon.....	31	8.30	31	13.40	31	20.30	31	21.55	French.....	French Line.	425.0	55.0	19.4	San Antonio, Chile.	Cast iron, gen.	2,197	6,982	4,834
Panama.....	30	14.40	31	14.30	31	21.43	31	23.02	Danish.....	East Asiatic Co.	410.0	55.0	13.6	Copenhagen, Den.	General, coke.....	3,796	7,027	5,341
Grafton.....	31	20.00	31	6.20	31	14.08	31	15.20	British.....	R. Chapman & Son.	423.0	58.0	16.0	Pto. Ferrato, Italy.	Ballast.....	6,823	4,827	4,827
Dagford.....	28	6.45	1	7.09	1	15.21	1	16.40	Norwegian.....	J. P. Peterson & Co.	54.0	14.0	14.0	Albany, N. Y.	Ballast.....	7,509	4,827	4,827
New Orleans.....	9-1	9.55	1	10.05	1	16.47	1	18.43	American.....	Rossvet S. S. Co., S. B.	385.0	55.0	17.3	Baltimore, Md.	General.....	1,431	7,509	5,172
City of.....																		
Victoria.....	1	11.55	1	12.05	1	18.54	1	20.40	British.....	Brit-Canadian S. S. Co.	411.0	54.0	20.1	Antwerp, Belgium.	General.....	4,525	6,597	4,989
Santa Maria.....	1	5.50	1	14.03	1	19.56	2	11.03	American.....	Grace Line.	466.0	61.0	23.9	New York, N. Y.	General.....	1,992	10,626	6,680

* Cotton, tobacco, tinplate, and general.

¹ Motor schooner.

² Motor ship.

³ Tanker.

	1	16	30	1	18	00	2	10	49	2	12	00	British	5	R. Chapman & Son	436.0	60.0	19.0	North Shields, Eng.	Vancouver, B. C.	Ballast	8,144	6,028
Frumenton																							
Gen. Wm. M. Graham																							
Ville de Strasbourg	1	12	30	2	6	00	2	13	22	2	22	20	French		U. S. Army	156.0	32.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast		
President Polk	2	5	45	2	7	15	2	14	03	2	21	38	American		Messagees Maritimes	409.0	53.0	22.0	Marselles, France	Noumea, N. Caled.	Wine, general	1,129	7,677
Republice	1	17	30	2	9	08	2	16	33	3	11	44	American		Dollar Line	502.0	62.0	21.11	New York, N. Y.	San Francisco, Cal.	General	2,807	12,660
Gertrude															U. S. Army	599.0	68.0	31.8	New York, N. Y.	Taku Bar, China	General	1,151	
Kellogg	2	6	40	2	9	45	2	16	57	2	18	00	American		Kellogg S. S. Corp.	391.0	51.0	26.0	New York, N. Y.	Seattle, Wash.	Cresosote	6,830	5,419
Norfolk	3	6	05	3	6	20	3	14	03	3	18	35	British		Federal Steam Nav. Co.	520.0	64.0	20.9	London, England	Champerio, N. Z.	General	5,451	12,966
Salvador	8-27	13	40	3	9	00	3	16	07	3	17	00	British		Pacific Steam Nav. Co.	215.0	33.5	14.1	Cristobal, C. Z.	Champerio, Guat.	General	540	1,270
Montevideo																							
Mary	9-3	9	20	3	9	30	3	16	45	3	17	46	Japanese		Osaka Shosen Kaisha	430.0	56.0	18.3	Buenos Aires, Arg.	Kobe, Japan	Cotton, general	1,822	7,875
Panama	3	10	00	3	10	10	3	17	38	3	22	15	American		Amer-Hawaiian Line	407.0	53.0	20.0	New York, N. Y.	Portland, Oreg.	General	2,355	7,098
Conch	3	13	15	3	13	20	3	19	33	3	23	14	British		Anglo-Saxon Pet. Co.	455.0	62.0	21.0	North Shields, Eng.	Los Angeles, Calif.	Ballast		5,804
Edgar F.																							
Luckenbach	1	13	30	3	13	50	3	21	45	3	23	05	American		Luckenbach Line	425.0	57.0	25.0	Houston, Tex.	Tacoma, Wash.	General	8,105	8,568
Nueva Panama	1	21	55	3	15	10	4	20	30	3	20	00	Panamanian		Hans Elliot	108.0	20.0	8.6	Cristobal, C. Z.	Buenaventura, Col.	General	100	226
Dora Maria															Wm. Schildener				Cristobal, C. Z.	Gatun, C. Z.	Ballast	3	21
Meltonian															F. Kariger	33.3	13.6		Cristobal, C. Z.	Gatun, C. Z.	Ballast		22

: Tanker.

: Mine planter.

: Transport.

: Launch.

: Schooner.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

El Aleto	28	3	10	28	6	40	28	14	40	28	16	05	British	Anglo-Ecuador. Oilfields.	440.8	57.5	27.0	La Libertad, Ecua.	Philadelphia, Pa.	Crude petroleum	9,837	7,555
Soyo Maru	28	11	20	28	11	55	28	19	20	28	19	20	Japanese	Kawasaki Kisen Kaisha	415.0	56.0	16.0	Kobe, Japan	New York, N. Y.	Silk, general	1,720	6,980
Elg	28	13	15	28	13	55	28	21	20	28	21	20	Norwegian	Canadian Transp. Co.	357.4	51.2	24.0	Tacoma, Wash.	Dublin, Ireland	Lumber, wheat	6,705	5,179
Adventure	28	13	15	28	13	55	28	21	20	28	21	20	American	R. O. Shuey	38.0	10.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast		12
Portland	28	21	35	29	6	21	29	16	50	29	18	40	German	Hamburg-American Line	462.2	61.2	26.0	Vancouver, B. C.	Hamburg, Germany	General	7,615	9,139
La Paz	28	4	10	29	7	21	29	16	10	29	18	20	British	Pacific Steam Nav. Co.	406.3	54.2	27.0	Corral, Chile	Hull, England	General	7,641	7,216
Loise Maersk	29	6	20	29	8	07	29	16	25	29	17	25	Danish	A. P. Moller	320.2	44.2	23.0	Don Martin Island	Tampa, Fla.	Guano	4,600	3,405
Marion Otis	29	00	20	29	9	12	29	17	55	29	17	55	American	Arrow Line	409.6	54.1	23.3	Seattle, Wash.	New York, N. Y.	Lumber, general	7,140	6,653
Chandler	29	11	00	29	11	36	29	18	20	29	18	20	American	Amer-Hawaiian Line	415.0	53.7	25.5	Seattle, Wash.	Boston, Mass.	Lumber, general	6,565	7,380
Alaskan	29	14	51	30	6	16	30	12	47	30	16	35	American	Grace Line	466.0	64.9	23.9	San Antonio, Calif.	New York, N. Y.	General	3,196	10,687
Santa Barbara	29	14	51	30	7	13	30	14	05	30	14	05	Brazilian	Cia. Nacional de Nav.	371.2	52.2	19.3	Los Angeles, Calif.	Rio de Janeiro	Passengers	5,501	3,636
Itaque	29	6	00	30	7	13	30	14	05	30	14	05	American	Nelson Line	377.0	52.0	24.0	Vancouver, B. C.	New York, N. Y.	Lumber, general	6,400	8,434
Democracy	30	3	45	30	8	20	30	15	30	30	15	30	American	Colonial Sugar Co.	400.5	52.2	25.0	Surva, Fiji Islands	United Kingdom	Sugar	7,288	9,927
Ashburn	30	18	30	31	6	15	31	13	40	31	14	40	British	W. R. Smith	412.1	55.0	25.0	Vancouver, B. C.	Cardiff, Wales	General	8,000	7,022
Queen City	30	22	25	31	7	06	31	14	45	31	17	50	British	Luckenbach Line	446.5	56.1	29.0	Seattle, Wash.	Boston, Mass.	General	7,926	8,785
Walter A.	30	23	35	31	7	59	31	15	35	31	15	35	American	Imperial Oil Co.	420.8	57.0	28.0	Talara, Peru	Halifax, Canada	Crude oil	9,351	7,226
Luckenbach	31	21	47	1	7	24	1	15	05	1	15	05	Danish	East Asiatic Co.	465.4	62.2	29.0	Vancouver, B. C.	Copenhagen, Den.	General	9,531	11,060
Trontolite	31	00	45	1	7	50	1	15	50	1	16	45	American	Standard Shipping Co.	429.0	59.0	17.3	Balboa, C. Z.	Aruba, Venezuela	Ballast	7,709	5,477
América	9-1	00	45	1	7	50	1	15	50	1	16	45	American	Hamburg-American Line	374.0	53.6	22.0	Palta, Peru	Hamburg, Germany	General	4,868	5,364
Dean Emery	8-30	22	55	1	8	56	1	16	55	1	16	55	American	McCormick S. S. Co.	401.4	53.2	27.2	Tacoma, Wash.	New York, N. Y.	Lumber, general	7,555	7,082
Palatia	9-1	4	25	1	9	12	1	17	25	1	20	00	German	Matson Nav. Co.	420.6	54.2	26.0	Port Allen, T. H.	New York, N. Y.	Sugar	7,911	7,332
Sidney M.														Hans Elliot	108.5	20.6	9.1	Buenaventura, Col.	Cristobal, C. Z.	Coff, general	210	226
Hauptman	1	6	00	1	9	35	1	18	10	1	18	10	American									
Mama Ala	1	6	45	1	10	30	1	19	45	2	1	10	American									
Nueva Panama	1	15	00	1	15	39	1	21	55	3	15	10	Panamanian									

: Tanker.

: Motor ship.

: Launch.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Gross.	Net.
Heinrich V. Riedemann	1	20.25	2	6.25	2	13.45	2	13.45	Danzig.	W. Tankseheiff Rhederi.	521.1	70.2	31.0	Cabo Blanco, Peru.	Fawley, England.	Crude oil.	16,644	12,535	8,224
Sawoka	1	11.25	2	7.39	2	14.30	2	16.25	American.	Roosevelt S. S. Co.	401.9	54.2	24.0	Sidney, Australia.	New York, N. Y.	(13)	5,007		
Osiris	2	1.25	2	8.05	2	15.50	2	17.30	German.	Hamburg-American Line	376.1	51.7	24.0	Valparaiso, Chile.	Hamburg, Germany	General.	5,953	5,788	4,023
San Bernardino	2	11.45	2	12.27	2	20.15	2	20.15	American.	Staten S. S. Co.	410.5	54.2	27.0	Portland, Ore.	Philadelphia, Pa.	Lumber, general.	7,876	6,755	4,873
Nguyen	2	20.50	3	6.18	3	13.36	3	13.50	Swedish.	Transatlantic S. S. Co.	422.5	53.8	25.0	Port Pirie, Australia.	London, England.	General.	8,398	6,972	5,122
Mexican.	2	20.00	3	7.15	3	14.25	3	14.45	American.	Amer-Hawaiian S. Co.	472.3	57.2	29.4	Tacoma, Wash.	Boston, Mass.	Lumber, general.	10,616	9,258	6,944
Kirishima	3	0.10	3	8.12	3	15.35	3	18.40	Japanese.	Kokusai Kisen Kaisha.	443.1	60.0	21.0	Manila, P. I.	New York, N. Y.	General.	3,268	8,912	6,504
Cal.	3	5.40	3	8.45	3	16.35	4	14.20	German.	North German Lloyd.	216.5	32.9	16.0	Guayaquil, Ecuador.	Cristobal, C. Z.	General.	1,092	1,105	698
Oxelund	3	6.30	3	9.20	3	17.40	3	17.40	Swedish.	Canadian Transp. Co.	333.6	53.4	25.5	Portland, Ore.	Hull, England.	Wheat, lumber.	7,500	6,061	4,165
Betterson	3	6.15	3	12.52	3	20.09	3	20.00	American.	Associated Oil Co.	431.0	59.2	27.0	San Francisco, Cal.	Tiverton, R. I.	Kerosene.	9,846	7,863	5,104
Ida Knudsen	3	12.15	3	12.58	3	22.15	3	22.15	Norwegian.	Knut Knutsen.	493.0	62.0	29.0	Esatero Bay, Calif.	Port de Bone, Fr.	Crude oil.	13,121	9,159	6,248
Norma D.	3	17.56	3	13.30	4				Panamanian.	J. J. De Preter.	37.3	12.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.		24	9
Santa Ana.	3	8.15	3	13.38	3	21.20	4	12.40	American.	Grace Line.	373.9	51.6	24.4	San Francisco, Cal.	New York, N. Y.	Coffee, general.	3,299	5,710	4,011
Niel Maersk	3	12.40	3	13.43	3	23.10	4	0.15	Danish.	A. P. Moller.	418.9	54.6	26.3	Cebu, P. I.	New York, N. Y.	Sugar, general.	7,808	7,410	5,523
Knoxville City	3	14.00	3	14.54	4	9.00	4	11.50	American.	Isthmian S. S. Lines.	424.2	56.2	26.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,099	7,611	5,450
Point Chico.	3	16.30	4	17.14	4	11.50	4	11.50	American.	Swayne & Hoyt.	386.8	52.2	22.0	Seattle, Wash.	Mobile, Ala.	General.	5,879	5,727	4,107

† Tanker.

‡ Motor ship.

§ Launch.

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

‡ Sugar and rabbit skins.

* Tanker.

* Motor ship.

* Launel.

* Sugar and rabbit skins.

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.	ARRIVALS.		DEPARTURES.	
		Line.	Date.	Vessel.	Line.
August 28	Baracoa	Colombian S. S. Line.	August 28	Sixola	United Fruit Co.
August 28	No. 9088	Pan American Airways.	August 28	Suriname	United Fruit Co.
August 28	No. 945-M	Pan American-Grace Airways.	August 29	Baracoa	Colombian S. S. Line.
August 29	Gula	French Line.	August 29	No. 659-M	Pan American Airways.
August 29	No. 659-M	Pan American Airways.	August 29	No. 145-M	Pan American-Grace Airways.
August 30	Quirigua	United Fruit Co.	August 29	Cristobal	Panama Railroad S. S. Line.
August 30	No. 145-M	Pan American-Grace Airways.	August 29	Overton	U. S. Navy.
August 31	No. 9064	Pan American Airways.	August 30	No. 144-M	Pan American-Grace Airways.
August 31	No. 144-M	Pan American-Grace Airways.	August 30	No. 9688	Pan American Airways.
September 1	Buenaventura	Panama Railroad S. S. Line.	August 30	Pearl Marie	G. I. Bryan.
September 1	Irona	United Fruit Co.	August 30	Quirigua	United Fruit Co.
September 1	No. 670-M	Pan American Airways.	August 31	Cuba	French Line.

* Other than ships passing through the Canal.

* Air mail carrier.

New York via waypoints.

New Orleans, La.

New York via waypoints.

Miami via waypoints.

Medellin via waypoints.

New York via Haiti.

Pto. Cabezas, Nicaragua.

Chelavio via waypoints.

San Salvador via waypoints.

Bluefields, Nicaragua.

New York via Habana.

Havre via waypoints.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
September 2	Calamars.	United Fruit Co.	New York via Habana.	September 1	No. 659-M ¹⁴ .	Pan American Airways.	Miami via wayports.
September 2	Contessa.	Standard Fruit & S. S. Co.	New Orleans via Habana.	September 2	No. 945-M ¹⁴ .	Pan American-Grace Airways.	Medellin via wayports.
September 3	Metapan.	United Fruit Co.	New York via Kingston.	September 2	Irioua.	United Fruit Co.	New Orleans via Tela.
September 3	Annetta I. ¹⁵ .	P. W. Hamilton.	Colon, Rep. of Panama.	September 2	Calamars.	United Fruit Co.	Port Limon, Costa Rica.
				September 3	Annetta I.	P. W. Hamilton.	Colon, Rep. of Panama.
				September 3	No. 9064 ¹⁴ .	Pan American Airways.	San Salvador via wayp'ts.
				September 3	No. 145-M ¹⁴ .	Uraba, Medellin & Central Airways.	Medellin, Colombia.
				September 3	Contessa.	Standard Fruit & S. S. Co.	New Orleans via wayports.
PORT OF BALBOA.							
¹⁵ Motor boat.							
August 29	Real ¹⁶ .	Hans Elliot.	Darien, Rep. of Panama.	August 30	Real ¹⁶ .	Hans Elliot.	Panama Bay, R. P.
August 29	Plus Ultra ¹⁷ .	Pablo Calvet & Co.	Esmeraldas, Ecuador.	August 31	Plus Ultra ¹⁷ .	Pablo Calvet & Co.	Esmeraldas, Ecuador.
September 3.	Real ¹⁶ .	Hans Elliot.	Panama Bay, R. P.	September 3.	Real ¹⁶ .	Hans Elliot.	Panama Bay, R. P.

* Other than ships passing through the Canal.

¹⁷ Motor ship.¹⁶ Motor schooner.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 90 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,300 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Tolls Charges for Transit of The Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement. \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement.72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton.50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessels to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton. 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake to original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in current tariff or supplements thereto.

Hours of Departure of Passenger Trains.

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sunday, 7.00 a. m., 12.15 p. m., 4.30 p. m.; Sunday only, 9.20 a. m., 4.00 p. m.

From Panama: Daily except Sunday, 7.05 a. m., 12.20 p. m., 4.35 p. m.; Sunday only, 7.05 a. m., 6.15 p. m.

The time required for passage from one terminal to the other is 1 hour and 45 minutes.

Tanker Traffic Through the Panama Canal During Fiscal Year 1932.

During the fiscal year ended June 30, 1932, 612 tank ships transited the Panama Canal carrying 3,501,390 tons of cargo, principally mineral oils. These vessels had a net tonnage of 3,570,398, and paid \$3,197,136.29 in tolls.

Tank ships comprised 13.6 per cent of the total commercial transits; made up 15.1 per cent of the net tonnage (Panama Canal measurement); paid 15.4 per cent of the total tolls collected; and carried 17.7 per cent of the total cargo in transit through the Canal.

Tanker traffic in 1932 was the lowest since the beginning of shipments on a large scale from California which occurred in 1923. Its proportion to the total traffic also showed a substantial decrease under previous years.

Tanker traffic reached its lowest ebb in the past year in March with 35 transits, carrying 179,666 tons of cargo for the month. From that month, successive increases were recorded, June having 66 transits, the highest of any month during the year. The highest cargo tonnage of any month occurred in May—373,789 tons.

Expressed in terms of percentage, the following tabulation shows the proportion of tanker traffic through the Canal in the past five fiscal years:

Fiscal year.	Per cent of total traffic.			
	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
1932.....	13.6	15.1	15.4	17.7
1931.....	17.1	19.0	19.0	20.3
1930.....	19.7	21.9	21.3	20.2
1929.....	16.8	19.6	18.9	17.9
1928.....	17.3	21.2	20.1	19.7

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the fiscal year 1932, segregated by nationality, are shown in the following tabulation, with comparative totals for the preceding four fiscal years:

Nationality.	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
Belgian.....	4	23,811	\$21,619.40	22,036
British.....	151	866,555	780,113.94	857,229
Danish.....	9	45,827	39,089.01	35,133
Danzig.....	33	244,300	217,087.09	238,884
Dutch.....	14	74,232	64,934.02	62,638
French.....	4	20,810	18,741.60	20,062
German.....	4	31,112	25,450.32	24,287
Italian.....	2	9,440	9,120.45	6,359
Norwegian.....	68	368,701	324,396.49	318,743
Swedish.....	5	31,119	29,593.50	32,592
United States.....	318	1,854,491	1,666,990.47	1,883,427
Total, fiscal year 1932.....	612	3,570,398	3,197,136.29	3,501,390
Total, fiscal year 1931.....	944	5,281,873	4,682,320.14	5,102,836
Total, fiscal year 1930.....	1,218	6,564,138	5,768,963.28	6,071,378
Total, fiscal year 1929.....	1,083	5,844,263	5,145,632.19	5,512,481
Total, fiscal year 1928.....	1,121	6,243,969	5,436,437.16	5,829,722

The number of tank ships passing through the Canal each month during the fiscal year ended June 30, 1932, the tons of cargo carried, and the percentages which the tanker traffic formed of transits, net tonnage, tolls, and cargo, are summarized in the following table:

	Transits.	Tons of cargo.	Percentage which tanker traffic formed of—			
			Transits.	Panama Canal net tonnage.	Tolls collected.	Cargo.
1931.						
July.....	59	303,068	14.5	15.7	15.7	16.2
August.....	52	325,628	13.3	14.6	15.1	18.2
September.....	55	317,189	13.9	15.4	15.8	17.7
October.....	57	304,420	14.6	15.8	16.0	17.3
November.....	50	292,706	13.3	14.6	14.9	18.6
December.....	51	312,763	13.2	14.1	14.9	19.0
1932.						
January.....	45	238,886	12.0	13.5	13.8	15.0
February.....	38	243,114	10.6	12.1	12.5	14.8
March.....	35	179,666	9.6	10.7	10.6	10.9
April.....	49	244,711	13.2	16.1	16.1	17.0
May.....	55	373,789	15.4	17.7	17.9	22.3
June.....	66	365,450	19.6	22.2	22.5	26.0
Total.....	612	3,501,390	13.6	15.1	15.4	17.7

As stated previously the highest month of tanker traffic in the past year occurred in June. In this month tanker traffic comprised 19.6 per cent of the total commercial transits through the Canal and carried 26.0 per cent of the total cargo tonnage. The increase recorded in the latter part of the year was due to increase in shipments from both California and South America, the two sources of supply of mineral oils in the Pacific area.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending August 27, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Guayaquil.....	Panama Railroad S. S. Line.....	.....	August 21	.....	212
Nueva Panama.....	United Fruit Co.....	.....	August 21	.....	32
Saramacca.....	United Fruit Co.....	.....	August 21	.....	422
Santa Marta.....	United Fruit Co.....	.....	August 21	.....	242
Durazzo.....	Hamburg-American Line.....	.....	August 21	.....	118
Bolivar.....	Colombian S. S. Line.....	August 21	August 21	34½	529
President Hoover.....	Dollar Line.....	August 21	August 21	498	(+)
Stella Lykes.....	Lykes Brothers.....	August 21	August 22	469	30
Veragua.....	United Fruit Co.....	August 22	August 22	(+)	160
West Nilus.....	McCormick S. S. Line.....	August 22	August 22	(+)	95
Los Angeles.....	Union Oil Co.....	August 22	August 23	8,967	(+)
Lochmonar.....	Royal Mail Steam Packet Co.....	August 22	August 24	203	(+)
Helder.....	Royal Netherlands S. S. Co.....	August 23	August 23	161	50
Magdalena.....	Hamburg-American Line.....	August 23	August 24	23	2,053
Simon Bolivar.....	Royal Netherlands S. S. Co.....	August 23	August 24	156	(+)
Tai Ping Yang.....	Barber S. S. Line.....	August 23	August 24	94	3
Oreoma.....	Pacific Steam Navigation Co.....	August 24	August 25	108	187
Davision.....	Leyland S. S. Line.....	August 24	August 25	214	(+)
San Francisco.....	Hamburg-American Line.....	August 24	August 25	46	179
Cristobal.....	Panama Railroad S. S. Line.....	August 24	.....	2,065	.....
Suriname.....	United Fruit Co.....	August 24	August 24	410	56
Atlas.....	Standard Transportation Co.....	August 25	August 27	10,275	(+)
Cerigo.....	Hamburg-American Line.....	August 25	.....	933	.....
Manizales.....	Grace Line.....	August 25	.....	1,062	.....
California.....	Navigazione Libera-Triestina.....	August 26	August 26	(+)	177
Carl Legien.....	Hamburg-American Line.....	August 26	August 26	35	281
Cefalu.....	Standard Fruit & S. E. Co.....	August 26	August 27	175	128
Oregon.....	French Line.....	August 26	August 27	246	288
Santa Teresa.....	Panama Mail S. S. Co.....	August 27	.....	540	.....
Salvador.....	Pacific Steam Navigation Co.....	August 27	.....	366	.....
Nueva Panama.....	United Fruit Co.....	August 27	.....	170	.....
Sanyo Maru.....	Osaka Shosen Kaisha.....	August 27	August 27	298	45
Simon Bolivar.....	Royal Netherlands S. S. Co.....	August 27	August 27	3	71
Sixola.....	United Fruit Co.....	August 27	.....	406	.....
Quirigua.....	United Fruit Co.....	August 27	August 27	249	24½
Suriname.....	United Fruit Co.....	August 27	.....	12	.....

* No cargo discharged.

* No cargo laded.

Supplement No. 14—Tariff No. 10.

THE PANAMA CANAL, PANAMA RAILROAD COMPANY,
EXECUTIVE OFFICE, BALBOA HEIGHTS, C. Z., August 30, 1932.

Item 14.—QUARANTINE.

(Effective August 25, 1932.)

Add:

5. Special demand quarantine service—

For special inspection at any time during the 24 hours:

Passenger vessels.....each.. \$25.00

Other vessels.....each.. 15.00

(Such special inspection between sunset and sunrise will not be made for vessels from ports subject to yellow fever quarantine.)

For such special inspection between sunset and sunrise where immigration service is required:

Additional charge against each vessel..... 5.00

Special demand quarantine is an additional service offered by the Panama Canal and does not affect or change procedure already in force.

H. BURGESS,
Governor, The Panama Canal,
President, Panama Railroad Company.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 31, 1932.

No. 1127.

Central America, Panama, north coast. The following information was received by the Hydrographic Office from the Commanding Officer of the U. S. S. *Memphis*:

1. *Isla de Pino anchorage.* The shore line of Isla de Pino has eroded somewhat (notably the southwest and south points) and changed so that it is impossible to cut in a position on tangents.

The best approach is made by heading for about the center of the area and taking ranges on outstanding palm trees on the point, anchoring about 200 yards southeast of the anchorage shown. This gives a least depth of 23 feet on a radius of 400 yards from anchorage, this sounding being 260 degrees from anchorage. The small island in the inner harbor shown to have palm trees on it has none now and it is nearly awash at high water. In approaching this anchorage soundings are very irregular until well inside.

2. *Gulf of San Blas.* H. O. Chart No. 2770, the buoys shown on this chart are missing. Sail Island is nearly awash at high water and has no vegetation on it.

3. *Escudo de Veragua.* The action of the sea on the shore line is particularly marked on the north side where there is an almost continuous line of small islets. The wreck of a small schooner is visible on one of these islets near the center of the northern shore. The ledge described as extending from the middle of the south side apparently reaches out a considerable distance as soundings of seven (7) fathoms were taken about two (2) miles from the shore at this point.

H. BURGESS,
Governor.

**Report of Cargo Discharged and Laded by Vessels Entering and Clearing
from Port of Balboa, C. Z., for Two Weeks Ending September 3, 1932.**

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Talamancan.....	United Fruit Co.....	August 21	August 21	191	35
Virginia.....	Panama-Pacific Line.....	August 22	August 22	.....	179
Rangitiki.....	New Zealand Shipping Co.....	August 23	August 24	19	.....
Lochmonar.....	Royal Mail Steam Packet Co.....	August 24	August 24	.....	2
Tai Ping Yang.....	Barber S. S. Line.....	August 23	August 23	191	.....
President Wilson.....	Dollar Line.....	August 26	August 26	.....	18
St. Mihiel.....	U. S. Army.....	August 26	August 27	13	22
California.....	Panama-Pacific Line.....	August 26	August 26	16	39
Bokuyo Maru.....	Nippon Yusen Kaisha.....	August 26	August 26	6	.....
Nueva Panama.....	Hans Elliot.....	August 27	August 27	64	.....
Santa Teresa.....	Panama Mail S. S. Co.....	August 28	August 28	112	20
Annie Johnson.....	Johnson Line.....	August 28	August 29	250	.....
Plus Ultra.....	Pablo Calvet & Co.....	August 29	August 31	276	.....
Santa Barbara.....	Grace Line.....	August 29	August 30	7	.....
Dean Emery.....	Pan-American Petroleum Co.....	August 30	September 1	10,908	.....
Nueva Panama.....	Hans Elliot.....	September 1	September 1	20	.....
Santa Maria.....	Grace Line.....	September 1	September 2	90	270
President Polk.....	Dollar Line.....	September 2	September 2	25	.....
Republic.....	U. S. Army.....	September 2	September 3	248	.....
Santa Ana.....	Panama Mail S. S. Co.....	September 3	September 3	60	38

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., September 14, 1932. No. 7.

Departure of Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 13, 1932.

To all employees of the Panama Canal and Panama Railroad:

On my final departure from the Isthmus I desire to express my deep regret that I must sever my connection with the two splendid organizations with which I have had the pleasure to be associated during the past eight years. It has never been my privilege to work with any organization that measured up higher than The Panama Canal and the Panama Railroad organizations on the Isthmus, in the United States, and on the steamships, and I extend my sincere appreciation and thanks to all of the employees for the fine loyalty and superior efficiency they have displayed, both in the daily routine of the work and in emergencies calling for unusual ability and efforts.

I feel certain that the same generous cooperation that has been given to my predecessors and myself will be accorded to Colonel Schley, who I most sincerely hope will be my successor.

With my best wishes to all,

Very sincerely,

H. BURGESS,
*Governor, The Panama Canal,
President, Panama Railroad.*

Frequency of Transits of Vessels Through the Panama Canal.

During the fiscal year ended June 30, 1932, 1,206 individual commercial vessels representing 22 nationalities, passed through the Panama Canal in a total of 4,506 transits. The number of transits per individual ship varied from 1 to 41 and averaged 3.74.

The highest number of transits by any vessel during the year was 41, made by the small Panamanian motor schooner *Real* of 22 net tons, Panama Canal measurement. This vessel was engaged in carrying bananas from the Pacific coast of the Republic of Panama to Cristobal. The United States vessel *Pennsylvania*, operating in the United States intercoastal service, aggregated the greatest net tonnage of any single vessel transiting during the year. This vessel, which is of 18,194 net tons, Panama Canal measurement, made 17 transits, aggregating 309,298 tons.

Vessels of United States registry led in the aggregate number of transits though not in the number of individual ships. While representing 31 per cent of the individual vessels through the Canal, they made up 43 per cent of the total transits. Ships of British registry ranked first in total number of vessels transiting and second in the number of total transits, with 395 individual ships, making 1,054 transits. Norway had 114 ships making 311 transits, Germany had 65 vessels making 338 transits, and Japan had 63 vessels making 179 transits.

The following table shows the number of individual ships, the frequency of transit per vessel, the total transits for the year, and the

average number of transits per individual vessel, segregated by nationality.

Nationality.	Vessels making indicated number of transits per vessel during fiscal year 1932.																															Total ships.	Total transits.	Average number of transits.
	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16	17	18	22	25	26	27	30	31	41										
Belgian.....	4		1	2																								7	15	2.14				
British.....	140	114	45	39	27	19	5	1	1						1		1			2								395	1,054	2.67				
Chilean.....	3	1																										4	5	1.25				
Colombian.....	1			1										1														4	33	8.25				
Costa Rican.....	1																											1	1	1				
Danish.....	11	11	7	5	2	1	1	1																				39	105	2.69				
Danzig.....	1	8		2				1																				12	33	2.75				
Dutch.....	8	5	1	2	4	6	1													1							28	117	4.18					
Finnish.....	1																											1	1	1				
French.....	2	7	5	5	5																							24	81	3.38				
German.....	9	21	3	9	3	6	7	3													1	2	1					65	338	5.20				
Greek.....	1			2																								6	16	2.67				
Honduran.....				1																								1	4	4				
Italian.....	1	3		2	3	1	1	3																				14	67	4.79				
Japanese.....	18	16	7	12	3	4	3																					63	179	2.84				
Norwegian.....	38	31	12	14	6	6	3	4																				114	311	2.73				
Panamanian.....		4		1	2				1													1		1				10	102	10.20				
Peruvian.....	1	1																										2	3	1.50				
Spanish.....		1																										1	2	2.00				
Swedish.....	11	10	3		4	1	2									2												33	114	3.45				
United States.....	54	51	39	51	28	34	40	22	28	11	4	4	2	1	2	5	1											377	1,917	5.08				
Yugoslav.....	2	3																										5	8	1.60				
Total.....	306	291	123	147	81	85	63	34	30	11	6	4	2	1	4	7	1	1	1	2	2	2	1	1				1,206	4,506	3.74				

From the above it will be noted that 306, or 25.4 per cent, of the individual vessels using the Canal during the year, made but one transit. One hundred and eighty-one (181) of these were from the Atlantic to the Pacific and 125 from the Pacific to the Atlantic. Approximately 50 per cent made 3 transits or more, and less than 4 per cent made 10 or more transits.

PROPORTION OF TRAFFIC BY FREQUENCY, FISCAL YEAR 1932.

The following tabulation shows for the fiscal year ended June 30, 1932, the number of vessels making the indicated number of transits through the Panama Canal, the per cent which each class formed of the total number of individual vessels (1,206), their aggregate number of transits, and their per cent of the total commercial transits (4,506):

Number of transits per vessel.	Number of vessels.	Per cent of individual vessels (1,206).	Total number of transits.	Per cent of total Canal transits (4,506).
1.....	306	25.37	306	6.79
2.....	291	24.13	582	12.92
3.....	123	10.20	369	8.19
4.....	147	12.19	588	13.05
5.....	81	6.72	405	8.99
6.....	85	7.05	510	11.32
7.....	63	5.22	441	9.79
8.....	34	2.82	272	6.04
9.....	30	2.49	270	5.99
10.....	11	.91	110	2.44
12.....	6	.50	72	1.60
13.....	4	.33	52	1.15
14.....	2	.17	28	.62
15.....	1	.08	15	.33
16.....	4	.33	64	1.42
17.....	7	.58	119	2.64
18.....	1	.08	18	.40
22.....	1	.08	22	.49
25.....	1	.08	25	.55
26.....	2	.17	52	1.15
27.....	2	.17	54	1.20
30.....	2	.17	60	1.33
31.....	1	.08	31	.69
41.....	1	.08	41	.91
Total.....	1,206	100.00	4,506	100.00

New Ferry and Highway Service Opened.

The Thatcher Highway, extending from Balboa to the Canal Zone boundary near Arraijan, and connecting there with the national highway of Panama, was opened on September 1, 1932. The Canal is crossed by a ferry at Balboa, for which were constructed the ferry boats *Presidente Amador* and *Presidente Roosevelt*, each capable of carrying about 30 automobiles. Construction of the ferry and highway were authorized by Act of Congress of May 27, 1930, which authorized the appropriation of \$1,000,000, or so much thereof as might be necessary, and provided that the ferry and highway should be operated and maintained free of tolls.

The new road is of concrete, normally 18 feet wide, extended to 22 feet on curves, and approximately $6\frac{3}{4}$ miles long, from the west bank of the Canal at Balboa to the boundary. The new route supplants that by way of Pedro Miguel, Culebra, and Empire to the boundary near Paja. It reduces the distance between Balboa and La Chorrera, or points beyond, by about $12\frac{1}{2}$ miles, and reduces the time of transit in somewhat greater proportion because of greater width and less curvature on the new route. The ferry operates daily from 6 a. m. to 9.15 p. m. or until excess vehicles left at the last scheduled trip have been transported.

Relatively heavy traffic used the new route during the first week of operation. In the 3-day period from September 3 to 5, including Sunday and the adjoining Labor Day holiday, the ferry was used by 3,297 automobiles and 18,337 passengers. During the time that the ferry at Pedro Miguel was operated by The Panama Canal, beginning October 8, 1927, the greatest traffic in any month was 10,365 vehicles, in April, 1931.

The new road and the Panama highway with which it connects form part of the proposed inter-American highway.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 12, 1932.

No. 1142.

Panama Canal, Pacific entrance, aids to navigation, Balboa ferry channel lights. The Balboa Ferry began regular service September 1, 1932, and its complete channel lighting system is now in operation. These lights are described below, reading from the East Ferry entrance along the ferry channel:

(a) *East entrance lights.* A 50-watt fixed green light and 50-watt fixed red light, to the port and starboard sides, respectively, are on top of the outend piling of the sides of the East Slip.

COMBINED CANAL AND FERRY CHANNEL LIGHTS.

(b) Canal channel buoy No. 18, flashing red, has been renamed "FB" and moved to a position, latitude $8^{\circ} 56' + 4190$ feet, longitude $79^{\circ} 34' + 00$ feet, on the Canal prism in 42 feet M. L. W. It marks the southern extremity of the East Ferry channel.

(c) Canal channel buoy "FD," flashing red, is established in 42 feet M. L. W., on the Canal prism to mark the northern extremity of the East Ferry channel, in position, latitude $8^{\circ} 56' + 4650$ feet, longitude $79^{\circ} 34' + 360$ feet.

(d) Canal channel buoy No. 19, flashing white, has been renamed "FC" and moved to a position, latitude $8^{\circ} 56' + 4260$ feet, longitude $79^{\circ} 34' + 690$ feet, on the Canal prism, in 42 feet M. L. W. It marks the northern extremity of the West Ferry channel.

(e) Canal channel buoy "FA," flashing white, is established in 42 feet M. L. W., on the Canal prism to mark the southern extremity of the West Ferry channel, in position, latitude $8^{\circ} 56' + 3670$ feet, longitude $79^{\circ} 34' + 230$ feet.

(f) *West entrance lights.* A 50-watt fixed green light and a 50-watt fixed red light, to the port and starboard sides, respectively, are on top of the outend piling of the West Ferry slip.

NOTE.—For advance notices see Notices to Mariners, Balboa Heights, No. 1002, dated December 3, 1931, and No. 1132, dated September 3, 1932.

H. BURGESS,
Governor.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, September 10, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.	Completed transit.		Cleared for sea.	Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
San Vicente.	3	10.30	4	7.15	4	14.30	American.	States S. S. Co.	410.5	54.0	15.7	Baltimore, Md.	Tacoma, Wash.	General.	1,471	6,572	4,900
Steel Voyager.	3	16.40	4	8.40	4	15.20	American.	Isidorian S. S. Lines.	395.5	55.0	18.3	Baltimore, Md.	Seattle, Wash.	General.	1,795	7,330	5,249
Sydle.	3	20.30	4	9.40	4	16.05	Swedish.	Transatlantic S. S. Co.	385.0	54.0	14.6	Philadelphia, Pa.	Los Angeles, Calif.	Ballast.	1,795	5,430	4,035
Cal.	3	16.35	4	14.20	4	20.50	Swedish.	North German Lloyd.	216.5	32.9	14.7	Cristobal, C. Z.	Guayaquil, Ecuador	General.	347	1,103	698
City of Delhi.	4	16.10	4	18.45	5	11.18	British.	Ellerman & Bucknall.	450.0	58.6	20.11	New York, N. Y.	Mourmour, Auslia.	General.	2,326	9,478	7,069
Jelling.	4	13.15	4	19.50	5	11.50	British.	Isidorian & Moller Co.	285.6	44.0	17.2	Pto. Mexico, Mex.	Guaymas, Mexico.	Case oil.	1,428	2,659	1,895
Movera.	5	7.35	5	7.40	5	13.59	British.	Donaldson Line.	385.6	51.0	18.0	Glalloway, Scotland.	Vancouver, B. C.	General.	440	6,576	4,724
City of Corinth.	5	6.15	5	8.40	5	15.28	British.	Ellerman & Bucknall.	391.0	54.0	20.6	Philadelphia, Pa.	Shanghai, China.	General.	2,879	7,197	5,532
Rhexon.	5	8.20	5	9.25	5	16.19	British.	Blue Funnel Line.	459.0	58.0	26.0	New York, N. Y.	Manila, P. I.	General.	3,500	8,207	5,703
Counsellor.	4	18.40	5	10.25	5	17.22	British.	T. & J. Harrison.	395.5	52.0	18.1	Liverpool, England.	Williams Head, B. C.	Ballast.	3,168	9,965	6,656
Este.	4	3.20	5	11.12	5	23.54	German.	North German Lloyd.	426.0	56.0	26.8	Bremen, Germany.	Vancouver, B. C.	General.	8,580	7,476	5,485
Canada.	5	15.55	5	16.10	6	12.18	Swedish.	Johnson Line.	426.0	56.0	26.8	Stockholm, Sweden.	Hawaii.	Gen., fertilizer.	603	4,968	3,610
Akazian Maru.	5	20.05	5	20.10	6	13.36	Japanese.	Mitsui & Co.	375.0	50.0	14.6	Jacksonville, Fla.	Yokohama, Japan.	Rosin, general.	4,501	7,750	5,805
Kristen Maersk.	5	15.35	6	10.10	6	15.27	Danish.	A. P. Moller & Co.	284.9	42.3	12.0	Norfolk, Va.	Paita, Peru.	Ballast.	5,112	5,919	4,400
Willkeno.	5	22.00	6	6.20	6	14.56	American.	Williams S. S. Line.	415.0	57.0	20.0	Albany, N. Y.	Seattle, Wash.	General, grain.	10,531	8,053	5,636
Chibuku Maru.	6	4.45	6	7.15	6	16.19	Japanese.	Kokugai Kisen Kaisha.	385.0	51.0	22.2	New York, N. Y.	Yokohama, Japan.	Rosin, cotton.	1,758	6,766	4,767
S-10.	6	8.25	6	8.25	6	17.00	American.	U. S. Navy.	231.0	21.1	..	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	2,292	7,011	5,454
S-12.	6	8.25	6	8.25	6	17.08	American.	U. S. Navy.	231.0	21.1	..	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	2,292	9,576	6,618
S-13.	6	8.25	6	8.25	6	17.00	American.	U. S. Navy.	231.0	21.1	..	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	2,292	7,274	5,213
Mallard.	6	7.00	6	8.40	6	15.53	Norwegian.	Anglo-Saxon Pet. Co.	441.2	59.2	26.5	Curacao, C. Z.	San Francisco, Cal.	Oil, gasoline.	2,400	5,885	4,073
Storass.	6	8.25	6	10.15	6	17.59	American.	Andrew-Hawthorn Line.	404.6	53.9	17.6	Boston, Mass.	Seattle, Wash.	General.	3,875	3,981	2,617
Hewbank.	6	15.00	7	6.10	7	14.03	British.	Andrew Weir & Co.	421.0	56.2	17.0	Norfolk, Va.	Vancouver, B. C.	Ballast.	2,438	6,256	4,668
Steel Navigator.	6	18.15	7	8.20	7	14.32	American.	Isidorian S. S. Lines.	424.2	56.2	18.7	Baltimore, Md.	Batavia, Java.	General, steel.	2,124	7,011	5,454
Silversteak.	6	21.15	7	8.20	7	15.10	British.	Kerr S. S. Co.	456.3	62.0	21.0	New York, N. Y.	Manila, P. I.	General.	2,292	9,576	6,618
Pajala.	6	23.05	7	8.30	7	15.50	Swedish.	Trak A. B. Grangsborg	418.8	55.0	14.6	Baltimore, Md.	Seattle, Wash.	Ballast.	2,400	5,885	4,073
Canadian.	7	13.25	7	13.35	7	22.08	British.	Can. Nat. Steamships.	400.0	52.0	17.0	Montreal, Canada.	Vancouver, B. C.	General.	3,875	3,981	2,617
Winner.	7	13.55	7	14.10	7	22.25	American.	Swayne & Hoyt.	324.0	46.0	23.0	Houston, Tex.	Seattle, Wash.	General.	2,438	6,256	4,668
Point Bonita.	7	15.20	7	16.30	8	12.00	British.	Sir W. R. Smith & Sons	490.0	54.8	13.6	Rotterdam, Holland.	Vancouver, B. C.	Ballast.	2,438	6,256	4,668
Bradley.	7	16.40	8	6.00	8	12.47	Dutch.	Holland-America Line.	490.0	64.6	18.9	Rotterdam, Holland.	Vancouver, B. C.	General.	2,438	6,256	4,668
Delfdijk.	8	7.30	8	7.30	8	14.13	American.	Roosevelt S. S. Co. S. B.	401.9	54.0	23.0	Philadelphia, Pa.	Adelaide, Australia	General.	3,539	7,097	5,241
City of Rayville.	8	2.40	8	8.05	8	15.51	Japanese.	Kokugai Kisen Kaisha.	385.0	51.0	24.3	Boca Grande, Fla.	Kobe, Japan.	Phosphate.	6,134	6,209	4,668
France Maru.	8	5.05	8	8.40	8	15.55	Norwegian.	Fern Line.	376.5	53.8	20.6	Houston, Tex.	Shanghai, China.	Ballast.	4,400	6,256	4,668
Stenmetad.	8	5.40	8	9.35	8	16.40	British.	W. Thomson & Co.	420.0	53.9	15.0	Middlesboro, Eng.	Vancouver, B. C.	Ballast.	6,565	4,236	3,009
Benlawers.	8	8.30	8	11.00	8	19.05	Dutch.	American Pet. Co.	469.8	63.2	17.0	Rotterdam, Holland.	Takara, Peru.	Ballast.	9,234	6,509	4,659
Den Haag.	8	13.40	8	13.50	8	20.08	Japanese.	Osaka Shosen Kaisha.	460.0	61.6	19.0	Boston, Mass.	Kobe, Japan.	Steel rail, gen.	2,598	9,407	6,777
Kwanto Maru.	8	13.40	8	13.50	8	20.08	Japanese.	Osaka Shosen Kaisha.	460.0	61.6	19.0	Boston, Mass.	Kobe, Japan.	Steel rail, gen.	2,598	9,407	6,777

* Motor ship.

* Submarine.

* Mine sweeper.

* Cotton and carbon black.

	8	14.10	8	14.20	8	21.44	8	22.30	Dutch	Halcyon Lyn, N. Y.	Antwerp, Belgium	Vancouver, B. C.	Ballast	8.065	5.386
Flensburg	8	15.45	8	15.55	8	22.30	8	22.30	Norwegian	Fern Line	Liverpool, England	Los Angeles, Calif.	Ballast	6.264	4.706
Silvestre	8	17.50	8	17.50	9	11.11	9	12.15	Norwegian	Barber S. S. Line	New York, N. Y.	Shanghai, China	General	2.472	9.997
Heraeus	8	17.30	8	18.50	9	11.54	9	12.55	American	Luckenbach Line	Boston, Mass.	Seattle, Wash.	General	3.067	6.363
President	8	16.25	9	6.00	9	14.26	9	21.10	American	Dollar Line	New York, N. Y.	Manila, P. I.	Machinery, gen.	3.384	27.813
Hoover	9	5.00	9	7.15	9	15.00	10	00.12	American	Panama-Pacific Line	New York, N. Y.	San Francisco, Cal.	General	2.472	25.254
Virginia	8	23.25	9	8.30	9	15.33	9	16.40	American	Stand. Vac. Transp. Co.	Boston, Mass.	San Francisco, Cal.	Ballast	9.795	6.725
Daylight	8	17.30	9	9.30	9	17.40	9	19.09	American	Union Sulphur Co.	Galveston, Tex.	Tacoma, Wash.	Coke, sulphur	6.324	5.367
Henry D.	8	19.00	9	14.05	9	20.40	10	13.55	Panamanian	Hans Eliot	Cristobal, C. Z.	Pro. Armettes R.P.	General	35	46
Whitton	8	18.20	10	7.00	10	12.55	10	13.55	German	Hamburg-American Line	Hamburg, Germany	Champerico, Guat.	General	745	3.350
Real	10	4.00	10	6.00	10	14.31	10	16.00	American	Shell Eastern Pet. Co.	Perth Amboy, N. J.	Los Angeles, Calif.	Ballast	7.484	5.212
Syria	10	4.00	10	6.00	10	14.31	10	16.00	American	Can. Nat. Steamships	Montreal, Canada	Brisbane, Australia	General	3.728	6.142
Meion	10	6.15	10	8.25	10	15.31	11	1.20	British	N. Z. Shipping Co.	London, England	Wellington, N. Z.	General	3.250	11.911
Canadian	10	8.35	10	8.50	10	16.17	10	23.54	British	Amer.-Hawaiian Line	Boston, Mass.	Portland, Oreg.	General	1.600	7.103
Challenger	10	9.40	10	9.50	10	17.02	11	1.20	American	Furness, Witly & Co.	Glasgow, Scotland	Vancouver, B. C.	General	251	7.892
Remora	10	8.55	10	12.15	10	19.00	10	20.18	British	Grace Line	Cristobal, C. Z.	Guayaquil, Ecuador	General	316	1.132
Ohiou	10	14.25	10	13.14	10	19.48	10	20.45	German	U. S. Army	New York, N. Y.	Balboa, C. Z.	General	1.380	4.354
Pacific Shipper	9	6.20	10	15.20	10	20.48	10	20.48	American	Swayne & Hoyt	Houston, Tex.	Tacoma, Wash.	Corn, general	4.848	5.708
Manizales	10	17.45	10	18.10	11	10.40	11	11.55	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138
Chateau	10	7.15	10	10.10	10	14.24	10	14.24	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138
Thierry	10	7.15	10	10.10	10	14.24	10	14.24	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138
Point Palmes	10	7.15	10	10.10	10	14.24	10	14.24	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138
Lieut. Col. H.	10	7.15	10	10.10	10	14.24	10	14.24	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138
C. Schumann	10	7.15	10	10.10	10	14.24	10	14.24	American	U. S. Army	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5.708	4.138

* Tanker.

° Motor schooner.

* Transport.

° Tug.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

	8-31	15.00	4	6.27	4	13.33	4	19.30	Dutch	N. Pacific Coast Line	485.5	62.3	29.0	Vancouver, B. C.	Rotterdam, Holl'd.	General	10.514	10.786	7,551
Dintdijk	8-31	15.00	4	6.27	4	13.33	4	19.30	Dutch	Dollar Line	485.5	62.3	29.0	Vancouver, B. C.	Rotterdam, Holl'd.	General	10.514	10.786	7,551
President	9-4	5.14	4	7.02	4	14.15	4	22.45	American	Amer.-Hawaiian Line	517.0	72.2	29.0	Manila, P. I.	New York, N. Y.	General	7.307	15.296	10,427
Mission	4	2.03	4	8.00	4	15.15	4	15.15	American	Anglo-Saxon Pet. Co.	443.1	59.8	25.0	Portland, Oreg.	Boston, Mass.	Lumber, general	5.986	8.567	6,020
Heraeus	4	11.03	4	11.53	4	19.50	4	22.00	Norwegian	W. Tankeriff Rhodori	435.0	59.0	27.0	Los Angeles, Calif.	Lands End, Eng. *	Gasoline	10.244	8.214	5,719
Peter Hurl	5	11.40	4	18.11	5	14.00	5	12.00	Danish	Panama-Pacific Line	521.9	70.2	31.0	Talara, Peru	Fawley, England	Crude oil	16.998	12.344	8,249
Peninsular	5	17.10	6	6.20	6	14.08	6	14.35	American	Swayne & Hoyt	586.4	80.3	30.0	San Francisco, Cal.	New York, N. Y.	General	10.687	25.262	18,194
Point Fernin	5	6.00	6	7.13	6	15.00	6	15.00	American	Johnson Line	394.0	46.2	22.4	Seattle, Wash.	Houston, Tex.	General	2.497	3.984	2,614
Axel Johnson	5	6.00	6	8.47	6	21.10	6	21.10	Swedish	Furness, Witly & Co.	409.0	52.6	25.3	Vancouver, B. C.	Gothenburg, Sweed.	Wheat, general	6.545	6.642	4,860
Pacific Ranger	6	5.00	6	9.35	6	16.35	6	19.10	British	Luckenbach Line	435.0	60.0	25.0	Vancouver, B. C.	London, England	General	8.679	9.725	6,942
Lillian	6	8.00	6	10.11	6	17.55	6	17.55	American	Luckenbach Line	449.0	60.2	31.0	Seattle, Wash.	Boston, Mass.	Lumber, general	8.250	9.294	6,865
Hakonecan	5	19.50	6	11.08	6	19.05	6	19.05	Japanese	Mitsui Bussan Kaisha	437.6	56.5	26.0	Iloilo, P. I.	Jacksonville, Fla.	Sugar, general	7.910		
Laurits	6	15.30	6	16.07	7	12.30	7	16.00	Norwegian	Fred Olsen & Co.	435.9	56.2	30.0	Vancouver, B. C.	Oslo, Norway	General	8.684	7.963	5,837
Swenson	6	17.45	7	6.15	7	13.30	7	13.30	American	Ishimaru S. S. Lines	424.2	56.2	27.0	Honolulu, T. H.	East coast, U. S. A.	Sugar	8.455	7.011	5,450
Memphis City	6	18.30	7	6.45	7	14.05	7	16.10	German	North German Lloyd	315.7	46.8	14.2	Champerico, Guat.	Lake Charles, La.	Ballast	3.512		2,471
Atika	7	00.43	7	8.05	7	16.05	7	16.05	American	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Gasoline	13.814	9.664	6,552
Northern	7	3.30	7	8.40	7	18.10	7	18.10	American	Calmar S. S. Corp.	410.5	54.2	25.0	Portland, Oreg.	Baltimore, Md.	Lumber	7.220	6.904	4,655
Sun	7	00.43	7	8.05	7	16.05	7	16.05	American	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Gasoline	13.814	9.664	6,552
Flomar	7	3.30	7	8.40	7	18.10	7	18.10	American	Calmar S. S. Corp.	410.5	54.2	25.0	Portland, Oreg.	Baltimore, Md.	Lumber	7.220	6.904	4,655

* For orders.

° Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Heranger ¹¹ ..	7	6.10	7	9.05	7	17.15	7	17.15	Norwegian.	Interocean S. S. Corp.	398.1	54.8	27.0	Portland, Oreg.	Rotterdam, Holl'd.	General.	7,404	5,260
Buyo Maru.....	7	15.00	7	15.41	7	22.20	7	23.15	Japanese.	Kokusa Kisen Kaisha.	400.0	51.9	21.6	Nagasaki, Japan.	New York, N. Y.	Sugar.	5,000	4,247
Parthenia.....	7	15.40	7	16.43	8	12.45	8	12.45	British.	Donaldson Line.	399.7	53.0	25.0	Vancouver, B. C.	Glasgow, Scotland.	General.	6,468	4,341
Tamara.....	7	15.45	8	6.15	8	14.05	8	14.05	British.	Shaw, Savill & Albion.	518.9	63.2	26.0	Pt. Chalmers, N. Z.	London, England.	Cold storage, gen.	3,829	9,383
Pennsylvania.	8	5.00	8	7.25	8	15.55	8	15.55	American.	Amer-Hawaiian Line.	404.7	53.7	25.0	Seattle, Wash.	Boston, Mass.	General.	6,575	7,107
Mercury ¹¹ ..	8	8.45	8	9.53	8	17.45	8	17.45	American.	Sun Oil Co.	480.6	66.0	29.3	Los Angeles, Calif.	Perth Amboy, N. J.	Gasoline.	13,549	6,536
Sun ¹¹	8	10.55	8	11.38	8	19.00	8	19.00	Panamanian.	Hans Elliot.	62.0	17.1	4.0	Panama, R. P.	Cristobal, C. Z.	Ballast.	46	22
Sagadotee.....	8	14.45	8	15.32	8	22.45	8	23.59	American.	Argonaut S. S. Line.	420.5	54.2	24.0	Honolulu, T. H.	Baltimore, Md.	(+)	6,965	7,345
Gen. Wm. M. Graham.....	8	15.32	8	15.32	8	22.45	8	22.45	American.	U. S. Army.	156.0	32.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	8,482	7,611
Steel Trader ¹¹ ..	8	18.30	9	0.14	9	14.20	9	14.20	American.	Isthmian S. S. Lines.	424.2	56.2	26.6	Pt. Allen, T. H.	Boston, Mass.	Sugar.	897	1,132
Manizales.....	9	2.38	9	7.03	9	14.35	9	13.14	German.	Grace Line.	216.5	32.9	15.9	Guayaquil, Ecuador.	Cristobal, C. Z.	General.	7,838	741
Dalcarn.....	9	6.30	9	8.05	9	17.10	9	17.10	British.	Kerr, Gifford Co.	406.5	54.1	23.6	Vancouver, B. C.	Cork, Ireland.	Wheat.	1,037	1,608
Durazzo.....	9	11.10	9	11.53	9	18.33	10	13.55	German.	Hamburg-American Line.	227.5	34.4	14.1	Guayaquil, Ecuador.	Cristobal, C. Z.	General.	1,037	1,633
Capella ¹¹ ..	9	21.00	10	6.19	10	13.20	10	13.20	Swedish.	Chile S. S. Corp.	437.7	64.2	19.0	Los Angeles, Calif.	Pt. Arthur, Tex.	Ballast.	266	9,801
Acapulco.....	9	21.10	10	7.15	10	14.18	10	14.18	British.	Pacific Steam Nav. Co.	215.7	33.0	14.8	Champerco, Guat.	Cristobal, C. Z.	General.	266	1,273
Nueva.....	10	9.30	10	10.07	10	16.20	11	12.23	Panamanian.	Hans Elliot.	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general.	156	226
Panama ¹¹ ..	10	9.30	10	10.07	10	16.20	11	12.23	Panamanian.	Shell Oil Co.	435.0	56.0	29.0	San Francisco, Cal.	Fall River, Mass.	Gas oil.	10,660	7,470
W. S. Miller ¹¹ ..	10	11.25	10	12.06	10	19.35	10	19.35	American.	Stand. Vac. Transp. Co.	468.3	62.7	30.0	Los Angeles, Calif.	Providence, R. I.	Fuel oil.	12,325	10,084
Japan Arrow ¹¹ ..	10	14.00	10	14.49	10	22.35	10	22.35	American.									7,388

¹¹ Motor ship.¹² Motor ship.¹³ Motor ship.¹⁴ Motor ship.¹⁵ Motor ship.

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
September 4	No. 9085 ¹⁵ ..	Pan American Airways.	San Salvador.	September 4	Buenaventura.	Panama R. R. S. S. Line.	New York, N. Y.
September 4	Marthine.....	Colombian S. S. Line.	New York via waypoints.	September 4	H. L. Hustler ¹⁷ ..	Borden Brothers.	Grand Cayman.
September 4	No. 300-N ¹⁵ ..	Pan American-Grace Airways.	Talara via waypoints.	September 4	Mayland ¹⁷ ..	Zillah Pauline Bush.	New York via waypoints.
September 5	Calamarea ¹⁵ ..	United Fruit Co.	Port Limon, Costa Rica.	September 4	Metapan.	United Fruit Co.	New York via waypoints.
September 5	No. 145-M ¹⁵ ..	Uraba, Medellin & Cent. Airways.	Barranquilla, Colombia.	September 5	Marthine.	Colombian S. S. Line.	Barranquilla, Colombia.
September 5	No. 670-M ¹⁵ ..	Pan American Airways.	Colon, Rep. of Panama.	September 5	No. 670-M ¹⁵ ..	Pan American Airways.	New York via waypoints.
September 5	Inapapina ¹⁶ ..	A. Tagarapoulos.	Colon, Rep. of Panama.	September 5	Inapapina ¹⁶ ..	United Fruit Co.	New York via waypoints.
September 5	Troja.....	Hamburg-American Line.	Tampico, Mexico.	September 5	Inapapina ¹⁶ ..	A. Tagarapoulos.	Colon, Rep. of Panama.

¹⁵ Air mail carrier.¹⁶ Motor boat.¹⁷ Schooner.¹⁸ Motor boat.¹⁹ Motor boat.²⁰ Motor boat.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
September 6.	Crynsen.	Royal Netherlands S. S. Co.	Amsterdam via wayp'ta.	September 6.	No. 300-N ¹⁵ .	Pan American-Grace Airways	Talara via wayports.
September 7.	Velma Lykes.	Lykes Brothers S. S. Co.	Houston, Tex.	September 6.	No. 9885 ¹⁵ .	Pan American Airways	San Salvador.
September 7.	Canden.	United Fruit Co.	Curacao, D. W. I.	September 7.	Crynsen.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
September 7.	Ancon.	Panama R. R. S. S. Line.	New York via Haiti.	September 7.	Troja.	Hamburg-American Line	Europe via West Indies.
September 7.	No. 9888 ¹⁵ .	Pan American Airways	San Salvador via wayp'ta.	September 8.	No. 670-M ¹⁵ .	Pan American Airways	Miami via wayports.
September 8.	No. 945-M ¹⁵ .	Pan American-Grace Airways	Chiclayo via wayports.	September 8.	No. 145-M ¹⁵ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
September 8.	Tela.	United Fruit Co.	New Orleans via Habana.	September 8.	Velma Lykes.	Lykes Brothers S. S. Co.	Sto. Domingo via wayp'ta.
September 8.	No. 659-M ¹⁵ .	Pan American Airways	Miami via wayports.	September 8.	Canden.	United Fruit Co.	Mobile, Ala.
September 9.	Veragua.	Standard Fruit & S. S. Co.	New Orleans via Habana.	September 8.	Tela.	United Fruit Co.	New Orleans via wayp'ta.
September 9.	Cavina.	United Fruit Co.	New Orleans via wayports.	September 9.	No. 144-M ¹⁵ .	Pan American Airways	Chiclayo via wayports.
September 9.	No. 145-M ¹⁵ .	Elders & Fyffes, Ltd.	Avonmouth via wayp'ta.	September 9.	Veragua.	United Fruit Co.	Port Limon, Costa Rica.
September 9.	Annetta I. ¹⁶ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	September 10.	No. 9886 ¹⁵ .	Pan American Airways	San Salvador via wayp'ta.
September 10.	Crynsen.	P. W. Hamilton.	Colon, Rep. of Panama.	September 10.	No. 145-M ¹⁵ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
		Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	September 10.	Cavina.	Elders & Fyffes, Ltd.	Avonmouth via wayp'ta.
				September 10.	Cefalu.	Standard Fruit & S. S. Co.	New Orleans via wayp'ta.
				September 10.	Crynsen.	Royal Netherlands S. S. Co.	Amsterdam via wayports.
				September 10.	Annetta I. ¹⁶ .	P. W. Hamilton.	Colon, Rep. of Panama.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
September 4	Nora ¹ .	Arrow Oil Co.	Los Angeles, Calif.	September 5	Nora ¹ .	Arrow Oil Co.	Los Angeles, Calif.
September 4	Antigua.	United Fruit Co.	San Francisco, Calif.	September 4	Antigua.	United Fruit Co.	San Francisco, Calif.
September 6	Capac.	Grace Line.	Tacoma, Wash.	September 7	Capac.	Grace Line.	Valparaiso, Chile.
				September 10	Coquet ^{18 19} .	T. J. Sullivan.	Tabiti.

* Other than ships passing through the Canal.

¹⁸ Motor ship.¹⁹ Yacht.

Traffic by Nationality for August, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of August, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for August, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	38	195,940	139,477	226,361	138,410	\$160,117.41	81,631
Colombian.....	1	58	56	80	56	42.00	.....
Danish.....	5	23,149	17,339	28,231	17,501	18,580.69	6,191
Danzig.....	2	16,473	14,092	24,218	13,831	11,860.56	.....
Dutch.....	4	23,331	16,938	28,353	16,991	19,100.94	5,691
French.....	3	19,338	11,478	21,158	12,105	14,347.50	3,515
German.....	13	38,667	25,932	43,940	26,275	32,174.77	14,533
Italian.....	1	6,029	3,679	6,101	3,773	4,598.75	1,299
Japanese.....	8	42,834	33,477	53,620	33,552	39,800.64	31,796
Norwegian.....	13	65,993	44,019	73,937	44,495	50,665.65	27,711
Panamanian.....	6	448	460	902	462	537.60	224
Swedish.....	2	10,067	5,655	9,681	7,211	7,063.75	2,449
United States.....	66	403,077	298,623	488,677	298,402	349,567.64	173,231
Total, August, 1932.....	162	849,504	611,225	1,005,309	613,067	703,462.88	348,271
Total, August, 1931.....	186	932,175	718,309	1,202,934	726,355	840,966.64	463,512
Total, August, 1930.....	244	1,258,181	933,348	1,558,747	944,570	1,062,369.82	679,407

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	337	311	605	215	\$242.64	.....
Brazilian.....	1	3,656	2,797	4,969	3,062	3,496.25	.....
British.....	30	165,353	114,139	191,518	117,155	142,673.75	207,831
Colombian.....	1	397	302	405	308	226.50	.....
Danish.....	4	24,442	17,337	29,216	18,132	21,671.25	35,357
Danzig.....	1	8,592	6,123	10,353	5,943	7,633.75	15,542
Dutch.....	3	16,256	10,670	18,129	10,576	13,337.50	24,772
French.....	3	20,689	13,352	23,092	14,024	16,690.00	19,265
German.....	11	32,775	21,516	37,259	21,912	26,895.00	42,569
Italian.....	2	16,000	12,568	20,823	12,978	15,710.00	12,407
Japanese.....	9	47,673	37,772	57,939	37,035	47,215.00	47,371
Norwegian.....	11	58,519	44,048	71,455	44,238	54,910.80	101,121
Panamanian.....	7	7,403	4,119	7,758	4,121	5,118.55	4,601
Swedish.....	2	8,492	4,833	8,386	6,243	6,103.75	13,452
United States.....	66	398,114	296,353	486,765	295,937	370,441.25	476,894
Total, August, 1932.....	152	808,608	586,290	938,722	591,879	732,385.99	1,001,182
Total, August, 1931.....	204	1,016,019	745,222	1,229,685	748,271	929,236.07	1,325,722
Total, August, 1930.....	221	1,087,392	818,416	1,352,631	826,075	1,017,860.60	1,469,062

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	337	311	605	215	\$242.64	.....
Brazilian.....	1	3,656	2,797	4,969	3,062	3,496.25	.....
British.....	63	361,293	253,616	417,879	255,565	302,791.16	289,462
Colombian.....	2	365	358	435	364	268.50	.....
Danish.....	9	47,591	34,676	57,447	35,633	40,251.94	41,548
Danzig.....	3	25,065	20,215	34,571	19,774	19,514.31	15,542
Dutch.....	7	40,637	27,608	46,182	27,567	32,438.44	30,463
French.....	6	40,027	24,830	44,250	26,129	31,037.50	22,780
German.....	24	71,442	47,448	81,193	48,187	59,069.77	57,102
Italian.....	3	22,029	16,247	26,924	16,751	20,308.75	13,706
Japanese.....	17	90,557	71,249	111,699	70,587	87,015.64	79,167
Norwegian.....	24	127,512	88,067	145,442	89,736	105,576.43	128,832

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Panamanian.....	13	7,851	4,579	8,660	4,583	\$5,656.15	4,825
Swedish.....	4	18,569	10,538	18,067	13,454	13,172.50	15,901
United States.....	132	801,191	594,976	975,442	594,339	720,008.89	650,125
Total, August, 1932.....	314	1,658,112	1,197,515	1,974,031	1,204,946	1,440,848.87	1,349,453
Total, August, 1931.....	390	1,998,194	1,463,531	2,432,619	1,474,626	1,770,202.71	1,789,234
Total, August, 1930.....	465	2,345,573	1,751,764	2,911,378	1,770,645	2,080,230.42	2,148,469

Tanker Traffic Through the Panama Canal in August, 1932.

During the month of August, 1932, 49 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement), of 293,604, on which tolls of \$264,315.35 were collected. Cargo amounted to 308,122 tons, comprised of 289,970 tons mineral oils, 7,667 tons molasses, 5,485 tons coconut and wood oils, and 5,000 tons tar.

In point of net tonnage tanker traffic registered a slight increase in comparison with August, 1931 (2,804 tons, or about 1 per cent), although the number of transits was less by 3 in August, 1932. Cargo tonnage carried in the past month in tank ships showed a decline of 17,506 tons, or 5.4 per cent, in comparison with the corresponding month in 1931.

Tank ships comprised 15.6 per cent of the total commercial transits through the Canal during the month; made up 17.7 per cent of the total Panama Canal net tonnage; paid 18.3 per cent of the total tolls collected; and carried 22.8 per cent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of August, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for August, 1931:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	2	11,465	\$8,254.80	.....
Danish.....	1	4,097	2,949.84	.....
Danzig.....	2	16,473	11,860.56	.....
Dutch.....	1	6,352	4,573.44	.....
Norwegian.....	2	11,866	8,543.52	.....
United States.....	16	92,821	71,322.39	18,106
Total, August, 1932.....	24	143,074	107,504.55	18,106
Total, July, 1932.....	27	171,821	128,874.26	17,676
Total, June, 1932.....	35	200,609	151,194.87	18,612
Total, August, 1931.....	23	129,256	101,302.60	36,510
<i>Pacific to Atlantic.</i>				
British.....	3	16,563	17,767.50	32,515
Danish.....	1	7,867	8,190.00	14,476
Danzig.....	1	8,592	7,653.75	15,542
Dutch.....	1	6,352	6,645.00	11,526
Norwegian.....	4	23,520	25,783.30	46,232
United States.....	15	87,636	90,771.25	* 169,725
Total, August, 1932.....	25	150,530	156,810.80	290,016
Total, July, 1932.....	24	146,710	151,772.50	275,682
Total, June, 1932.....	31	186,295	193,384.13	346,838
Total, August, 1931.....	29	161,544	166,269.23	289,113

* Includes 7,667 tons molasses, 5,485 tons coconut and wood oil, and 5,000 tons tar.

The following tabulation shows the tanker traffic through the Canal during August, 1932, classified according to trade route:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	14	83,675	\$61,881.75	1,135
United States to Canada.....	1	5,182	5,191.25	6,063
United States to South America.....	1	5,049	3,635.28	.....
West Indies to United States.....	1	4,903	3,530.16	.....
West Indies to Balboa.....	1	5,477	5,338.75	10,908
Europe to United States.....	2	11,866	8,543.52	.....
Europe to South America.....	4	26,922	19,383.84	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	12	70,927	74,202.50	^a 141,247
United States to Europe.....	4	25,012	26,067.50	46,881
South America to United States.....	2	10,098	10,987.50	19,639
South America to Canada.....	1	7,109	8,530.80	14,823
South America to Europe.....	4	29,294	29,236.25	54,274
Hawaiian Islands to United States.....	1	4,286	3,841.25	^a 7,667
Philippine Islands to United States.....	1	3,804	3,945.00	^a 5,485

^a Includes 5,000 tons tar.^b Molasses.^c Coconut and wood oil.

Of the tanker traffic passing through the Canal in August, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for August, 1931:

	No. of transits.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
August, 1932.....	13	80,068	\$57,648.96	.....
July, 1932.....	14	90,498	65,158.56	.....
June, 1932.....	19	109,928	79,148.16	.....
August, 1931.....	13	71,761	51,667.92	.....
<i>From Los Angeles.</i>				
August, 1932.....	11	72,149	75,520.00	143,470
July, 1932.....	13	79,629	79,933.75	145,435
June, 1932.....	18	107,415	110,863.75	206,242
August, 1931.....	17	92,487	93,520.48	162,107

Official Circulars.

Acting Governor.—Duties of Engineer of Maintenance.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 13, 1932.

To all concerned:

Effective September 14, 1932, and during my absence from the Isthmus, Lieut. Col. J. L. Schley, U. S. A., Engineer of Maintenance, will be Acting Governor. During this period Lieut. Col. C. S. Ridley, U. S. A., Assistant to the Engineer of Maintenance, will perform the duties of Engineer of Maintenance.

H. BURGESS,
Governor.

Duties of President, Panama Railroad Company.

PANAMA RAILROAD COMPANY,
PANAMA RAILROAD STEAMSHIP LINE,
BALBOA HEIGHTS, C. Z., September 13, 1932.

To all concerned:

Effective September 14, 1932, and during my absence from the Isthmus, Lieut. Col. J. L. Schley, U. S. A., 2d Vice President, will perform such duties of the President as relate to the operation of the Company on the Isthmus.

H. BURGESS,
President.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 90 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending September 10, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Manizales.....	Grace Line.....	.....	August 28	.....	133
Santa Teresa.....	Grace Line.....	.....	August 28	.....	425
Nueva Panama.....	United Fruit Co.....	.....	August 23	.....	71
Sixola.....	United Fruit Co.....	.....	August 23	.....	153
Suriname.....	United Fruit Co.....	.....	August 28	.....	625
Pacific Trader.....	Furness, Withy & Co.....	August 28	August 28	(¹)	143
Baracoa.....	Colombian S. S. Line.....	August 28	August 29	136½	1,221
Cerigo.....	Hamburg-American Line.....	.....	August 29	.....	203
Cristobal.....	Panama R. R. S. S. Line.....	.....	August 29	.....	697
Haarlem.....	Royal Netherlands S. S. Co.....	August 29	August 29	116	38
Portland.....	Hamburg-American Line.....	August 29	August 29	147	322
Cuba.....	French Line.....	August 29	August 31	69	345
Pearl Marie.....	R. Feuillebois.....	.....	August 30	.....	18
Quirigua.....	United Fruit Co.....	August 30	August 30	2	291
Santa Barbara.....	Grace Line.....	August 30	August 30	261	48
Feltre.....	Navigazione Libera-Triestina.....	August 30	August 31	63	(²)
Panama.....	Danish East Asiatic Line.....	August 30	August 31	8	40
Zenon.....	French Line.....	August 31	August 31	68	124
Washington.....	French Line.....	August 31	August 31	81	2
Santa Maria.....	Grace Line.....	September 1	September 1	133	181
Amerika.....	Danish East Asiatic Line.....	September 1	September 1	55	60
Iriona.....	United Fruit Co.....	September 1	September 2	629	142
Ville de Strasburg.....	Messageries Maritimes.....	September 1	September 2	(¹)	42
Nueva Panama.....	United Fruit Co.....	September 1	September 3	256	89
Buenaventura.....	Panama Railroad S. S. Line.....	September 1	.....	870	.....
Calamarcas.....	United Fruit Co.....	September 2	September 2	167	211
Contessa.....	Standard Fruit & S. S. Co.....	September 2	September 3	455	113½
San Vincente.....	Quaker S. S. Line.....	September 3	.....	217	.....
Metapan.....	United Fruit Co.....	September 3	.....	379	.....
Santa Ana.....	Panama Mail S. S. Co.....	September 3	.....	1,118	.....
Cali.....	North German Lloyd.....	September 3	.....	1,001	.....
Kirishima Maru.....	Kokusai Kisen Kaisha.....	September 3	September 3	53	(²)
Salvador.....	Kokusai Steam Navigation Co.....	.....	September 3	.....	540
Buenaventura.....	Panama R. R. S. S. Line.....	.....	September 4	.....	193
Metapan.....	United Fruit Co.....	.....	September 4	.....	145
Santa Ana.....	Panama Mail S. S. Co.....	.....	September 4	.....	59
Cali.....	North German Lloyd.....	.....	September 4	.....	347
President Jackson.....	Dollar Line.....	September 4	September 4	531	(²)
Dinteldijk.....	Holland-America Line.....	September 4	September 4	(³)	15
Counsellor.....	T. & J. Harrison.....	September 5	September 5	168	(¹)
Este.....	North German Lloyd.....	September 5	September 5	136	579
Martinique.....	Colombian S. S. Line.....	September 5	September 5	239	566
Calamarcas.....	United Fruit Co.....	September 5	September 5	36	369
Troja.....	Hamburg-American Line.....	September 5	September 7	11	1,067
Axel Johnson.....	Johnson Line.....	September 6	September 6	(¹)	83
Crijnsen.....	Royal Netherlands S. S. Co.....	September 6	September 7	144	(²)
Laurits Swenson.....	Fred Olsen & Co.....	September 7	September 7	(¹)	90
Delftdijk.....	Holland-America Line.....	September 7	September 8	112	(¹)
Ancon.....	Panama R. R. S. S. Line.....	September 7	.....	2,128	.....
Velma Lykes.....	Lykes Brothers.....	September 7	September 8	2,632	2
Camden.....	United Fruit Co.....	September 7	September 8	9,668	(²)
Tela.....	United Fruit Co.....	September 8	September 8	803	171
Veragua.....	United Fruit Co.....	September 9	September 9	219	136
Durazzo.....	Hamburg-American Line.....	September 9	.....	1,057	.....
Manizales.....	Grace Line.....	September 9	September 10	1,018	316
Syra.....	Hamburg-American Line.....	September 9	September 10	53	118
Cefalu.....	Standard Fruit & S. S. Co.....	September 9	September 10	218	171
Virgilio.....	Societe Italia Flotte Riunite.....	September 9	.....	99	.....
Cavina.....	Elders & Fyffes, Ltd.....	September 9	September 10	½	(²)
Acajutla.....	Pacific Steam Navigation Co.....	September 10	.....	266	.....
Nueva Panama.....	United Fruit Co.....	September 10	.....	184	.....
Crijnsen.....	Royal Netherlands S. S. Co.....	September 10	September 10	14	320
Abraham Lincoln.....	Fred Olsen & Co.....	September 10	.....	52	.....

¹ No cargo discharged.² No cargo laded.³ One package.

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective September 14, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Tolls Charges for Transit of the Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... .72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton..... .50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessel to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton..... 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake or original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in the current tariff or supplements thereto.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

Subscription rates, domestic, \$0.50 per year; foreign, \$1.00; address
The Panama Canal Record, Balboa Heights, Canal Zone, or
The Panama Canal, Washington, D. C.

Entered as second-class matter February 6, 1918, at the Post Office
at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., September 21, 1932. No. 8.

Cargo Through the Canal During August, 1932.

On pages 88 and 89 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in August, 1932. This cargo, segregated according to direction as compared with August, 1931, and the differences, are shown in the following tabulation:

	August, 1931.	August, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantle to Pacific.....	463,512	348,271	-115,241
Pacific to Atlantlc.....	1,325,722	1,001,182	-324,540
Total.....	1,789,234	1,349,453	-439,781

As will be noted from the above, cargo tonnage through the Canal in the past month declined 115,241 tons (24.9 per cent) in the Atlantic to Pacific movement, in comparison with August, 1931, while in the opposite direction a loss of 324,540 tons (24.5 per cent) was recorded. In the combined movement in both directions, there was a decline of 439,781 tons (24.6 per cent). In comparison with the preceding month (July, 1932) total tonnage made an increase of 89,472 tons (7.1 per cent) due to an increase in the Pacific to Atlantic movement.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the cargo originating in the Atlantic area, that coming from the United States amounted to 242,723 tons, or 69.7 per cent of the total moving from the Atlantic to the Pacific in the past month. In actual tonnage this was a decrease of 92,499 tons, or 27.6 per cent, in comparison with the amount coming from the east coast of the United States in August, 1931. Cargo from Europe, which comprised 54,719 tons, or 15.7 per cent of the total in August, 1932, showed a decrease of 30,702 tons, or 35.9 per cent. In August, 1932, cargo from the United States and Europe made up over 85 per cent of the total moving from the Atlantic to the Pacific. In so far as the proportion of the total cargo is concerned, that from both the United States and Europe made slight decreases in comparison with August, 1931.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in the past month was reported routed as follows: 155,576 tons, or 44.7 per cent, to the United States; 79,546 tons, or 22.8 per cent, to Asia; 56,173 tons, or 16.1 per cent, to Australasia; and 20,729 tons, or 6.0 per cent, to South America. With exception of the cargo tonnage routed to Australasia, the amounts destined to these areas declined in comparison with August, 1931. Cargo tonnage to Australasia registered an increase of 17,708 tons, or 46.0 per cent, which was accounted for principally by shipments of sulphur, asphalt, etc., from the Gulf ports. To the other areas the decreases were as

follows: United States, 60,441 tons, or 28.0 per cent; Asia, 45,677 tons, of 36.5 per cent; and South America, 23,641 tons, or 53.3 per cent. The percentage of the total to these areas also made small decreases in comparison with August, 1931, while the proportion going to Australasia was almost double that of August, 1931.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in August, 1932, 523,266 tons, or 52.3 per cent of the total, originated in the United States; 157,117 tons, or 15.7 per cent, in South America; 150,505 tons, or 15.0 per cent, in Canada; 79,597 tons, or 7.9 per cent, in Asia; and 37,090 tons, or 3.7 per cent, in Australasia. Tonnage from two of these regions made slight increases in comparison with August, 1931—that from Canada, 9,249 tons, or 6.5 per cent, and from Asia, 3,406 tons, or 4.5 per cent. From the other aforementioned regions decreases occurred as follows: From the United States, 181,980 tons, or 25.8 per cent; from South America, 156,266 tons, or 49.9 per cent; and from Australasia, 18,426 tons, or 33.2 per cent. The percentage of the total cargo originating in Canada and Asia was higher than in August, 1931, while from South America and Australasia the proportion of the total was smaller. The percentage originating in the United States last month was approximately the same as in August, 1931. Curtailed iron ore and nitrate shipments accounted for the relatively heavy decrease in tonnage from South America, and light lumber shipments in the tonnage from the United States.

Destination.—Segregated according to destination, 529,112 tons, or 52.8 per cent of the cargo moving from the Pacific to the Atlantic in August, 1932, was destined to ports on the east coast of the United States, and 412,764, or 41.2 per cent, to Europe. These two areas absorbed 94 per cent of the total cargo moving in this direction. Cargo destined to both the United States and Europe in the past month declined in comparison with August, 1931—to the United States it decreased 176,442 tons, or 25.0 per cent, and to Europe 131,030 tons, or 24.1 per cent. The percentage of the total destined to these areas was approximately the same as in the corresponding month last year. Greatly reduced shipments in a number of leading commodities accounted for the decreased cargo tonnage to these two areas.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify about 89 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of August, 1932. The remaining 11 per cent consisted, for the most part, of manufactured goods in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for August, 1932, or August, 1931, are listed in the following tabulation:

Commodity.	August, 1931.	August, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Asphalt and tar.....	10,319	8,356	-1,963
Coal and coke.....	14,262	7,328	-6,934
Corn.....		20,998	+20,998
Cotton.....	22,657	26,832	+4,175
Iron and steel.....	79,932	33,875	-46,057
Metal, scrap.....	728	14,343	+13,615
Tinplate.....	15,897	7,527	-8,370
Oils, mineral.....	59,996	33,166	-26,830
Paper.....	17,944	14,385	-3,559
Phosphates.....	21,976	12,833	-9,143
Sulphur.....	15,766	18,459	+2,693

The above 11 commodity groups comprise 56.9 per cent of the total cargo moving from the Atlantic to the Pacific in August, 1932. Among these items there were recorded 4 increases as against 7 decreases. Corn shipments, aggregating 26,832 tons, showed the largest gain, there having been no shipments of this commodity in this direction through the Canal in August, 1931. The other increases were in the shipments of scrap metal, cotton, and sulphur. Manufactures of iron and steel, normally the heaviest item of cargo shipped in this direction, showed a decline of 46,057 tons, or almost 58 per cent in comparison with August, 1931.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 per cent of the cargo moving from the Pacific to the Atlantic during August, 1932. Commodities which aggregated more than 10,000 tons either during the past month or the corresponding month in 1931, are listed below:

Commodity.	August, 1931.	August, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	14,538	19,312	+4,774
Beans.....	10,186	7,907	-2,279
Canned goods (fish, fruit, vegetables, etc.).....	62,743	67,587	+4,844
Cold storage (food products) ¹	28,142	6,904	-21,238
Copra.....	10,007	4,175	-5,832
Fruit, dried.....	22,451	23,521	+1,070
Fruit, fresh.....	19,535	17,710	-1,825
Guano.....	14,700	4,600	-10,100
Lumber.....	261,413	124,633	-136,780
Metals (various).....	52,399	34,314	-18,085
Molasses.....	18,141	7,667	-10,474
Nitrates.....	125,968	25	-125,943
Oils (mineral).....	274,587	273,396	-1,191
Ores.....	56,146	10,800	-45,346
Sugar.....	99,944	154,901	+54,957
Wheat.....	116,589	121,736	+5,147
Wood pulp.....	12,632	4,413	-8,219
Wool.....	10,099	3,224	-6,875

¹ Does not include fresh fruit.

The above 18 commodity groups comprise about 89 per cent of the cargo moving from the Pacific to the Atlantic in August, 1932. Five of the items show increases and the balance decreases. The increases recorded in four of the items, *viz.*, barley, canned goods, dried fruit, and wheat, were relatively small, the shipments of sugar alone registering a substantial increase. Of the decreases, the most important occurred in shipments of lumber, nitrates, and ores. Nitrates, which are normally shipped in sizable quantities from Chile via the Canal, were reported as only 25 tons in the past month.

(Continued on next page.)

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 16, 1932.

No. 1147.

Panama Canal, Pacific entrance, aids to navigation. The gas buoy, showing a fixed red light and painted with red and black horizontal stripes, marking the wreck of a sunken sand barge, was permanently discontinued, effective September 14, 1932.

The wreck is now marked with a spar buoy, painted with black and red horizontal stripes, permanently secured to the mast of the sunken barge, effective September 14, 1932. The spar buoy is located on the wreck, which is 1,250 yards north of Tortolita Island.

J. L. SCHLEY,
Acting Governor.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, August, 1932.—Continued from page 87.
(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.					AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.		
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. ‡	Philippine Islands.	China.	Japan.	Far East. ‡			Total, Asia.	
NORTH AMERICA:																							
UNITED STATES—																							
North Atlantic ports.....	91,118	70	298	3903,178	95,054	1,499	384	2491,028			3,160	3,160	3,605	8113,310	7,726	7,160	9,837	10,359	1,213	28,569	134,509	38.6	
South Atlantic ports.....	3,700			3,700	46,045										527	232	2,683	6,910	2,0			2.0	
Gulf ports.....	36,433	9,526			86								7,061	5,775	12,836	71	7,321	29,999	5,032	42,433	101,304	29.1	
Total, United States.....	131,251	9,596	298	3903,264	144,799	1,499	384	2491,028			3,160	3,160	3,605	8113,310	7,726	7,160	9,837	10,359	1,213	28,569	134,509	38.6	
East coast of Canada.....													3,016	1,490	4,506				5,286		5,286	2.8	
East coast of Central America and Mexico.	994		2,465			3,459	1,359	1,094	735	463	171	3,827	6,717	822	7,539						7,539	2.2	
Cristobal, C. Z. *	86					11,778									8,010		2				3	2.1	
West Indies.....				10,908																		5.6	
Total, North America.....	132,331	10,380	2,763	11,298	3,264	160,036	2,860	1,478	984	1,496	171	6,939	20,399	16,903	837	41,144	7,464	18,540	46,715	6,245	78,964	287,133	82.4
EUROPE:																							
British Isles.....	1,382	2,393				3,775	2,496	50	395	1,010		3,951		15,029	15,029							22,755	6.5
Belgium.....	4,313	566	130	194		5,203	727	5	91	56	535	1,414										6,617	1.9
Denmark.....			1,320	1		1,321		1,000				1,000										2,321	0.7
France.....	496	32	6			534	977		22	39		2,138										2,672	0.8
Germany.....	3,857	987	2			4,846	724	91	163	1,986		2,964										7,810	2.2
Holland.....	2,453	134		62		2,649	602	48	54	487		1,191										3,840	1.1
Italy.....	595	30	615			1,241																1,241	0.4
Norway.....	424	162	212	235		1,033																1,033	0.3
Spain and Portugal.....	115	50	3			168				2		2										170	.....
Sweden.....	1,588	13	656	192		2,449																2,449	0.7
Europe †.....	2,367	439				2,806	165	12	6	115	707	1,005										3,811	1.1
Total, Europe.....	17,590	4,367	3,383	634	1	26,025	6,791	1,206	731	3,695	1,242	13,665		15,029	15,029							54,719	15.7
East coast of South America.....	5,647	7		100		5,754		75			75						8		574		582	6,411	1.9
Asia.....																							.....
Egypt.....																							7
Grand total.....	155,576	14,754	6,146	12,082	3,263	191,823	9,651	2,759	1,715	5,191	1,413	30,729	30,399	31,937	3,837	56,173	7,472	18,540	47,289	6,245	79,546	348,271	100.0
Per cent of total cargo:																							
August, 1932.....	44.7	4.2	1.8	3.5	0.9	55.1	2.8	0.8	0.5	1.5	0.4	6.0	5.9	9.2	1.0	16.1	2.1	5.3	13.6	1.8	22.8	100.0	.....
August, 1931.....	46.6	3.9	1.3	0.3	3.0	55.1	5.1	1.2	0.7	2.0	0.6	9.6	2.3	5.6	0.4	8.3	2.5	8.2	13.6	2.7	27.0	100.0	.....
August, 1930.....	42.4	5.8	1.5	0.6	1.3	51.6	6.4	0.4	1.2	1.4	4.5	13.9	6.8	7.5	1.6	15.9	1.5	4.7	9.6	2.8	18.6	100.0	.....

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, August, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.										EUROPE.												Grand total.	Per cent of total cargo.	
	UNITED STATES.					MEXICO.																			
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Central America.	Cristobal, C. Z. ¹	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.	Europe. ²	Total, Europe.	East coast of South America.			Africa.
NORTH AMERICA:																									
West coast United States	325,705	13,033	20,641	359,379	311	583	4,410	364,883	87,203	11,976	650	15,029	9,647	3,535	6,905	773	22	4,372	28,627	146,527	544	37	523,206	52.3	
West coast Canada	1,150			1,150		108	2,176	3,434	91,061	10,235	785	2,999	3,372	1,609	467								150,505	15.0	
West coast Cen. America	28			28		3,249	152	3,429	82					91	13	3					107		3,536	0.4	
Balboa Canal Zone						82																	82		
Hawaiian Islands	48,218			1,760	49,978	8	3	49,989															49,989	5.0	
Total, N. America	375,101	13,033	22,401	410,535	311	4,080	6,741	421,617	178,264	22,211	4,435	18,028	13,110	5,157	7,375	773	22	4,655	47,537	154,933	4,157	37	727,378	72.7	
SOUTH AMERICA:																									
Chile	7,290			7,290		462	780	8,532	13,918	2,251	400	2,043	2,600	764									33,526	3.3	
Colombia	1,974			1,974		4,693	7	6,674	5					13							18		6,692	0.7	
Ecuador	20,206			20,206		2,668		22,874	40				19	104	29			90			282		23,156	2.3	
Peru	4,520			4,520		81		24,024	24,140	72	876	12,730	555	26,288							4,910	69,571	93,595	9.4	
West coast South America	109			109		14		123													25		143		
Total, S. America	34,099			4,600	38,699	14,823		7,918	787	38,103	2,323	14,792	3,259	27,094				90			7,953	94,800	157,117	15.7	
AUSTRALASIA:																									
Australia	78			78		19	813		5,509														19,813	2.0	
New Zealand	725			725		970		7,288	492				3,002	16							5,509		6,479	0.6	
Australasia																					10,798		10,798	1.1	
Total, Australasia	803			803		20,783	12,797	492					3,002	16							16,307		37,090	3.7	
ASIA:																									
Philippine Islands	52,373			12,235	64,608	3	17	64,628															64,628	6.5	
China	3,908			3,908		239		4,147															4,147	0.4	
Japan	9,002	203		9,205		216	29	9,450														18	9,468	0.9	
Far East	1,354			1,354				1,354															1,354	0.1	
Total, Asia	66,637	203	12,235	79,075		458	46	79,579														18	79,597	7.9	
Grand total	476,640	13,236	39,629	529,112	34,803	311	12,406	7,574	384,206	229,104	25,026	5,711	35,822	16,383	32,251	7,375	773	112	4,655	55,490	142,764	4,175	37	1,001,182	100.0
Per cent of total cargo:																									
August, 1932	47.6	1.3	3.9	52.8	3.5	1.3	0.8	58.4	22.9	2.5	0.6	3.6	1.6	3.2	0.7	0.1			0.5		5.5	41.2	0.4	100.0	
August, 1931	47.5	0.9	4.8	53.2	3.0	0.8	1.3	58.3	20.9	0.9	0.1	1.8	1.3	1.5	0.5	0.7				13.3	41.0	0.7	100.0		
August, 1930	53.1	0.5	3.7	57.3	3.2	0.7	2.4	63.9	21.7	0.7	0.1	0.7	1.6	1.5	0.2	0.8				7.8	35.6	0.5	100.0		

¹ General cargo not routed so as to allow segregation between definite ports.

² Includes both local and transit cargo.

³ Includes Sweden.

* General cargo not routed so as to allow segregation between definite ports.

* Includes both local and transit cargo.

* Includes Sweden.

MOVEMENTS OF OCEAN VESSELS. *Week ending at midnight, September 17, 1932.*

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Virgilio ²	9	14.40	11	6.00	11	13.54	11	14.50	Italian	Soc. Italia-Flotte Rimonte	484.0	61.0	24.11	Genoa, Italy	Valparaiso, Chile	General	292 12 941	9,329	
Abraham																			
Lincoln ²	10	12.25	11	6.45	11	14.11	11	19.44	Norwegian	Fred Olsen & Co.	435.9	56.2	17.6	Oslo, Norway	Vancouver, B. C.	General	1,301 8,005	5,953	
Velma ²	10	23.55	11	8.25	11	16.05	11	17.15	Norwegian	Chile Exploration Co.	475.6	64.2	25.0	Aruba, D. W. I.	Tocopilla, Chile	Crude oil	10,026 10,074	7,126	
Altair ²	11	3.20	11	8.25	11	17.04	11	18.00	American	Calmar S. S. Corp.	399.7	56.2	18.2	Baltimore, Md.	Seattle, Wash.	Steel, general	3,989 7,351	5,595	
Pacific																			
President ²	11	6.35	11	9.50	11	17.48	11	18.48	British	Furness, Withy & Co.	450.4	60.8	19.7	Glasgow, Scotland	San Francisco, Cal.	Ballast	10,086	7,226	
Hidelford ²	11	6.25	11	10.42	11	19.40	11	21.00	Norwegian	Anglo-Saxon Pet. Co.	451.9	59.0	20.1	Antwerp, Belgium	Los Angeles, Calif	Ballast	8,013	5,402	
Sir James																			
Clark Ross ²	11	11.55	11	12.05	11	20.45	11	22.03	Norwegian	Ugland Jacobsen and E. Onness	537.9	72.0	31.0	Sandefjord, Norway	Wellington, N. Z.	Fuel oil	15,880 16,364	11,790	
Nueva Panama ²	10	16.20	11	12.23	11	19.40	11	21.00	Panamaian	Hans Elliot	108.0	20.0	9.0	Cristobal, C. Z.	Buena Ventura, Col.	General	60	236	101
Durazo ²	9	18.35	11	13.55	11	23.00	11	23.54	German	Hamburg-American Line	227.0	34.0	13.6	Cristobal, C. Z.	Guayaquil, Ecuador	General	130	1,633	1,041
Santa Cecilia ²	11	6.40	11	14.00	11	22.48	12	5.08	American	Panama Mail S. S. Co.	360.2	51.6	23.1	New York, N. Y.	San Francisco, Cal.	Coffee, general	2,028	5,797	4,188
Appalachia ²	11	11.20	11	13.55	11	21.34	11	22.35	British	Anglo-Amer. Oil Co.	477.0	63.8	19.0	Glasgow, Scotland	Los Angeles, Calif	Ballast	2,384	7,611	5,395
Steel Engineer	11	16.05	11	18.10	12	9.50	12	11.07	American	Isthmian S. S. Lines	424.0	56.2	16.7	Baltimore, Md.	Seattle, Wash.	General	1,600	6,503	4,944
Bridge ²	10	18.40	12	5.30	12	12.46	12	17.07	American	U. S. Navy	400.0	55.2	21.3	Boston, Mass.	Los Angeles, Calif	Naval stores	1,800	6,503	4,944
Darwin ²	9	21.15	12	7.45	12	14.25	12	15.45	Norwegian	John P. Pedersen & Co.	381.9	54.0	16.0	London, France	Vancouver, B. C.	Ballast	.....	.....	.....
Ontario ²	12	18.05	12	19.20	13	10.52	13	12.00	British	Imperial Oil Co.	470.0	63.2	24.0	Halifax, N. S.	Talara, Peru	Ballast	.....	.....	.....
Bastida ²	8	14.40	12	18.45	13	13.35	14	13.30	Colombian	Colombian Government	127.2	32.6	13.0	Cartagena, Colon	Buena Ventura, Col.	Ballast	.....	.....	.....
Barranquilla ²	8	14.40	12	18.45	13	13.35	14	13.30	Colombian	Colombian Government	127.2	32.6	13.0	Cartagena, Colon	Buena Ventura, Col.	Ballast	.....	.....	.....
Tos. H.																			
Wheeler ²	12	10.25	13	5.55	13	15.05	13	17.05	American	West India Oil Co.	425.0	57.2	20.1	Baton Rouge, La.	Bahoa, C. Z.	Gasoline	2,200	7,481	5,004
Glenbank ²	12	18.35	13	7.25	13	15.45	13	17.05	British	Amer. Ref. & Smelt. Co.	420.0	53.0	26.2	Boiswood, N. F.	San Francisco, Cal.	Gasoline	7,886	7,100	5,005
Pennsylvania ²	13	3.35	13	8.25	13	16.41	13	17.45	American	The Texas Co.	416.0	56.0	20.0	Wilmingon, N. C.	Los Angeles, Calif	Ballast	.....	6,756	4,844
Sun ²	13	6.05	13	8.40	13	17.02	13	18.05	American	Sun Oil Co.	480.6	66.0	23.0	Chester, Pa.	Los Angeles, Calif	Ballast	.....	9,620	6,476
San Antonio ²	12	21.45	13	9.40	13	17.34	13	18.43	French	French Line	431.0	59.0	16.0	Havre, France	Vancouver, B. C.	Iron, steel	285	7,771	4,650
Albion Star ²	13	11.15	13	11.25	13	18.14	13	19.25	British	Blue Star Line	450.0	58.0	19.0	Newcastle, Eng.	Vancouver, B. C.	Ballast	.....	8,317	5,531
Virginian ²	13	12.25	13	12.35	13	20.05	13	21.09	American	Amer.-Hawaiian Line	491.5	58.2	20.0	Boston, Mass.	Seattle, Wash.	General	1,370 10,491	7,601	
Margaret																			
Johnson ²	13	12.50	13	13.25	13	21.00	14	2.07	Swedish	Johnson Line	407.7	57.0	18.4	Stockholm, Swed.	Vancouver, B. C.	General	2,770	7,048	5,337
O. B.																			
Sorensen ²	13	11.45	13	13.55	13	21.50	13	23.00	Norwegian	G. M.-Saxon Pet. Co.	462.0	59.7	21.5	Cardiff, England	Los Angeles, Calif	Ballast	.....	8,329	5,542
Lady May ²	13	11.45	13	13.55	13	21.50	13	23.00	American	Anglo-Saxon Pet. Co.	462.0	59.7	21.5	Cardiff, England	Gatun, C. Z.	Ballast	.....	8,329	5,542
J. L. Luckenbach																			
Pelux Tausig	13	16.40	13	18.15	14	10.55	14	12.05	American	Lukenbach Line	448.9	60.2	21.0	Boston, Mass.	Seattle, Wash.	General	2,845	9,294	6,861
American Star	13	21.20	14	6.15	14	13.28	14	14.40	American	McCormick S. S. Co.	395.0	55.0	18.3	Albany, N. Y.	Tacoma, Wash.	General	7,524	7,056	4,904
American Star	13	23.45	14	7.05	14	14.38	14	16.00	American	Neison Line	386.8	52.2	17.7	New York, N. Y.	Seattle, Wash.	General	2,865	5,699	4,167

Soyo Maru ²	14	1.35	14	8.30	14	15.32	14	16.45	Japanese.....	415.0	56.0	15.0	New York, N. Y.	Los Angeles, Calif.	Ballast.....	6,980	4,950
Takaoka Maru.....	14	4.35	14	8.35	14	16.00	14	17.15	Japanese.....	445.0	58.0	20.4	Baltimore, Md.	Kobe, Japan.....	General.....	4,203	7,989
Barbara Cats.....	13	5.40	14	9.45	14	17.18	14	18.38	American.....	409.5	54.2	17.8	Seattle, Wash.	Seattle, Wash.	General.....	2,500	5,856
Neches ¹	13	15.55	14	12.10	14	19.00	14	20.10	American.....	455.0	55.0	19.9	Cristobal, C. Z.	Los Angeles, Calif.	Ballast.....	6,804	4,882
Oakland ²	14	9.30	14	14.05	14	20.12	14	22.25	British.....	433.0	59.0	18.6	Vancouver, B. C.	Vancouver, B. C.	General.....	1,433	8,510
Lagarto ²	14	12.30	15	5.55	15	14.06	15	15.00	German.....	385.0	52.0	19.0	Hull, England	Corral, Chile.....	General.....	2,427	5,856
Pakistan.....	15	1.30	15	9.15	15	16.00	15	17.10	British.....	440.0	57.6	20.0	South Shields, Eng.	Vancouver, B. C.	Ballast.....	7,679	5,623
Emergency Aid.....	15	5.30	15	9.40	15	16.50	15	17.56	American.....	400.7	54.2	19.6	Rosario, Argentina.	Seattle, Wash.	(*).....	1,709	6,534
Pres. Herrenschmidt ¹	15	6.00	15	12.05	15	18.56	15	20.00	Norwegian.....	477.0	63.0	21.0	Pt. de Boue, France	Talara, Peru.....	Ballast.....	9,444	6,483
Santa Barbara ²	15	5.55	15	14.35	15	21.15	16	10.34	American.....	466.0	64.0	24.3	New York, N. Y.	San Antonio, Chile.	General.....	1,756	10,487
Chivi ⁶	15	.....	15	.....	15	16.00	.....	.....	American.....	.....	.....	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.....	1	1
President Adams.....	16	4.35	16	7.25	16	13.55	16	21.03	American.....	502.0	62.2	27.0	New York, N. Y.	Round the world.....	General.....	2,346	12,512
Katsuragi Maru.....	15	20.40	16	8.20	16	15.15	16	16.38	Japanese.....	440.0	60.0	24.1	New York, N. Y.	Moji, Japan.....	General, cotton.....	5,280	8,820
Albert Vogler.....	16	6.45	16	12.45	16	21.03	16	10.00	German.....	409.8	54.0	17.1	Hamburg, Germany	Valparaiso, Chile.....	General.....	1,926	7,173
El Aleto ²	16	16.15	16	17.55	17	11.39	17	13.12	British.....	385.0	57.0	22.6	Philadelphia, Pa.	La Libertad, Ecua.	Ballast.....	5,555	5,514
Vinas ²	17	17.55	17	7.00	17	15.34	17	16.50	British.....	435.0	51.0	24.0	Genoa, Italy.....	Australia.....	Gasoline.....	5,822	7,233
Rialto ²	16	11.30	17	8.05	17	15.42	17	16.50	Italian.....	385.0	55.0	18.1	Trieste, Italy.....	Vancouver, B. C.	General.....	553	7,817
Brimanger ²	17	4.40	17	9.25	17	16.15	17	17.25	Norwegian.....	395.0	54.9	15.6	Rotterdam, Holl'd	Vancouver, B. C.	Ballast.....	6,853	5,246
Royal Star.....	17	7.10	17	8.20	17	17.12	17	17.12	British.....	462.0	58.0	21.0	Newcastle, Eng.	Vancouver, B. C.	Ballast.....	8,561	5,815
City of Canberra.....	17	12.40	17	13.00	17	19.55	18	00.26	British.....	453.0	57.0	22.0	Philadelphia, Pa.	Freemantle, Auslia.	General.....	3,107	.....
Oakworth ²	17	13.50	17	14.15	17	21.30	17	21.30	British.....	400.6	53.2	15.0	Newcastle, Eng.	Vancouver, B. C.	Ballast.....	5,615	3,737
American.....	17	16.00	17	16.05	18	10.40	18	11.47	American.....	404.6	57.0	20.0	Boston, Mass.	Portland, Oreg.	General.....	2,999	6,777
Atlanta City.....	17	18.00	17	20.25	18	11.55	18	13.20	American.....	429.0	56.0	18.6	Baltimore, Md.	Seattle, Wash.	General.....	2,277	7,611

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Trenton.....	10	8.33	11	6.15	11	13.10	11	13.10	American.....	550.0	55.0	18.0	San Diego, Calif.	Hampton Rds., Va.	Cruiser.....	.....	.....
Jeckon.....	11	2.30	11	6.58	11	15.00	11	15.00	American.....	434.1	57.7	28.0	Los Angeles, Calif.	New Orleans, La.	General.....	9,102	7,982
Luckenbach.....	11	9.10	11	9.46	11	17.25	11	17.25	American.....	407.7	53.7	27.0	Portland, Oreg.	Boston, Mass.	General.....	6,952	7,156
Dakota.....	10	13.45	11	14.12	11	22.40	12	12.05	German.....	432.3	59.1	26.0	Vancouver, B. C.	Hamburg, Germany	General.....	7,190	8,454
Los Angeles ²	11	13.45	11	14.35	11	23.20	11	23.20	American.....	435.0	56.0	27.0	Los Angeles, Calif.	Tiverton, R. I.	Gasoline.....	10,000	7,482
Utacon ²	11	17.05	12	6.41	12	14.05	12	16.40	German.....	392.9	51.6	26.0	Magallanes, Chile.	Liverpool, England	General.....	6,296	5,783
Isis ²	11	17.05	12	6.41	12	14.05	12	16.40	German.....	434.4	57.7	26.0	Tacoma, Wash.	N. London, Conn.	Lumber, general.....	8,559	7,983
Arizona.....	12	20.09	12	13.18	12	21.09	13	20.05	American.....	483.3	63.9	22.0	San Antonio, Chile.	New York, N. Y.	General.....	3,181	11,680
Santa Clara.....	12	18.04	13	6.27	13	13.25	13	13.25	American.....	475.7	56.0	28.0	Los Angeles, Calif.	Cristobal, C. Z.	Gasoline.....	405	.....
Neches ¹	12	4.10	13	7.22	13	15.20	14	12.10	American.....	475.7	56.0	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.....	10,000	9,294
Dorothy Luckenbach.....	13	8.05	13	9.57	13	18.25	13	18.25	American.....	448.9	60.2	31.0	Seattle, Wash.	Boston, Mass.	Lumber, general.....	10,000	9,294
Chateau Thierry.....	10	20.48	13	10.20	13	17.25	14	11.05	American.....	448.0	58.0	26.0	Balboa, C. Z.	New York, N. Y.	Army supplies.....	7,512	6,082
Skransstad ²	13	9.40	13	10.47	13	19.40	13	19.40	Norwegian.....	382.7	53.4	26.0	Vancouver, B. C.	Avonmouth, Eng.	Wheat, general.....	5,500	5,349
Hermu Frach.....	13	16.35	17	17.29	14	12.20	14	12.20	American.....	356.0	51.6	26.0	Pongkeepee, N.Y.	Liverpool, England	Lumber.....	7,000	7,139
Laguna ²	13	17.55	14	16.43	14	13.30	14	13.30	British.....	420.5	51.2	26.4	Magallanes, Chile.	Liverpool, England	General.....	7,000	7,139

* Tanker.

* Motor ship.

* Supply ship.

* Tug.

* Launch.

* Dredge.

* Towling dredge Barzanquilla.

* Coffee, bones, and general.

* Lead concentrate.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Thomas H. Wheeler	13	15.00	14	7.54	14	15.25	14	15.25	American	West India Oil Co.	425.0	57.0	.....	Balboa, C. Z.	Baytown, Tex.	Ballast	.....	7,431	5,004
Boussole	14	8.15	14	9.14	14	17.30	14	21.20	French	Messageries Maritimes	330.2	52.5	21.0	Noumea, N. Caled.	Dunkirk, France	Copra, general	2,648	5,504	3,681
Lochkatrine	14	15.00	14	16.20	15	13.35	15	18.55	British	Royal Mail Line, Ltd.	501.9	62.0	30.0	Vancouver, B. C.	Liverpool, England	General	10,464	10,802	7,595
Iakubasan	14	15.40	14	16.52	15	13.25	15	13.25	Japanese	Mitsui Bussan Kaisha	437.0	56.5	27.0	Iloilo, P. I.	New York, N. Y.	General	8,340	7,420	5,040
Sveadrott	14	17.15	15	6.19	15	14.20	15	14.40	Swedish	Stockholm S. Co.	392.1	54.7	24.0	Valparaiso, Chile	Stockholm, Sweden	General	5,915	7,011	5,039
Kansan	14	17.00	15	7.01	15	15.30	15	15.30	American	Amer.-Hawaiian Line	404.6	53.9	28.0	Seattle, Wash.	Boston, Mass.	General	7,174	6,779	4,921
Santa Elisa	15	6.45	15	14.25	15	21.10	16	10.17	American	Panama Mail S. S. Co.	360.3	51.7	23.0	San Francisco, Cal.	New York, N. Y.	Coffee, general	2,659	5,557	4,325
Forbes	15	15.10	15	16.05	16	8.35	16	8.35	American	McCormick S. S. Co.	409.8	54.2	27.0	Seattle, Wash.	New York, N. Y.	Lumber, general	8,500	6,831	4,969
Hauptmann	15	22.00	16	6.15	16	13.55	16	23.15	Dutch	Royal Neth. S. S. Co.	400.6	58.3	25.5	Corral, Chile	Hamburg, Germany	General	7,353	7,819	6,101
West Camargo	15	20.40	16	6.58	16	15.20	17	1.20	American	McCormick S. S. Co.	410.5	54.0	26.0	Powell River, B. C.	Rosario, Argentina	Lumber, general	6,597	6,824	5,024
Canadian	15	23.30	16	8.19	16	15.30	16	22.40	British	Can. Nat. Steamships	400.0	52.4	21.0	Auckland, N. Z.	Montreal, Canada	General	4,937	6,192	4,402
Baron Ruthven	16	1.00	16	9.13	16	17.43	16	18.20	British	Gia. Admirs. del Guano	336.3	48.5	21.3	Salaverry, Peru	London, England	Guano	5,250	3,693	2,590
Sea Thrush	16	9.20	16	10.16	16	18.33	16	18.35	American	Shepard S. S. Co.	410.0	54.2	25.0	Astoria, Oreg.	Philadelphia, Pa.	Lumber, general	7,054	6,660	4,984
Cerigo	16	11.50	16	12.46	16	19.55	16	18.35	German	Hamburg-American Line	227.2	34.4	14.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	896	1,572	1,011
Rumbic	16	11.30	16	15.34	17	8.35	17	8.35	British	N. S. Shipping Co.	480.6	60.3	25.0	Plymouth, N. Z.	London, England	Frozen, general	4,130	11,443	8,469
San Clemente	16	19.00	17	6.17	17	13.55	17	13.55	American	Quaker Line	410.0	54.4	24.3	Portland, Oreg.	Philadelphia, Pa.	Lumber, general	7,638	6,476	4,365
Den Haag	17	1.30	17	7.11	17	14.55	17	14.55	Dutch	American Petroleum Co.	469.8	63.2	27.4	Talara, Peru	Amsterdam, Holland	Naphtha	11,323	9,204	6,365
Ward	17	5.10	17	8.13	17	15.50	17	21.00	American	Roosevelt S. S. Co.	395.5	55.0	27.0	Manila, P. I.	New York, N. Y.	Sugar, general	7,905	7,342	5,247
Balboa	17	7.40	17	8.53	17	17.05	17	21.35	Swedish	Johnson Line	427.0	56.2	27.0	Vancouver, B. C.	Gothenburg, Swed.	General	8,660	7,480	5,553
Canadian	17	9.15	17	10.11	17	19.30	17	19.30	British	Can. Nat. Steamships	400.4	52.3	17.0	Vancouver, B. C.	Montreal, Canada	Lumber, general	2,421	5,879	4,121
Nueva	17	6.30	17	10.30	17	17.53	18	9.18	Panamanian	Hans Elliot	409.5	20.6	10.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general	170	226	101
Benvenue	17	9.30	17	10.34	17	20.40	17	20.40	British	Wm. Thomson & Co.	128.0	53.9	28.0	Everett, Wash.	Rotterdam, Holland	General	8,050	6,520	4,289
Lake Oswego	17	15.15	17	16.15	18	11.05	18	11.05	American	Ford Motor Co.	251.0	43.6	21.1	Longview, Wash.	Chester, Pa.	Auto, parts	3,275	2,739	1,609
S. A. Perkins	17	12.30	17	13.12	17	21.40	17	21.40	American	Swayne & Hoyt	380.5	53.1	23.0	Seattle, Wash.	Tampa, Fla.	General	5,720	.....	.....

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

Commercial Traffic Through the Panama Canal in August, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of August, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for August, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States interoceanic:							
United States.....	49	289,473	217,190	352,459	217,218	\$249,529.73	120,302
Europe to Canada:							
British.....	10	56,358	40,329	62,704	33,734	43,601.69	2,995
Danish.....	2	13,677	10,190	16,199	10,278	11,323.17	3,796
Dutch.....	1	8,351	6,201	10,155	6,337	7,751.25	3,186
French.....	2	14,504	8,255	15,768	8,886	10,318.75	1,310
German.....	3	21,346	14,245	24,017	14,036	17,805.25	7,990
Italian.....	1	6,029	3,679	6,101	3,773	4,598.75	1,299
Norwegian.....	3	18,124	11,637	19,179	11,958	14,546.25	2,294
Swedish.....	1	4,919	2,890	4,960	3,665	3,612.50	2,449
Total.....	23	143,338	97,426	159,113	98,317	113,558.61	25,319
United States to Far East:							
British.....	5	26,539	17,348	29,274	17,591	21,685.00	12,183
Japanese.....	6	32,381	23,707	40,158	25,413	30,927.95	29,648
Norwegian.....	4	20,965	11,473	20,215	11,682	14,341.25	19,515
United States.....	2	12,171	9,327	14,800	9,297	11,658.75	10,319
Total.....	17	92,056	63,855	104,447	63,983	78,612.95	71,665
Europe to South America:							
British.....	2	13,061	10,941	18,059	11,177	13,676.25	4,394
Danish.....	1	4,097	3,355	5,722	3,406	2,949.84	.....
Dutch.....	2	16,473	14,092	24,218	13,831	11,860.56	.....
French.....	3	16,030	10,737	18,198	10,654	11,349.69	2,505
German.....	1	4,834	3,223	5,390	3,219	4,028.75	2,205
Norwegian.....	2	8,866	6,251	9,877	6,016	7,813.75	4,724
Total.....	12	67,199	51,293	85,726	50,971	54,442.20	13,828
United States to Philippine Islands:							
British.....	1	6,145	3,490	6,734	3,656	4,362.50	4,514
United States.....	2	30,686	21,377	36,063	21,350	26,721.25	4,607
Total.....	3	36,831	24,867	42,797	25,006	31,083.75	9,121
Europe to Australasia:							
British.....	7	34,938	23,224	37,330	23,324	28,037.28	15,029
United States to Australasia:							
British.....	4	23,780	16,120	26,229	16,102	20,150.00	22,853
United States.....	1	52	52	73	52	39.00	.....
Total.....	5	23,832	16,172	26,302	16,154	20,189.00	22,853
United States to South America:							
British.....	2	7,639	6,455	10,381	6,236	5,500.08	.....
United States.....	2	14,075	9,140	17,797	9,140	11,425.00	4,639
Total.....	4	21,714	15,595	28,178	15,426	16,925.08	4,639
Around the world:							
United States.....	2	17,702	12,461	21,030	12,428	15,576.25	5,474
United States to Canada:							
Norwegian.....	1	4,610	2,961	4,904	2,939	3,701.25	4,220
United States.....	3	12,952	10,027	16,105	9,993	12,533.75	12,082
Total.....	4	17,592	12,988	21,099	12,932	16,235.00	16,302
Europe to United States:							
Norwegian.....	2	11,866	9,838	16,309	9,754	8,543.52	.....
Swedish.....	1	5,148	2,765	4,721	3,546	3,456.25	.....
Total.....	3	17,014	12,603	21,030	13,300	11,999.77	.....

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Foreign vessels in ballast (U. S. intercoastal):							
British.....	1	6,416	5,415	8,966	5,329	\$4,619.52	.....
Norwegian.....	1	4,868	2,688	4,494	2,732	3,360.00	.....
Total.....	2	11,284	8,103	13,460	8,061	7,979.52	.....
South America to Canada:							
Norwegian.....	1	4,722	2,728	4,624	2,765	3,410.00	1,682
United States.....	1	5,095	3,484	5,546	3,540	4,355.00	2,086
Total.....	2	9,817	6,212	10,170	6,305	7,765.00	3,768
Canada to Australasia:							
British.....	2	9,690	7,705	12,632	7,753	9,631.25	10,281
West Indies to United States:							
Japanese.....	1	2,877	2,329	3,835	2,291	2,071.44	.....
United States.....	1	4,903	4,206	6,752	4,206	3,530.16	.....
Total.....	2	7,780	6,535	10,587	6,497	5,601.60	.....
South America to Far East:							
Japanese.....	1	7,626	5,441	9,627	5,848	6,801.25	2,148
Cristobal to South America:							
German.....	7	5,984	4,004	7,569	4,136	4,764.77	1,193
Panamanian.....	4	404	412	812	404	484.80	197
Total.....	11	6,388	4,416	8,381	4,540	5,249.57	1,390
Europe to Central America:							
Danish.....	1	3,531	2,334	3,953	2,394	2,980.00	2,395
German.....	1	2,471	1,432	2,447	1,437	1,790.00	626
Total.....	2	6,002	3,816	6,400	3,831	4,770.00	3,021
West Indies to Balboa:							
United States.....	1	5,477	4,271	6,664	4,148	5,338.75	10,908
United States to Hawaiian Islands:							
United States.....	1	5,450	3,465	5,686	3,450	4,331.25	2,287
West Indies to Australasia:							
British.....	1	5,106	3,034	5,060	3,025	3,792.50	8,010
South America to United States:							
United States.....	1	5,011	3,623	5,702	3,580	4,523.75	527
Africa to Canada:							
British.....	1	4,797	4,130	6,694	4,129	3,453.84	.....
Africa to South America:							
Danish.....	1	1,844	1,410	2,357	1,423	1,327.68	.....
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,372
Panamanian.....	2	44	48	90	58	52.80	27
Total.....	4	1,485	1,334	2,388	1,362	1,660.30	1,399
South American intercoastal:							
Colombian.....	1	58	56	80	56	42.00	.....
Grand total, August, 1932	162	849,504	611,225	1,005,309	613,067	708,462.88	348,271
Grand total, August, 1931	186	932,175	718,300	1,202,934	726,355	840,966.64	463,512
Grand total, August, 1930	244	1,258,181	933,348	1,553,747	941,570	1,062,369.82	679,407

PACIFIC TO ATLANTIC.

United States intercoastal:							
United States.....	46	266,487	204,547	332,169	204,346	\$255,683.75	339,358
Canada to Europe:							
British.....	16	87,618	57,350	93,900	57,733	71,687.50	122,804
Danish.....	1	8,275	5,779	10,224	6,430	7,223.75	9,134
French.....	2	15,060	9,009	16,085	9,622	11,261.25	15,755
German.....	3	20,243	13,056	22,274	13,346	16,320.00	25,683
Italian.....	2	16,000	12,568	20,823	12,978	15,710.00	12,407
Norwegian.....	6	31,238	20,915	34,510	21,178	26,143.75	48,184
Swedish.....	1	5,661	3,406	5,642	4,320	4,257.50	8,546
United States.....	1	5,497	3,465	5,687	3,450	4,331.25	7,842
Total.....	32	189,592	125,548	200,145	129,057	156,935.00	250,355

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Philippine Islands to United States:							
Danish.....	1	5,923	3,137	5,339	3,341	\$3,921.25	7,147
Japanese.....	4	19,428	15,140	22,163	14,735	18,925.00	26,016
United States.....	5	46,025	33,282	55,229	33,142	41,602.50	30,193
Total.....	10	71,381	51,559	82,736	51,263	64,448.75	63,356
South America to Europe:							
British.....	2	13,011	13,106	24,255	14,797	16,382.50	12,274
Danish.....	1	7,867	6,532	10,517	6,463	8,190.00	14,476
Danzig.....	1	8,592	6,123	10,353	5,943	7,653.75	15,542
Dutch.....	3	16,236	10,670	13,129	10,576	13,337.50	24,772
German.....	1	2,310	2,065	3,369	2,063	2,531.25	3,451
Norwegian.....	1	6,483	5,398	9,103	5,401	6,747.50	12,730
Swedish.....	1	2,831	1,477	2,744	1,923	1,846.25	4,906
Total.....	10	62,350	45,391	78,470	47,171	56,733.75	88,151
South America to United States:							
British.....	3	13,111	10,976	17,902	10,953	13,720.00	25,327
Danish.....	1	2,372	1,869	3,136	1,893	2,336.25	4,600
German.....	1	4,979	3,010	5,098	3,007	3,762.50	7,856
United States.....	3	20,755	13,081	25,950	13,081	16,351.25	10,004
Total.....	8	41,217	28,936	52,036	28,934	36,170.00	47,737
Far East to United States:							
Japanese.....	5	28,245	22,632	35,821	22,250	28,290.00	21,355
Panamanian.....	1	6,955	3,659	6,856	3,659	4,573.75	3,742
Total.....	6	35,200	26,291	42,677	25,909	32,863.75	25,097
Hawaiian Islands to United States:							
United States.....	6	31,427	21,591	35,208	21,567	26,938.75	43,906
United States to Europe:							
British.....	1	6,465	5,424	8,955	5,422	6,780.00	12,876
Norwegian.....	3	13,689	10,791	17,791	10,640	13,483.75	25,384
United States.....	1	8,619	7,026	11,247	6,953	8,782.50	15,326
Total.....	5	28,773	23,241	37,993	23,015	29,051.25	53,586
Australasia to Europe:							
British.....	2	17,833	12,234	21,745	13,343	15,292.50	12,797
French.....	1	5,629	4,343	7,037	4,402	5,423.75	3,510
Total.....	3	23,462	16,577	28,782	17,750	20,712.25	16,307
Australasia to Canada:							
British.....	3	14,837	10,525	17,161	10,504	13,156.25	20,783
Canada to United States:							
United States.....	3	14,271	9,858	15,760	9,887	12,322.50	13,710
South America to Canada:							
Norwegian.....	1	7,109	6,914	10,051	7,019	8,530.80	14,823
United States to South Africa:							
British.....	1	6,037	3,238	5,302	3,094	4,047.50	37
South America to Cristobal:							
Colombian.....	1	307	302	405	303	226.50	.....
German.....	6	5,243	3,385	6,513	3,496	4,231.25	5,579
Panamanian.....	4	404	412	812	404	484.80	777
Total.....	11	5,954	4,090	7,735	4,203	4,942.55	6,356
Canada to South America:							
United States.....	1	5,033	3,503	5,515	3,511	4,378.75	6,555
United States to South America:							
Brazilian.....	1	3,656	2,797	4,960	3,062	3,496.25	.....
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	933
United States to West Indies:							
Belgian.....	1	337	311	605	215	242.64	.....
Balboa to Cristobal:							
Panamanian.....	2	44	43	90	58	63.00	82
Grand total, August, 1932	152	808,603	536,290	963,722	591,879	732,335.99	1,001,182
Grand total, August, 1931	204	1,016,019	745,222	1,229,635	748,271	929,236.07	1,325,722
Grand total, August, 1930	221	1,037,392	818,416	1,352,631	826,075	1,017,869.60	1,469,062

Traffic by Commodities for August, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of August, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts.....				21
Agricultural implements.....	701	65	806	105
Alfalfa meal.....		975		975
Ammonium compounds.....	66	14	1,094	17
Animal foods.....	33	747	33	1,034
Apparel, wearing (hats, shoes, clothing, etc.).....	159		169	16
Asbestos.....	86		287	
Asphalt and tar.....	139	5,000	8,356	5,569
Automobiles (and auto trucks).....	1,561	33	2,612	43
Automobile parts and accessories.....	2,665	25	5,871	33
Bags and bagging, textile.....	354	173	359	173
Bananas.....				82
Barks, miscellaneous.....		29		366
Barley.....				19,312
Beans, edible, dry.....	368	3,735	368	7,907
Beer.....			10	6
Beverages, nonalcoholic.....	288	125	297	125
Blood and tankage.....	795		795	95
Bones and bone meal.....			967	
Books and printed matter.....	25		39	
Borax.....		1,110		5,837
Bran and pollards.....			100	2,094
Bricks and tile.....	74		324	
Camphor.....				128
Canned and preserved goods:				
Fish.....	367	10,559	664	12,655
Fruit.....	270	18,836	270	35,297
Meat.....	27	17	270	43
Milk.....	43	1,281	135	1,396
Soup.....	1,853		1,882	19
Vegetables.....	1,448	2,754	1,458	2,781
Miscellaneous and unclassified.....	2,134	14,386	2,655	15,396
Carbon black.....	212		259	
Celite.....		1,041		1,041
Cement.....	163	13	6,384	13
Chalk.....			100	
Charcoal.....	59		59	
Chemicals.....	2,678	276	6,039	503
Clay, china and fire.....	173	435	200	440
Clay, filtering.....		85		85
Clorox.....		271		271
Coal.....	2,396		2,526	
Cocoa and cacao beans.....	81	6	693	1,072
Cocoanuts and products.....	169	987	245	1,138
Coffee.....	164	69	3,043	9,839
Coke.....	1,304		4,802	
Cold storage and refrigerated products:				
Dairy products.....	39		99	2,244
Eggs.....		163		190
Fish.....			21	470
Meats.....		275	8	3,029
Poultry.....	4	120	4	120
Vegetables.....		543		838
Other and unclassified.....	106	13	106	13
Confectionery.....	483		585	
Copra.....				4,175
Copra meal and cake.....				1,121
Corn.....	20,951		20,998	
Cotton, raw.....	55	514	26,832	6,547
Cresote.....			2	
Dextrine.....	46		46	

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Drugs and medicines.....	1,065	20	1,358	291
Dyes.....			638	1
Earthenware.....	29	11	168	304
Eggs, dried.....		31		96
Electrical apparatus and appliances.....	336	13	641	249
Explosives.....			37	
Extract, quebracho.....			294	
Fertilizers.....			1,852	
Floor coverings.....	286	227	288	425
Flour.....	367	6,522	1,053	8,303
Fruit, dried.....	47	8,633	65	23,521
Fruit, fresh.....		2,225		17,710
Furniture and household goods.....	237	11	268	11
Gallnuts.....				13
General.....	17,547	5,693	37,121	12,183
Glass and glassware.....	2,462	30	3,958	367
Glue.....		80	4	121
Groceries.....	544	17	671	17
Guano.....				4,600
Gums.....		28		74
Hair, all kinds.....	178	10	178	11
Hay.....		2,587		2,587
Hemp, unmanufactured.....		25	4	878
Honey.....		260		440
Hops.....		29		29
Horns and hoofs.....				20
Infusorial earth.....		305		561
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	19,822	2,357	33,875	2,359
Ivory nuts.....			30	761
Jute, unmanufactured.....		140	85	151
Lard substitute.....	129	250	133	250
Liquors.....	116		515	
Lumber (including manufactured mill products).....	819	75,491	1,121	124,633
Machinery (other than electrical).....	2,120	265	4,518	407
Malt.....	90		238	
Manufactured goods.....	3,168	880	5,175	1,867
Marble and granite.....	40		76	
Matches.....	234	192	280	202
Metals:				
Antimony.....		26		85
Copper.....		5,524		20,513
Gold and silver.....			20	14
Iron.....		30	80	30
Lead.....		22	14	6,525
Scrap.....	335	547	14,343	673
Tin.....		66	47	2,652
Zinc.....			458	4,301
Other and unclassified.....	36	59	43	194
Milk, powdered.....	17	802	73	802
Molasses and syrups.....	176		183	7,667
Newsprint.....	53		1,942	
Nitrates.....	2,675		2,728	25
Nuts, edible (including meats).....		118	150	275
Oats.....	68		109	2,446
Oils, mineral:				
Crude.....				70,910
Gas and fuel.....		36,850	10,908	37,514
Gasoline, benzine, and naphtha.....	25	98,173	7,155	162,922
Kerosene.....			1,101	667
Lubricating and greases.....	6,721	1,347	14,002	1,383
Oils, vegetable:				
Coconut.....		515		4,715
Cottonseed.....	71		73	23
Linseed.....	25		29	1
Olive.....	30	18	389	18
Rapeseed.....			89	119
Wood.....	15		15	2,412
Other and unclassified.....	215	21	1,225	1,766
Oil, fish.....			17	20
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....	31	217	181	470
Oilseed cake and meal.....	2,558		2,558	4,153
Ores:				
Copper.....				5,917
Gold and silver.....				6
Iron.....			4	
Lead.....				347
Magnesite.....	15	40	15	40
Manganese.....				449
Tin.....				2,404

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Ores—Continued:				
Zinc.....			14	1,032
Other and unclassified.....	20	100	20	605
Paints and varnishes.....	296	33	430	33
Paper and paper products ¹	4,480	5,777	12,443	6,491
Paper scrap.....			1,032	
Peanuts.....	621	31	621	31
Peas, dry.....		43	8	43
Peatmoss.....			293	
Phosphates.....	240	68	12,833	88
Plaster.....			61	
Porcelain ware.....	15	151	81	1,731
Potash.....		905	2,727	1,445
Pyrethrum flowers.....				357
Rags and waste.....	10	50	10	286
Railroad material.....	120		861	
Rice.....	172	428	220	2,085
Rope and twine.....	58	55	59	154
Rosin.....	794		2,819	
Rubber:				
Manufactured.....	824	77	1,032	77
Raw.....				379
Scrap.....		1	20	33
Rye.....				100
Salt.....	279		1,335	
Sand.....			1,200	
Seeds (except oilseeds).....	308	898	1,466	1,369
Sewer pipe (concrete and terra cotta).....	58		58	
Shells, oyster.....	911		1,536	
Silk, raw.....	89	217	89	1,147
Skins and hides.....	35	1,793	55	3,220
Slag.....			465	
Slate.....	375		375	
Soaps and products.....	2,093	104	2,261	110
Soda and sodium compounds.....	1,244		1,619	
Soy beans.....	479		479	24
Sugar.....	124	26,139	8,234	154,901
Sulphur.....	4,073		18,459	579
Talc.....		195	20	225
Tallow.....		203		567
Tea.....	1	12	72	976
Textiles ²	3,123	252	5,565	837
Tinplate.....	3,520		7,527	
Tobacco and manufactures.....	788	53	3,415	98
Toilet preparations.....	87		87	
Turpentine.....	119		460	
Vegetables, dry ²		590	49	1,058
Wall board.....	23		29	35
Wax, paraffin.....	188	23	931	23
Wheat.....		135	27	121,736
Wines.....		300	69	1,096
Wood pulp.....	93	3,650	1,291	4,413
Wool.....		1,714	47	3,224
Total, August, 1932.....	131,251	359,379	348,271	1,001,182
Total, August, 1931.....	176,844	475,747	463,512	1,325,722
Total, August, 1930.....	214,322	512,105	679,407	1,469,062

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 20, 1932.

No. 1155.

Panama, Colon harbor approach, shoaling reported. Shoals have formed at the ends of the breakwaters at the entrance to Limon Bay as follows:

(a) A depth of 23 feet about 80 yards 256 degrees from East breakwater light.

(b) A depth of 27 feet about 95 yards 97 degrees from West breakwater light.

Approximate position, 9° 23' 30" N., 79° 55' 30" W.

The above is quoted from Notice to Mariners No. 37, dated Washington, D. C., September 10, 1932.

J. L. SCHLEY,
Acting Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 12, 1932.

No. 1141.

South America, east coast, British Guiana, beacon erected. The following notice was received by the Governor of the Panama Canal, from the officer administering the Government of British Guiana:

A beacon has been erected in latitude 6° 57' 0" N., longitude 58° 03' 18" W. to replace the Bar Lightship. The latter will be withdrawn about the middle of September, 1932.

A white light, revolving every 30 seconds, and visible all round the horizon will be exhibited on the beacon from sunset to sunrise.

During periods of poor visibility a sound signal will be made, either by siren, whistle, or ringing of a bell.

The white revolving light is exhibited by an 18-inch Sperry beacon with an estimated beam candle power of one million. The focal plane of the light is 64 feet above M. H. W. S. and this should be visible to an observer 35 feet above sea level at a distance of 16 nautical miles.

The height from the top of the light to M. H. W. S. is 65 feet.

For the purpose of "distance by nautical angle" it will be found more convenient to measure the angle from the platform, on which is mounted the light, at the top of the tapered steel lattice mast, to the water's edge.

The distance to M. H. W. S. is 59 feet.

The main portion of the beacon is a wooden structure 10 feet above M. H. W. S. It is 85 feet long and 27 feet broad, the major axis lying approximately W. N. W. and E. S. E.

On this is erected:

(1) On its eastern end and for two-thirds of its length a house to accommodate the attendants and pilots;

(2) On its western end a tapered steel lattice-work mast, on top of which is mounted light.

On the eastern extremity will also be erected a wooden flagstaff 35 feet above the deck level for the wireless telegraph aerial and from which the following signals will be shown to approaching ships:

Current setting to the N. — A A A

Current setting to the N. E. — A A B

Current setting to the E. — A B B

Current setting to the S. E. — A B A

Current setting to the S. — B B B

Current setting to the S. W. — B B A

Current setting to the W. — B A A

Current setting to the N. W. — B A B

In the above table:

By day—

A represents a cone pointing upward.

B represents a sphere.

By night—

A represents a red light.

B represents a white light.

These signals will be in a vertical line one over the other in order shown above, reading from left to right, six feet apart.

The beacon will be in communication with Georgetown by wireless telegraphy and communicates as necessary on pilotage matters with ships using the port. (Signed) R. D. BAIRD, Harbor Master.

H. BURGESS,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending September 17, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Antigua.....	United Fruit Co.....	September 4	September 4	583	18
Nora.....	Arrow Oil Co.....	September 4	September 4	12,771	
Este.....	North German Lloyd.....	September 5	September 5		104
Point Fernin.....	Swayne & Hoyt.....	September 5	September 6	798	
Storaas.....	Anglo-Saxon Petroleum Co.....	September 6	September 8	10,531	
Capac.....	Grace Line.....	September 6	September 6	750	60
Kwanto Maru.....	Osaka Shosen Kaisha.....	September 8	September 8		57
Virginia.....	Panama-Pacific Line.....	September 9	September 9		23
Chateau Thierry.....	U. S. Army.....	September 10	September 13	242	76
Los Angeles.....	Hamburg-American Line.....	September 10	September 11	22	185
Santa Cecilia.....	Panama Mail S. S. Co.....	September 11	September 11	392	4
Abraham Lincoln.....	Fred Olsen & Co.....	September 11	September 11	99	
Bridge.....	U. S. Government.....	September 12	September 12	7	
Neches.....	U. S. Government.....	September 12	September 13	6,817	
Santa Clara.....	Grace Line.....	September 12	September 13	179	60
Margaret Johnson.....	Johnson Line.....	September 13	September 13	213	
Svendrott.....	South Pacific Line.....	September 14	September 15	73	
Santa Elisa.....	Panama Mail S. S. Co.....	September 15	September 15	98	80
Santa Barbara.....	Grace Line.....	September 15	September 16	99	116
President Adams.....	Dollar Line.....	September 16	September 16	1	
Ruakine.....	New Zealand Shipping Co.....	September 16	September 16	66	

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OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., September 28, 1932. No. 9.

Comparison of Canal Traffic in August, 1932, with August Traffic in Previous Years.

Commercial traffic through the Canal during the month of August, 1932, with 314 transits, aggregating 1,658,112 net tons (Panama Canal measurement), and carrying 1,349,453 tons of cargo, was the lowest August traffic since 1922. In comparison with August, 1931, commercial traffic for the past month declined 76 transits (19.5 per cent); 340,082 net tons (17.0 per cent); and 439,781 cargo tons (24.6 per cent). In comparison with August, 1930, there was a decrease of 151 transits (32.5 per cent); 687,461 net tons (29.3 per cent); and 799,016 cargo tons (37.2 per cent).

The peak month for August traffic in so far as net tonnage (Panama Canal measurement) and cargo tonnage are concerned occurred in 1929, when the number of vessels which made transits was 541. The peak month for transits in any month of August since the opening of the Canal occurred in 1927 when 543 vessels were put through the Canal. In comparison with these high figures last month's traffic decreased 42.2 per cent in transits, 35.2 per cent in net tonnage, and 49.7 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage, Panama Canal measurement, and the tons of cargo carried through the Canal during the month of August each year from 1914 to 1932, inclusive, and for comparison, the monthly averages for the corresponding fiscal year ending on June 30 preceding:

Calendar year.	Month of August.			Fiscal year.	Average per month for fiscal year.		
	Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.		Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.
1914.....	24	89,894	110,884	1915.....	102	361,197	465,567
1915.....	155	492,752	571,475	1916.....	63	199,687	257,843
1916.....	137	443,415	505,673	1917.....	150	483,213	588,213
1917.....	170	511,648	579,340	1918.....	172	547,839	627,699
1918.....	158	452,005	533,703	1919.....	169	510,416	576,385
1919.....	188	586,111	715,724	1920.....	206	712,170	781,208
1920.....	266	951,345	1,040,740	1921.....	241	951,323	966,601
1921.....	236	965,276	839,273	1922.....	228	951,455	907,075
1922.....	257	1,084,133	1,165,950	1923.....	331	1,550,482	1,630,656
1923.....	454	2,232,590	2,168,750	1924.....	436	2,179,073	2,249,559
1924.....	372	1,901,895	1,958,479	1925.....	389	1,904,596	1,996,570
1925.....	372	1,779,627	1,912,217	1926.....	433	2,064,549	2,169,787
1926.....	464	2,230,905	2,321,697	1927.....	456	2,185,651	2,312,351
1927.....	543	2,513,614	2,429,947	1928.....	538	2,454,886	2,469,226
1928.....	526	2,437,246	2,425,336	1929.....	534	2,468,483	2,555,250
1929.....	541	2,558,739	2,680,730	1930.....	515	2,498,385	2,502,519
1930.....	465	2,345,573	2,148,469	1931.....	461	2,316,012	2,090,233
1931.....	390	1,998,194	1,789,234	1932.....	376	1,968,785	1,650,667
1932.....	314	1,658,112	1,349,453	(1).....	350	1,832,969	1,502,180

¹ Canal opened August 15, 1914.

² Average for 10½ months of fiscal year ended June 30, 1915.

³ Average for first 8 months of calendar year 1932.

CANAL WORK IN AUGUST, 1932.

The following is the report of the Acting Governor to the Secretary of War, of Canal work in the month of August, 1932.

BALBOA HEIGHTS, C. Z., September 21, 1932.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of August, 1932:

TRANSITS AND TOLLS.

During the month 314 commercial vessels and 7 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 33 vessels belonging to the United States Army and Navy, making a total of 354 transits for the month, or a daily average on all traffic of 11.42.

Tolls on the 314 commercial vessels amounted to \$1,440,848.87, and on the launches \$31.83, a total of \$1,440,880.70, or a daily average on all traffic of \$46,480.02.

The number of commercial vessels passing through the Canal in the past month was the lowest recorded since December, 1922, when 304 were transited. Tolls collected were the lowest since February, 1923, in which month \$1,423,954.21 was collected.

In comparison with the first 8 months of the calendar year 1931, commercial traffic this year shows a decrease of 18.2 per cent in transits; 15.6 per cent in net tonnage (Panama Canal measurement); 21.5 per cent in cargo carried; and 16.5 per cent in tolls collected; in comparison with the first 8 months of the calendar year 1930, there was a decline of 28.8 per cent in transits; 24.9 per cent in net tonnage (Panama Canal measurement); 36.6 per cent in cargo tonnage; and 26.7 per cent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of August in the two preceding years and in 1932 are shown in the following tabulation:

	August, 1930.	August, 1931.	August, 1932.
Commercial vessels.....	465	390	314
Launches (under 20 tons).....	19	4	7
Noncommercial vessels:			
United States Government.....	41	32	33
Panamanian Government.....	1		
Vessels for repairs.....		1	
Total.....*	526	427	354

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	4	3	7
Pedro Miguel.....	16	16	32
Miraflores.....	16	17	33
Total.....	36	36	72

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, for the commercial traffic transiting the Canal each month from the beginning of the calendar year 1932, to the end of August, 1932, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January...	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February...	431	353	2,134,866	1,873,177	1,930,219	1,645,393	1,915,902.73	1,647,797.06
March.....	439	363	2,211,934	1,864,896	1,915,507	1,643,932	1,964,434.22	1,645,366.81
April.....	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,634.67
May.....	428	357	2,184,959	1,936,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June.....	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,845,633.45	1,463,723.36
August....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
Total.....	3,423	2,801	17,372,876	14,663,752	15,304,245	12,017,443	15,366,528.62	12,833,820.90

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for August in the years 1930, 1931, and 1932, and comparison with the monthly averages for the fiscal year 1932:

	August, 1930.	August, 1931.	August, 1932.	Average per month for fiscal year 1932.
Number of vessels.....	465	390	314	376
Panama Canal net tonnage.....	2,345,573	1,998,194	1,658,112	1,968,785
United States net tonnage.....	1,751,764	1,463,531	1,197,515	1,433,982
Registered gross tonnage.....	2,911,378	2,432,619	1,974,031	2,397,578
Registered net tonnage.....	1,770,645	1,474,626	1,204,946	1,448,846
Tolls.....	\$2,080,230.42	\$1,770,202.71	\$1,440,848.87	\$1,725,614.75
Tons of cargo carried.....	2,148,469	1,789,234	1,349,463	1,650,667

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for fiscal year 1932.
	August, 1930.	August, 1931.	August, 1932.	
Number of transits.....	15.00	12.58	10.13	12.31
Panama Canal net tonnage.....	75,664	64,458	53,487	64,550
Tolls.....	\$67,104.21	\$57,103.31	\$46,479.00	\$56,577.53
Tons of cargo carried.....	69,305	57,717	43,531	54,120

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of August in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for fiscal year 1932.
	August, 1930.	August, 1931.	August, 1932.	
Panama Canal net tonnage.....	5,044	5,124	5,281	5,254
United States net tonnage.....	3,767	3,753	3,814	3,827
Registered gross tonnage.....	6,261	6,237	6,237	6,398
Registered net tonnage.....	3,898	3,781	3,837	3,866
Tolls.....	\$4,473.61	\$4,538.98	\$4,588.69	\$4,595.51
Tons of cargo (including vessels in ballast).....	4,620	4,588	4,293	4,405
Tons of cargo (laden vessels only).....	5,344	5,262	4,943	5,154

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fifteen nationalities were represented in the commercial traffic through the Canal in August, 1932. Vessels of United States registry, with 132, lead in the number of transits, while those flying the British flag, with 68, were second. Vessels of these two nationalities made up 63.7 per cent of the total transits for the month. Vessels of Norwegian and German registry were next in numerical importance with 24 each.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of August, 1932, was 1,349,453 tons, a decrease of 439,781 tons, or 24.6 per cent, in comparison with August, 1931. Cargo from the Atlantic to the Pacific aggregated 348,271 tons, compared with 362,717 tons in the previous month, and 463,512 tons in August, 1931. From the Pacific to the Atlantic cargo amounted to 1,001,182 tons, as compared with 897,264 tons in the previous month, and 1,325,722 tons in August, 1931. The combined cargo movement in the past month showed an increase of 89,472 tons, or 6.6 per cent, in comparison with that passing through in July, 1932.

From the Atlantic to the Pacific, manufactures of iron and steel, totaling 33,875 tons, comprised the leading commodity, followed by mineral oils with 33,166 tons, cotton with 26,832 tons, corn with 20,998 tons, sulphur with 18,459 tons, paper with 14,385 tons, and scrap metal with 14,343 tons. Increases were made in shipments of cotton, corn, sulphur, and scrap metal, while manufactures of iron and steel, mineral oils, and paper decreased.

From the Pacific to the Atlantic, mineral oils formed the leading commodity in August, 1932, with shipments totaling 273,396 tons. This item was followed by sugar with 154,901 tons, lumber with 124,633 tons, wheat with 121,736 tons, canned goods with 67,587 tons, and metals with 34,314 tons. A large increase was recorded in sugar shipments in comparison with August, 1931, and smaller increases were made in wheat and canned goods. The most important decreases in the cargo movement in this direction were made in the shipments of lumber and nitrates, while mineral oils and metals registered less important losses. There was a decrease of 324,540 tons, or 24.5 per cent, in the cargo movement in this direction in comparison with August, 1931, while from the Atlantic to the Pacific there was a decrease of 115,241 tons, or 24.9 per cent.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden vessels and \$0.72 per ton for vessels in ballast, computed on the basis of the Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both the Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.891 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.716 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of August, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of the Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian	\$242.64	\$202.20		\$40.44		\$0.720
Brazilian	3,496.25	3,656.00	\$159.75		\$0.956	
British	302,791.16	339,953.00	37,161.84		.860	.713
Colombian	263.50	219.00		49.50		.736
Danish	40,251.94	41,880.20	1,628.26		.900	.720
Danzig	19,514.31	18,475.80		1,038.51	.890	.720
Dutch	32,433.44	33,096.20	5,657.76		.813	.720
French	31,037.50	40,027.00	8,999.50		.775	
German	59,069.77	71,145.60	12,075.83		.823	.720
Italian	20,303.75	22,029.00	1,720.25		.922	
Japanese	87,015.64	87,410.20	394.56		.984	.720
Norwegian	105,576.43	117,168.40	11,591.97		.858	.709
Panamanian	5,656.15	7,851.00	2,194.85		.720	
Swedish	13,172.50	16,499.80	3,327.30		.724	.671
United States	720,008.89	770,315.40	50,306.51		.918	.720
Total	1,440,848.37	1,574,928.80	135,298.38	1,128.45	.891	.716
Net increase for all traffic			134,079.93			

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade	\$21,852.92
United States foreign trade	28,453.59
Total	50,306.51

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in August, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
British.....	.57	1.26	.94
Danish.....	.70	1.45	1.25
Danzig.....		1.81	1.81
Dutch.....	.32	1.52	.89
French.....	.18	.93	.57
German.....	.38	1.30	.81
Italian.....	.22	.78	.62
Japanese.....	.91	.99	.96
Norwegian.....	.64	1.73	1.27
Panamanian.....	.50	.62	.61
Swedish.....	.50	1.58	1.19
United States.....	.53	1.20	.90
Averages, August, 1932.....	.54	1.24	.93
Averages, August, 1931.....	.61	1.31	1.01
Averages, August, 1930.....	.73	1.37	1.07

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of August, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	21	127,390	\$91,720.80			
Laden.....	3	15,684	15,783.75	25	150,530	\$156,810.80
All others—						
Ballast.....	19	79,726	56,513.93	1	307	226.50
Laden.....	116	626,506	544,300.25	125	657,434	575,106.05
Noncargo-carrying ships—						
Yachts.....	3	198	144.15	1	337	242.64
Total.....	162	849,504	708,462.88	152	808,608	732,385.99
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	98	531,427	462,243.72	84	446,710	411,083.75
Motor.....	58	317,777	245,980.21	65	361,517	320,999.60
Motor schooner.....	3	102	94.80	2	44	60.00
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	3	198	144.15	1	337	242.64
Total.....	162	849,504	708,462.88	152	808,608	732,385.99

Of the 182 steam driven cargo-carrying vessels, 136 were oil burning, 41 coal burning, and 5 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of August, 1932. If tolls had been assessed against these vessels at commercial rates, the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Cruisers.....	2	17,050	\$8,525.00	1	7,050	3,525.00
Destroyers.....	4	4,860	2,430.00			
Destroyer tenders.....	1	5,294	6,617.50			
Launches.....	1	10	7.50			
Mine sweepers.....	1	950	475.00	3	2,850	1,425.00
Submarines.....	3	2,628	1,314.00	6	5,256	2,628.00
Tankers.....	1	6,424	7,708.80			
Transports.....				1	3,908	4,885.00
Tugs.....	1	1,000	500.00	1	1,000	500.00
U. S. Army vessels:						
Launches.....	1	10	7.50			
Mine planters.....	1	1,208	604.00	1	1,208	604.00
Transports.....	1	5,764	7,205.00	2	20,102	25,127.50
Tugs.....				1	46	34.50
Total.....	17		35,394.30	16		38,729.00

* Indicates displacement tonnage. * Indicates Panama Canal net tonnage. * Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of August, 1932, carried cargo as follows: Atlantic to Pacific, 227 tons; Pacific to Atlantic, 2,150 tons; total, 2,377 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of August, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	2	11	\$8.25
Pacific to Atlantic.....	5	32	23.58
Total.....	7	43	31.83

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of August, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons	50,738	14,714	65,452
Local cargo shipped..... tons	4,379	500	4,879
Transit cargo arriving..... tons	1,357,059	1,347,622	2,704,681
Transit cargo clearing..... tons	1,358,530	1,346,220	2,704,750
Cargo received for transshipment..... tons	21,948	5,049	26,997
Cargo transhipped..... tons	21,917	547	22,464
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	96	56	152
Number of releases issued.....	753	359	1,112
Tons received.....	1,087	314	1,401
Tons withdrawn.....	868	233	1,101
Packages received.....	4,809	2,168	6,977
Packages withdrawn.....	7,366	1,725	9,091
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	11		11
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons	2,693		2,693
Coal issued, miscellaneous:			
Panama Canal departments..... tons	61	6	67
Panama Railroad Company..... tons		11	11
U. S. Army, including vessels..... tons	19		19
Individuals and companies, including galley coal for ships..... tons	35		35
Transferred to Navy..... tons	17		17
Total sales and issues..... tons	2,825	17	2,842
Coal on hand, August 1, 1932..... tons	40,054		40,054
Coal on hand, September 1, 1932..... tons	37,229		37,229
Coal received from Navy..... tons		17	17
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls.	4,080.85	15,214.07	19,294.92
Panama Railroad Company..... bbls.	14,203.12	516.00	14,719.12
U. S. Army and Navy..... bbls.	14,989.14	122.21	15,111.35
Individuals and companies..... bbls.		169.60	169.60
Total sales and issues..... bbls.	33,273.11	16,021.88	49,294.99
Fuel oil on hand, September 1, 1932..... bbls.	58,421.60	91,152.77	149,574.37
Diesel oil received, borrowed from Union Oil Company..... bbls.	38.30		38.30
Diesel oil issued during August, 1932..... bbls.	38.30	3,673.71	3,712.01
Diesel oil on hand, September 1, 1932..... bbls.	2,914.35	26,539.73	29,454.08
Miscellaneous transfers..... bbls.	402.96	1,258.24	1,661.20
Gasoline and kerosene pumped for The Panama Canal..... bbls.	2,562.34	5,529.05	8,091.39
Gasoline pumped for individuals and companies..... bbls.	1,386.00	8,099.68	9,485.68
Oil pumped for individuals and companies:			
Receipts..... bbls.	256,109.96	14,034.68	270,144.64
Issues..... bbls.	123,680.26	73,476.22	197,156.48
Oil pumped for U. S. Navy..... bbls.	4,189.00	8,579.00	12,768.00
Total fuel oil, gasoline, and kerosene handled..... bbls.	421,641.93	130,672.46	552,314.39

	Cristobal.	Balboa.	Total.
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	9	4	13
Measured for Panama Canal net tonnage.....	2	3	5
Remeasured for Panama Canal net tonnage.....	10	1	11
Panama Canal net tonnage corrected.....	3	2	5
U. S. equivalent tonnage corrected.....	7	4	11
Services of harbor equipment:			
Tugs, total operating hours.....	183 $\frac{1}{2}$	165 $\frac{1}{2}$	349
Launches, total operating hours.....	79 $\frac{1}{2}$	1,002	1,793 $\frac{1}{2}$
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$6,236.25	\$5,451.25	\$11,687.50
Pilotage.....	12,355.00	4,980.00	17,335.00
Seamen.....	7,388.00	7,040.00	14,428.00
Launch service.....	1,240.00	1,770.50	3,010.50
Wharfage.....	11,199.21	3,634.45	14,833.66
Ships measured.....	10.00	60.00	70.00
Right of basin.....	59.53	2,322.98	2,382.51
Miscellaneous.....	201.25	204.00	405.25
Clearances issued.....	207	168	375
Bills of health issued.....	219	173	392

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal..	374	2,374,479	1,453,770	338	2,126,253	1,314,540
Vessels entering port but not transiting Canal.	54	273,909	157,711	10	43,325	25,317
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	90	664,363	401,933	75	567,774	340,771
<i>Ships clearing.</i>						
All vessels, including those transiting Canal..	376	2,393,848	1,463,897	339	2,116,635	1,311,682
Vessels clearing port but not transiting Canal.	55	232,663	162,663	9	47,244	31,153
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	92	677,077	409,357	74	558,463	335,014

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:									
From Atlantic ports.....	938	428	1,416	199	104	213	1,097	532	1,629
From Pacific ports.....	92	78	170	163	180	343	255	258	513
Total disembarking.....	1,030	506	1,586	272	284	556	1,352	790	2,142
Embarking:									
For Atlantic ports.....	986	676	1,662	67	204	271	1,053	880	1,933
For Pacific ports.....	83	66	149	202	258	460	285	324	609
Total embarking.....	1,069	742	1,811	269	462	731	1,338	1,204	2,542
Remaining on board:									
From Atlantic to Pacific ports.....	1,087	2,072	3,159				1,087	2,072	3,159
From Pacific to Atlantic ports.....				1,963	2,192	4,155	1,963	2,192	4,155
From Atlantic to Atlantic ports.....	1,131	158	1,239				1,131	158	1,289
From Pacific to Pacific ports.....				41	140	181	41	140	181
Total remaining on board.....	2,218	2,230	4,448	2,004	2,332	4,336	4,222	4,562	8,784
Total arriving on Canal Zone.....	3,293	2,736	6,034	2,276	2,616	4,892	5,574	5,352	10,926
Total departing from Canal Zone.....	3,287	2,972	6,259	2,273	2,794	5,067	5,560	5,766	11,326

NOTE.—In passengers "remaining on board," those from the Atlantic to Pacific and Pacific to Atlantic are reported only at the port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.
Atlantic to Pacific.....	162	56	34.6
Pacific to Atlantic.....	152	57	37.5
Total.....	314	113	36.0

In addition to the aforesaid, 48 passenger-carrying vessels called at the port of Cristobal and 6 at Balboa without transiting the Canal, making a total of 167 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of August, 1932, 38 commercial airplanes entered and cleared at Cristobal, and none at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of August, 1932, together with the total sales in the corresponding month in 1931 and 1930:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$860.49	\$3,721.69	\$9,177.34	\$103.22	\$2,931.52	\$16,794.26
Government vessels.....	157.40	1,068.93	3,056.78	28.74	379.19	4,691.04
P. R. R. vessels.....		262.35	225.07	503.03	.72	991.17
Total sales, August, 1932....	1,017.89	5,052.97	12,459.19	634.99	3,311.43	22,476.47
Total sales, August, 1931....	1,594.40	9,236.34	20,636.20	927.76	7,254.65	39,649.35
Total sales, August, 1930....	2,675.45	13,953.10	38,154.92	1,595.87	8,727.83	65,107.17
Sales at Balboa to:						
Commercial vessels.....	385.32	1,923.34	3,704.19	182.47	1,838.90	8,034.22
Government vessels.....	393.10	1,399.92	12,537.96	150.54	2,403.71	16,885.23
Total sales, August, 1932....	778.42	3,323.26	16,242.15	333.01	4,242.61	24,919.45
Total sales, August, 1931....	893.73	8,370.80	22,364.44	959.34	4,748.47	37,366.78
Total sales, August, 1930....	1,224.75	4,973.46	26,306.67	1,396.25	14,873.34	48,774.47

The aggregate sales to commercial vessels during the month was \$24,828.48; to Government vessels, \$21,576.27; and Panama Railroad vessels, \$991.17, making the total sales to all vessels, \$47,395.92. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of August, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial.*			Aug., 1930.	Aug., 1931.	Aug., 1932.
	North.	South.	Total.	North.	South.	Total.			
Gatun.....	149	152	301	8	11	19	470	394	320
Pedro Miguel.....	151	155	306	13	17	30	495	420	336
Miraflores.....	151	155	306	15	18	33	490	414	339
	Number of vessels put through locks.								
Gatun.....	152	163	315	27	23	50	536	446	365
Pedro Miguel.....	152	162	314	38	34	72	554	468	386
Miraflores.....	152	162	314	38	35	73	553	470	387

* Includes tolls paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	37	35	35
Panama Canal equipment.....	7	32	33
Launches under 20 tons measurement.....	6	5	5

The total consumption of water for lockages, loss in leakage, and maintenance, was as follows in August, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
	<i>Cubic feet.</i>	<i>Cubic feet.</i>	<i>Cubic feet.</i>
Lockages.....	1,336,480,000	1,019,510,000	1,028,120,000
Leakage.....	30,000,000	45,000,000	40,000,000
Maintenance.....	9,430,000	.....	69,860,000
Total, August, 1932.....	1,375,910,000	1,064,510,000	1,137,980,000
Total, July, 1932.....	1,344,060,000	1,096,770,000	1,191,630,000
Total, August, 1931.....	1,650,370,000	1,379,140,000	1,322,960,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of August, 1932, are shown in comparative form in the following tabulation:

	August.		August—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagres River at Alhajuela.....	3,102	3,450	4,724	1,579	3,047
Maximum momentary discharge for the month.....	12,090	17,640	39,700	818	.....
Gatun Lake watershed, total yield.....	6,910	9,687	11,656	4,901	8,110
Gatun Lake watershed, net yield.....	6,446	9,135	11,089	4,303	7,577
Draft on Gatun Lake for lockages and power.....	2,663	2,482	.....	.....	2,622

¹ August 19-20, 1885.

² Ten-year average (1921-1930).

The monthly mean discharge of the Chagres River at Alhajuela for August, 1932, was 3,450 c. f. s., which is 13 per cent above the 31-year average of 3,047 c. f. s. The maximum mean discharge on record for August is 4,724 c. f. s. in 1917 and the minimum, 1,579 in 1904. The maximum momentary discharge for the month was 17,640 c. f. s. at elevation 100.28 feet on the 25th, and the minimum was 2,240 c. f. s. at elevation 92.76 feet on the 18th. The maximum momentary discharge on record for August (1879 to 1932, inclusive) is 39,700 c. f. s. at elevation 103.55 feet on August 19-20, 1885. The minimum momentary discharge on record for August (1907 to 1932, inclusive) is 818 c. f. s. at elevation 91.68 feet on August 10, 1914. There were 3 rises of 5 feet or more during the month, on the 2d, 4th, and 25th.

Gatun Lake varied in elevation during August from a maximum of 85.80 feet on the 10th and 27th to a minimum of 85.40 feet on the 18th, averaged 85.60 feet and ended the month at elevation 85.59 feet. The total yield of the Gatun Lake watershed was 9,687 c. f. s. which is 19 per cent above the 19-year average of 8,110 c. f. s. The maximum total yield on record for August is 11,656 c. f. s. in 1917 and the minimum is 4,901 c. f. s. in 1930.

Miraflores Lake varied between elevations 53.38 feet on the 24th to 54.53 feet on the 28th, averaged 53.96 feet, and ended the month at elevation 54.07 feet.

SEISMOLOGY.

Six seismic tremors were recorded during the month, on the 10th, 13th, 24th, 26th, and two on the 28th. The one of the 24th was felt by residents of the Canal Zone and Republic of Panama.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 5,696,900 kilowatt hours, and the computed water consumption was 4,281,370,194 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 12,900 kilowatt hours, and the fuel oil consumption was 28.5 barrels. Diesel engines were in service four times during the month for peak load purposes caused by operation of dry dock pumps.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 24 vessels during the month. There were 457 work orders issued during the month, as compared with 452 issued during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of August, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	4	26	26
United States Army and Navy.....	8	5	6
Panama Canal equipment.....	1	3	
At Balboa:			
Commercial.....		5	3
United States Army and Navy.....	6	6	7
Panama Canal equipment.....	2	4	4
Total.....	21	49	46
Vessels in dry dock.			
At Cristobal:			
Commercial.....		7	7
United States Army and Navy.....		2	1
Panama Canal equipment.....		2	2
At Balboa:			
Commercial.....		1	
United States Army and Navy.....	2	1	3
Panama Canal equipment.....	1	1	1
Total.....	3	14	14

Preliminary work was started on interim docking of United States submarine *S-16*, annual overhaul was continued on overhaul of *S-11*, and overhaul of *S-14* was completed. The U. S. S. *Sturtevant* was dry docked and a propeller changed. Repairs were completed on the U. S. S. *Swan*, and carried forward on the U. S. S. *Memphis*, U. S. S. *Overton*, and submarine *S-48*.

MUNICIPAL ENGINEERING DIVISION.

On the Thatcher Highway project, at the east ferry slip, all wales except the bottom one were completed and about 80 per cent of the sheathing for the racks was put on. Caisson for north rack was set in place and both caissons were filled with concrete. At the west ferry slip, the driving of the piling for the racks was completed at the end of the month, all wales except the bottom one were in place and about 80 per cent of the sheathing was put on. The dike north of the bridge was repaired. Final arrangements were made for opening the road on September 1.

In connection with installation of oil lines to coaling dock at Cristobal, miscellaneous pipe work was performed, brush was cleared along pipeline, and trench was excavated. The work is 60 per cent completed.

Work on numerous improvement projects in the Canal Zone and in the cities of Panama and Colon were carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 700,690,000 gallons.

DREDGING DIVISION.

At East Culebra slide, a slight movement, averaging about 4.0 feet toward the Canal, was recorded for three of the reference points. This slide was in constant motion throughout the month, at times shoaling the easterly half of the Canal channel to within 70 feet of the center line. The entire area of the slide has settled, in some places as much as 35 or 40 feet, and there has been a general movement toward the Canal, reaching a maximum of 50.0 feet for the month for a point on the face of the slide approximately opposite station 1765 plus 00. Three dipper dredges worked on this slide, removing a total of 177,550 cubic yards of material during the month, of which 153,700 cubic yards were rock. Five hundred pounds of dynamite were used in dobbing a large boulder that slid into the Canal at station 1765 plus 00.

There was considerable surface movement at South Cucaracha slide, and an area on the west bank of the Canal between stations 1832 and 1835 has shown indications of activity. The movement to date is very largely confined to surface material. The West Barge Repair slide also showed considerable surface movement during the

month. There were numerous small bank breaks in the Cut during the month. There was no interference with shipping on account of slides during the month.

The total excavation during August, 1932, was 856,600 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
East and West Culebra slide (including extension).....	23,850	153,700	177,550
West Lirio slide.....	2,500	6,500	9,000
East Powder House slide.....		650	650
South Cucaracha slide.....	1,200	1,800	3,000
Maintenance.....	16,050	24,350	40,400
Balboa inner harbor:			
Maintenance.....	628,000		628,000
Total.....	671,600	187,000	858,600

The ferry service at the north end of Pedro Miguel locks operated 31 days during the month. One thousand three hundred and seventy (1,370) single trips were made, and 262 Panama Canal, 77 United States Army, and 5,235 other vehicles, a total of 5,574, were ferried across the Canal. The ferryboat *Presidente Amador* made several trial runs on the 30th and 31st between the new ferry slips at Balboa, preparatory to the inauguration of the regular ferry service at this point on September 1.

MADDEN DAM DIVISION.

The average working force for both the Government and the contractor for August, 1932, was 302 gold and 910 silver employees.

On the 26th the first concrete was poured in the Dam, in block 17-S. The mixing plant failed, however, after six batches had been poured, due to defects in drainage of bins. The necessary drainage system was installed the same day and the plant resumed operations on the 27th. During the month, 470.62 cubic yards were placed, *viz.*, in block 18, 49.43 cubic yards; and in block 17-S, 421.19 cubic yards. The amount of concrete poured to date totals 3,256.32 cubic yards. The total rock excavation to date for Madden Dam has been 73,260 cubic yards, and the total earth excavation, 124,581 cubic yards.

Work was continued during the month on clay grouting area No. 1 (saddles Nos. 10 and 11), the following work having been accomplished: 1,625 lineal feet of hole drilled, 82 lineal feet of 4-inch stand pipe set, and 511 lineal feet of 2-inch grout pipe placed. There were 1,540.8 cubic yards of grout placed of which 596.3 cubic yards were injected by air, 691.5 cubic yards placed with the Magma pump and 253.0 cubic yards placed by ram.

Considerable work was performed on clearing of Madden Dam reservoir.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on August 31, 1932, was 24,173, composed of 8,144 Americans, 2,801 of whom were men, 2,493 women, and 2,850 children; 179 Europeans, 76 of whom were men, 24 women, and 79 children; and 15,850 West Indians, 4,223 of whom were men, 2,854 women, and 8,773 children. The total number of persons in quarters on August 31, 1931, was 23,909.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of August 17, 1932, with a comparison of the working force for the preceding month and for August, 1931:

	Total employees.		As of August 17, 1932.		
	August, 1931.	July, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	109	95	54	35	90
Electrical.....	413	341	154	192	346
Municipal Engineering.....	762	690	77	532	659
Lock Operation.....	914	913	232	679	911
Dredging.....	1,121	993	169	815	984
Madden Dam.....	242	166	42	139	181
Mechanical.....	1,384	1,200	436	890	1,236
Marine.....	816	692	180	474	654
Fortifications.....	128	93	14	89	103
Total.....	5,899	5,138	1,353	3,805	5,164

	Total employees.		As of August 17, 1932.		
	August, 1931.	July, 1932.	Gold.	Silver.	Total.
Supply Department:					
Quartermaster.....	1,785	1,514	195	1,313	1,508
Commissary.....	1,550	1,463	230	1,235	1,465
Cattle Industry—Plantations.....	96	100	2	98	100
Hotel Tivoli.....	113	101	8	92	100
Hotel Washington.....	102	87	7	80	87
Transportation.....	301	296	76	222	298
Total.....	3,947	3,561	518	3,040	3,558
Accounting Department.....	210	196	191	5	196
Health Department.....	1,144	1,098	274	820	1,094
Executive Department.....	904	929	564	357	921
Total.....	2,258	2,223	1,029	1,182	2,211
Panama Railroad Company:					
General Manager.....	298	75	25	59	84
Transportation.....	171	324	68	231	299
Receiving and Forwarding Agency.....	1,214	520	72	522	594
Coaling Stations.....	187	89	21	74	95
Total.....	1,870	1,008	186	886	1,072
Grand total, August, 1931.....	13,964				
Grand total, July, 1932.....		11,980			
Grand total, August, 1932.....			3,091	8,914	12,005

Additions to the gold force on the Isthmus in August, 1932, were as follows: Employed in the United States, 6; reemployed in the United States, 1; employed on the Isthmus, 2; reemployed on the Isthmus, 9; total, 18. Separations from the gold force totaled 24, as follows: Resigned, 4; discharged, 13; retired, 7. At the end of the month there were on file 700 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employment during the month totaled 173 and separations from service 108; the number seeking employment was estimated at approximately 3,000.

VITAL STATISTICS.

A total of 168 deaths occurred during the month of August, 1932, among the population of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon (30,000), total population 149,570, which is equivalent to an annual death rate of 13.48 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 29; pneumonia (broncho and lobar), 22; diarrhea and enteritis, 19; organic diseases of the heart, 10; and cancer, 10. There were 7 deaths from syphilis, 3 from nephritis (acute and chronic), and 1 from diphtheria. There were 25 deaths among nonresidents, which are not included in the above statistics.

There were 329 live births and 14 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 27.52. Deaths among children under 1 year of age numbered 43, giving an infant mortality rate, based on the number of live births reported, of 130.70.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 109, of whom 14 were employees (5 white and 9 colored), 29 were members of employees' families (7 white and 22 colored), 2 were employees of contractors at Madden Dam (1 white and 1 colored), 2 were Canal Zone agriculturists, 22 were other civilian nonemployees, and 40 were Army and Navy personnel.

Of the 43 employees and members of employees' families, 30 were probably infected outside our sanitized areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were 2 deaths from malaria among residents, a child of a Canal Zone agriculturist, and a child residing in Panama City but who acquired his infection in the interior of the Republic.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$210,450.26, of which \$196,897.64 was for the Department of Operation and Maintenance, and \$13,552.62 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$21,048.05.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of July, 1932, as compared with July, 1931.

It is impossible to submit figures for the month of August at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	July, 1931.	July, 1932.
Tolls.....	\$1,848,675.20	\$1,468,768.57
Other receipts.....	255,429.61	240,139.19
Total transit revenues.....	2,104,104.81	1,708,907.76
Total transit expenses.....	1,049,191.41	879,864.22
Net transit revenues.....	1,054,913.40	829,043.54
Three per cent fixed capital charge.....	1,266,455.35	1,272,757.12
Surplus or (deficit).....	(211,541.95)	(443,713.58)
Business revenues.....	1,245,881.84	1,150,946.98
Business expenses.....	1,193,039.87	1,116,110.37
Net business revenues.....	52,841.97	34,836.61
Three per cent fixed capital charge.....	59,742.86	60,007.90
Surplus or (deficit).....	(6,900.89)	(25,171.29)
Combined revenues.....	3,349,936.65	2,859,854.74
Combined expenses.....	2,242,231.28	1,995,974.59
Net revenues.....	1,107,755.37	863,880.15
Three per cent fixed capital charge.....	1,326,198.21	1,332,765.02
Surplus or (deficit).....	(218,442.84)	(468,884.87)

() indicates deficit.

Respectfully,

J. L. SCHLEY,
Acting Governor.

Supplement No. 15—Tariff No. 10.

THE PANAMA CANAL, PANAMA RAILROAD COMPANY,
EXECUTIVE OFFICE, BALBOA HEIGHTS, C. Z., September 9, 1932.

Item 38.—SPECIAL TRAINS AND CARS.

Paragraph No. 1 is superseded by the following:

1. (a) Special train, consisting of engine, baggage, or buffer car, and necessary coaches, minimum charge deposited or guaranteed in advance, \$100. The rate for a round-trip within 12 hours, will be the same as for a 1-way train. If train does not return to starting point within 12 hours, an additional charge of \$50 will be made without further time limit. The return movement must in all cases be for the account of the same passengers, or the full rate for a special train will be charged.
- (b) All passengers must be provided with tickets or other regular forms of transportation.
- (c) No special train will be furnished or operated for a revenue of less than \$100.
- (d) When 100, or more, full first-class round-trip fares at commercial tariff rates are guaranteed, the cost of which equals or exceeds \$100, the special train charge of \$100 will be waived.
- (e) When the special train charge of \$100 is waived under the provisions of paragraph (d) above, no refunds will be made for unused tickets or portions of tickets so as to bring the revenue below the value of 100 first-class round-trip fares at the commercial rate.

H. BURGESS,
Governor, The Panama Canal,
President, Panama Railroad Company.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 27, 1932.

No. 1162.

Panama Canal, Balboa Reach, range targets temporarily discontinued. Range targets Nos. 3-A, 3-B, 4, 4-A, 4-B, 4-D, 4-E, 4-F, and 4-G, in Balboa Reach, were temporarily discontinued due to dredging operations, effective September 23, 1932.

J. L. SCHLEY,
Acting Governor.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, September 24, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.				Day.	Hour.			Nature.	Tons.	Gross.	Net.
Reina del Pacifico ¹	17	20 25	18	6 05	18	12 30	18	14 10	British	Pacific Steam Nav. Co.	551.0	76.6	26.8	Liverpool, England	Talcahuano, Chile.	General	1,335	18,871	13,099
San Marcos ²	17	13 35	18	7 05	18	14 47	18	16 30	American	Quaker Line.	410.0	54.0	16.4	Baltimore, Md.	Seattle, Wash.	General	1,539	6,755	4,895
Elmworth ³	18	4 05	18	8 20	18	15 42	18	17 05	British	R. S. Dalglish & Co.	400.0	53.2	14.3	St. John, N. B.	Vancouver, B. C.	Ballast	5,958	4,114	
Acajutla ⁴	10	14 18	18	8 50	18	15 48	18	17 05	British	Pacific Steam Nav. Co.	215.7	34.0	16.6	Cristobal, C. Z.	Champerico, Guat.	General	903	1,273	766
Baron Newlands ⁵	17	22 40	18	9 45	18	16 43	18	18 00	British	H. Hogarth & Sons.	341.0	48.0	12.4	Barry, England	Paiza, Peru	Ballast		3,968	2,816
Nueva Panama ⁶	17	17 55	18	9 15	18	16 23	18	18 50	Panamaian	Haus Elliot.	108.0	20.6	8.0	Cristobal, C. Z.	Tumaco, Colombia.	General	140	226	101
Leikanger ⁷	18	1 20	18	9 55	18	17 10	18	18 25	Norwegian	Westfal, Larsen & Co.	375.3	52.3	15.3	Rio de Janeiro	Vancouver, B. C.	General	560	5,953	4,354
Laganbank ⁸	18	6 40	18	10 50	18	17 46	18	18 51	British	Andrew Weir & Co.	426.0	57.0	18.0	Boston, Mass.	Shanghai, China.	General	2,307	7,507	5,346
Cerro ⁹	16	19 55	18	12 35	18	19 12	18	20 21	German	Hamburg-American Line	227.0	34.4	13.2	Cristobal, C. Z.	Guayaquil, Ecuador	General	189	1,572	1,011
F. J. Luckenbach ¹⁰	18	14 45	18	14 55	18	22 25	18	23 42	American	Luckenbach Line.	446.0	56.0	18.6	Houston, Tex.	Seattle, Wash.	General	7,500	8,508	6,179
George Washington ¹¹	18	21 03	19	6 10	19	14 18	19	15 45	Norwegian	Fred Olsen & Co.	425.0	55.0	17.3	Antwerp, Belgium	Vancouver, B. C.	General	1,150	7,553	5,673
S-17 ¹²			19	8 30	19	16 07			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
S-16 ¹³			19	8 40	19	16 17			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
S-14 ¹⁴			19	8 40	19	16 17			American	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Dreidlyk ¹⁵	18	17 10	19	12 05	19	19 13	19	20 35	Dutch	N. Pacific Coast Line.	485.5	62.3	20.0	Rotterdam, Holland	Portland, Oreg.	General	1,783	10,793	7,619
Snestad ¹⁶	18	22 05	19	14 10	19	20 31	19	21 45	Norwegian	Pern Line	377.6	54.0	14.0	Nuevaiba, Cuba	Vancouver, B. C.	Ballast		6,079	4,534
Chevimk ¹⁷			19	6 55	19	14 16			American	U. S. Navy	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Motor Sailer Nordvard ¹⁸	19	12 20	20	7 30	20	13 52	20	15 10	American	W. L. Conyn & Co.	375.0	53.0	13.6	Albany, N. Y.	Vancouver, B. C.	Ballast		9,108	4,358
Peter Maersk ¹⁹	20	6 05	20	8 40	20	14 21	20	15 50	Danish	Isb andsen Moller Co.	441.0	57.0	22.8	Baltimore, Md.	Vancouver, B. C.	General	5,030	7,723	5,964
Gregalia ²⁰	20	8 20	20	8 45	20	15 35	20	16 35	British	Donaldson Brothers.	425.0	56.0	19.3	Glasgow, Scotland	Vancouver, B. C.	General	425	7,827	5,432
Pontregia ²¹	20	6 35	20	10 05	20	18 04	20	19 40	British	W. E. Hynes & Co.	380.3	52.0	14.0	Barry, England	Makatea Island	Ballast	5,504	4,026	
Ronsaka ²²	20	11 55	21	12 35	20	18 49			British	Lord Mynne	273.6	34.2	12.5	Southampton, Eng.	Tahiti.	Ballast	1,454	554	
Saranak ²³	20	12 05	20	12 55	20	19 54	20	21 10	British	International Co.	530.5	66.3	21.0	Heburn, England	Talara, Peru	Ballast	12,207	8,543	
Montanan ²⁴	21	6 10	21	6 25	21	12 53	20	14 10	American	Amr-Hawaiian Line.	404.0	53.9	16.4	Boston, Mass.	Seattle, Wash.	General	1,874	6,756	4,775
Wittell ²⁵	21	8 00	21	8 05	21	14 59	21	16 35	German	North German Lloyd.	449.6	58.3		Bremen, Germany	Vancouver, B. C.	Ballast		7,816	5,755
Baron Blythe ²⁶			21	9 10	21	16 00	21	17 05	British	H. Hogarth & Sons.	350.7	50.0	12.6	Charleston, S. C.	Paiza, Peru	Ballast			
Katrina Luckenbach ²⁷	21	11 05	21	11 55	21	18 10	21	19 34	American	Luckenbach Line.	446.0	54.0	19.11	Boston, Mass.	Seattle, Wash.	General	2,496	8,508	6,179
Iwatsuan Maru ²⁸	21	13 05	21	13 49	21	20 26	21	21 48	Japanese	Mitsui Bussan Kaisha.	385.0	51.0	13.8	Philadelphia, Pa.	Santa Rosalia, Mex.	Ballast		6,207	4,551
Canocosa ²⁹	21	19 05	22	6 10	22	13 02	22	14 40	British	Furusu Prince Line.	430.0	58.0	17.3	Manchester, Eng.	Vancouver, B. C.	Ballast		8,956	6,562
Brilliant ³⁰	22	8 10	22	8 15	22	15 25	22	16 55	American	Stand. Vac. Transp. Co.	480.0	66.0	20.0	New York, N. Y.	San Francisco, Cal.	Ballast		9,822	6,749
Gisborne ³¹	22	9 35	22	9 45	22	16 16			British	Com th & Dom. Line	475.0	63.0	20.0	London, England	Auckland, N. Z.	General	2,280	10,678	7,674

Barneval	21	17.30	22	10.40	22	17.23	22	18.50	Dutch	Royal Neth. S. S. Co.	401.0	58.0	18.4	Hamburg, Germany	Corral, Chile	General	1,481	7,820	5,980
Pacific Reliance	22	13.20	22	13.40	22	20.23	22	21.38	British	Furness, Withy & Co.	436.0	61.0	17.8	Glasgow, Scotland	Vancouver, B. C.	General	452	9,644	6,967
Tacoma City	22	15.35	22	15.40	22	10.43	22	12.00	British	Reardon Smith Line	400.0	54.0	13.6	Rotterdam, Holland	Vancouver, B. C.	General	6,947	5,358	1
No. 4977	22	12.12	22	12.12	22	13.14			Panamanian	J. Perea				Gatun	Cristobal, C. Z.	Ballast			
President Jackson	22	13.35	23	6.00	23	13.37	23	21.05	American	Dollar Line	517.0	72.0	27.2	New York, N. Y.	Manila, P. I.	General	1,619	15,296	10,427
Pennsylvania	22	4.55	23	7.11	23	15.03	24	00.23	American	Panama-Pacific Line	596.0	80.0	27.0	New York, N. Y.	San Francisco, Cal.	General	2,757	25,262	18,104
Willmott	22	9.45	23	8.35	23	16.19	23	17.35	American	Williams Line	390.0	54.0	19.0	Chester, Pa.	Seattle, Wash.	General	3,015	6,162	4,433
Netheroy	23	7.25	23	9.30	23	16.50	23	18.22	British	Royal Mail Line, Ltd.	430.0	58.0	17.1	Rotterdam, Holland	Vancouver, B. C.	Ballast	8,874	6,558	
Betterton	23	9.05	23	10.45	23	17.58	23	19.31	American	Associated Oil Co.	431.0	50.0	20.0	Tiverton, R. I.	San Francisco, Cal.	Ballast	7,803	5,104	
K. I. Luckenbach	23	19.20	24	6.20	24	13.05	24	14.05	American	Luckenbach Line	446.0	56.0	17.0	Boston, Mass.	San Francisco, Cal.	Ballast	8,552	6,236	
Guldborg	23	6.25	24	7.15	24	14.11	24	15.30	Danish	W. L. Cuny & Co.	353.0	54.0	10.0	Norfolk, Va.	Vancouver, B. C.	Ballast	6,736	5,064	
Spencer Kellogg	23	20.50	24	8.25	24	15.45	24	16.55	American	Kellogg S. S. Corp.	391.0	51.0	21.0	New York, N. Y.	Los Angeles, Calif.	Ballast	5,601	3,992	
Munaster Castle	24	3.35	24	8.45	24	15.14	24	16.30	British	Barber S. S. Co.	428.0	56.0	20.0	New York, N. Y.	Shanghai, China	General	2,945	7,596	5,159
Northern Sun	24	4.30	24	9.25	24	16.29	24	17.40	American	Sun Oil Co.	480.0	66.0	23.6	Chester, Pa.	Los Angeles, Calif.	Ballast	9,664	6,552	
La Plata Maru	24	4.35	24	9.55	24	16.24	24	17.40	Japanese	Osaka Shosen Kaisha	430.0	56.0	21.0	Montevideo, Uruguay	Kobe, Japan	General	1,537	7,875	5,821
Maizales	24	14.15	24	10.32	24	18.08	24	19.53	German	Grake Line	216.0	32.0	12.11	Cristobal, C. Z.	Guayaquil, Ecuador	General	93	1,132	741
Minnesota	24	7.50	24	10.55	24	18.03	24	19.58	American	Amer-Hawaiian Line	407.0	53.0	19.0	Boston, Mass.	Seattle, Wash.	General	2,562	7,150	5,024
Maasburg	24	9.00	24	12.10	24	19.25	24	21.45	Dutch	Alberta Wheat Pool	451.0	60.0	19.0	Rotterdam, Holland	Vancouver, B. C.	Ballast	8,062	5,389	

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Nitro	16	16.10	18	6.13	18	13.35	19	10.54	American	U. S. Navy	460.0	61.0	21.0	Puget Sound, Wash.	Boston, Mass.	Navy supplies	328		
Point Reyes	16	6.45	18	7.27	18	15.10	18	17.10	American	Swayne & Hoyt	324.0	46.2	22.0	San Francisco, Cal.	Houston, Tex.	Sugar, general	4,189	3,984	2,617
Chari II	15	16.00	18		18				American	C. W. Wirtz	16.0	4.5		Balboa, C. Z.	Cristobal, C. Z.	Ballast			1
President McKinley	18	8.15	18	9.07	18	17.15	18	23.00	American	Dollar Line	516.5	72.2	31.0	Manila, P. I.	New York, N. Y.	General	5,626	15,286	10,580
Pacific Maru	18	23.00	19	0.04	19	11.03	19	14.45	Japanese	Strauss & Co.	385.0	51.0	27.0	San Francisco, Cal.	Leith, Scotland	Barley	7,209	6,251	4,736
Adolf von Baecker	18	23.25	19	7.08	19	14.30	19	17.10	German	Hamburg-American Line	409.8	53.8	22.0	Valparaiso, Chile	Hamburg, Germany	General	6,009	7,173	5,504
S. C. T. Dodd	19	4.00	19	8.16	19	15.55	19	15.55	American	Shell Oil Co.	425.0	57.2	27.0	Los Angeles, Calif.	Fall River, Mass.	Gasoline	9,256	7,481	5,065
Oregonian	19	7.54	19	8.40	19	16.55	19	13.55	American	Shell Oil Co.	403.0	53.9	25.0	Portland, Ore.	Boston, Mass.	General	6,266	6,754	4,800
Stuolt	19	8.00	19	9.18	19	17.45	19	17.45	American	Amer-Hawaiian Line	450.6	66.0	29.3	Los Angeles, Calif.	Chester, Pa.	Gasoline	13,693	9,619	6,456
Tacoma	19	11.45	19	12.15	19	20.03	20	1.10	German	Sun Oil Co.	477.1	63.0	26.0	Vancouver, B. C.	Hamburg, Germany	General	8,641	10,277	7,304
Orangemoor	19	12.15	19	13.09	19	21.00	19	21.00	British	Hamburg-American Line	399.6	53.0	27.0	Portland, Ore.	Ireland	Wheat	8,400	5,888	4,236
California	19	12.12	20	6.16	20	13.15	20	14.60	American	Farmers' Nat. Grain Corp.	574.4	80.3	30.0	San Francisco, Cal.	New York, N. Y.	General	9,431	24,506	17,365
Wyoming	19	20.15	20	7.15	20	14.31	20	18.00	French	French Line	470.3	61.2	26.3	Vancouver, B. C.	Harve, France	Wheat, general	8,180	10,440	7,027
Southern Sun	20	1.30	20	8.20	20	15.40	20	15.40	American	Shell Oil Co.	480.5	66.0	29.1	Los Angeles, Calif.	Sewaren, N. J.	Naptha	13,743	9,716	6,544
Pacific Explorer	20	4.30	20	8.38	20	16.50	20	19.10	British	Furness, Withy & Co.	435.9	60.8	28.0	Vancouver, B. C.	Glasgow, Scotland	General	9,239	9,633	6,998
Paul Luckenbach	20	4.41	20	9.20	20	17.00	20	17.00	American	Luckenbach Line	471.1	59.2	26.2	Portland, Ore.	Boston, Mass.	Lumber, general	7,619	9,027	6,539

1 Launch.

6 Cayuco.

5 Yacht.

4 Mine sweeper.

3 Submarine.

2 Motor ship.

1 Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	Port—	Cargo.	Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.									Tons.	Net.
St. Michel.....	20	7 15	20	14 11	20	20 25	21	11 00	American...	U. S. Army.....	448.0	58.0	23.0	San Francisco, Cal.	Brooklyn, N. Y.	Army supplies..	437	5,337
Kwausai Maru ¹	20	19 15	21	6 17	21	12 45	21	15 05	Japanese..	Osaka Shosen Kaisha.	461.7	61.5	24.3	Manila, P. I.	New York, N. Y.	General.....	9,414	6,790
Atago Maru ²	20	10 55	21	11 42	21	18 20	21	23 32	Japanese..	Nippon Yusen Kaisha.	490.2	57.0	25.0	Hilo, P. I.	Boston, Mass.	General.....	8,158	5,676
Fella ³	21	13 20	21	14 08	21	21 30	22	10 30	Italian....	Nav. Libera-Tristina.	436.6	55.4	25.3	Vancouver, B. C.	Trieste, Italy	General.....	9,334	7,841
Logician.....	21	14 25	21	14 59	21	22 45	21	22 45	British....	T. & J. Harrison.....	420.3	54.6	26.0	Vancouver, B. C.	Liverpool, England	General.....	7,900	6,651
Santa Clara.....	21	16 10	22	6 20	22	13 45	22	13 45	British....	Sir W. R. Smith & Sons	401.0	54.3	25.1	Vancouver, B. C.	Avonmouth, Eng.	General.....	8,216	6,784
Valley ⁴	22	5 24	22	7 06	22	14 15	24	10 52	German....	Grace Line.....	417.5	52.9	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.....	508	1,132
Manizales.....	22	7 50	22	8 52	22	16 10	22	21 40	American..	The Texas Co.....	416.0	56.0	27.0	Los Angeles, Calif.	New York, N. Y.	Gasoline.....	8,760	6,925
New Jersey ⁵	22	20 50	23	6 15	23	13 20	23	15 20	Panamaian	Barber Line.....	484.0	60.8	23.0	Davao, P. I.	New York, N. Y.	General.....	2,000	9,870
Tai Shan ⁶	22	15 20	23	7 05	23	15 20	23	15 20	American..	Hartford Products Corp.	419.5	56.5	26.0	San Francisco, Cal.	New York, N. Y.	Gasoline.....	8,671	7,060
Solana ⁷	22	22 10	23	8 05	23	15 50	23	15 50	British....	R. Dale & Co.....	412.6	55.5	25.0	Vancouver, B. C.	London, England	Grain, general..	9,839	6,823
Marbrion.....	22	5 40	23	8 40	23	17 30	23	17 30	American..	Charles Nelson Co.	380.4	53.1	24.0	Seattle, Wash.	New York, N. Y.	Lumber, general.	6,000	5,659
Charles Nelson.....	23	7 20	23	9 22	23	16 55	23	16 55	Japanese..	Kawasa Kisen Kaisha	405.0	53.0	17.0	Kobe, Japan.....	New York, N. Y.	General.....	609	7,025
Venice Maru.....	23	8 50	23	10 34	24	19 00	23	19 00	Norwegian.	Peehelbreen, Strassborg	477.1	63.0	28.0	Talara, Peru.....	Pt. de Boue, France	Crude oil.....	13,158	9,444
President Her- reschmidt ⁸	23	10 00	23	10 39	23	20 00	23	20 00	American..	Nelson Navigation Co.	402.0	54.0	26.0	Port Allen, T. H.	New York, N. Y.	Sugar.....	7,196	6,926
Makiki.....	23	10 24	23	11 30	23	22 10	23	22 10	American..	Ishimian S. S. Lines	395.5	55.0	27.0	Honolulu, T. H.	Baltimore, Md.	Sugar, pines....	7,737	7,330
Enley City.....	23	6 25	23	12 30	23	21 00	23	21 00	British....	N. Z. Shipping Co.	531.0	70.0	28.0	Auckland, N. Z.	London, England	Frozen, general.	5,611	18,200
Raigata ⁹	23	6 25	23	12 30	23	21 00	23	21 00	American..	U. S. Navy.....	231.0	29.0		Bahoa, C. Z.	Cristobal, C. Z.	General.....	913	1,105
Call.....	23	12 15	23	13 28	23	23 30	25	8 05	German....	North German Lloyd	216.5	32.9	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.....	7,650	6,821
San Felipe.....	23	15 25	23	16 48	24	13 15	24	15 25	American..	States S. S. Co.....	409.8	54.2	27.0	Portland, Ore.	Philadelphia, Pa.	Lumber, general.	4,167	7,982
Hanover.....	23	16 55	24	6 20	24	14 25	24	14 25	American..	Am. Gulf Orient Line.	434.3	57.7	21.0	Manila, P. I.	New Orleans, La.	Logs, general....	4,107	7,982
San Salvador.....	23	23 00	24	7 23	24	15 35			British....	Pacific Steam Nav. Co.	415.0	57.2	23.0	Champerico, Guat.	Cristobal, C. Z.	General.....	294	1,270
Texas.....	24	00 08	24	8 03	24	16 00	24	16 00	American..	Amer.-Hawaiian Line.	471.0	57.2	23.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	9,600	9,154
Forrebank ⁹	24	1 30	24	8 53	24	17 05	24	17 05	British....	Colonial Sugar Ref. Co.	420.1	54.0	26.0	Towansville, Aus'ia.	Montreal, Canada	Lumber, general.	8,200	7,097
Olympia Maru ¹⁰	24	7 50	24	9 10	24	17 10	24	17 10	Japanese..	Mitsubishi Shoji Kaisha	405.0	55.0	26.0	Kobe, Japan.....	Liverpool, England	Salmon.....	7,162	6,550

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	From—	Date.	Vessel.	Line.	For—
September 18.....	Baracoa.....	Colombian S. S. Line.	September 18.....	Sixola.....	United Fruit Co.	New York via waypoints.
September 18.....	No. 9688 ¹⁰	Pan American Airways.	September 18.....	Baracoa.....	Colombian S. S. Line.	New York via Kingston.
September 18.....	No. 945-M ¹⁰	Pan American-Grace Airways.....	September 19.....	No. 669-M ¹⁰	Pan American Airways.	Barranquilla, Colombia.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.			* DEPARTURES.		
Date.	Vessel.	From—	Date.	Vessel.	For—
September 19.	Quirigua	Port Limon, Costa Rica.	September 19.	Colombia	Port Limon, Costa Rica.
September 19.	No. 145-M ¹⁰	Medellin, Colombia.	September 19.	Quirigua	New York via wayp'ts.
September 19.	No. 609-M ¹⁰	Barranquilla, Colombia.	September 19.	Anachucuna ¹¹	Colon, Rep. of Panama.
September 19.	A. Tagaropulos	Colon, Rep. of Panama.	September 19.	Inapaquina ¹¹	Colon, Rep. of Panama.
September 19.	A. Tagaropulos	Colon, Rep. of Panama.	September 20.	No. 9685 ¹⁰	San Salvador via wayp'ts.
September 20.	Inapaquina ¹¹	Puerto Barrios via Limon.	September 20.	No. 144-M ¹⁰	Talara via wayp'ts.
September 20.	Orinoco	Bluefields, Nicaragua.	September 20.	Pearl Marie ¹²	Bluefields, Nicaragua.
September 20.	Pearl Marie ¹²	Bluefields, Nicaragua.	September 21.	Orinoco	Europe via West Indies.
September 21.	Cristobal	New York via Haiti.	September 21.	Stella Lykes	Sao Domingo via wayp'ts.
September 21.	No. 9673 ¹⁰	San Salvador via wayp'ts.	September 22.	Tela	New Orleans via Tela.
September 21.	300-N ¹⁰	Chiclevo via wayp'ts.	September 23.	Calamares	Port Limon, Costa Rica.
September 21.	Stella Lykes	Galveston, Tex.	September 23.	Florana	Rio Acha, Colombia.
September 22.	Melpomene ¹³	New Orleans via Habana.	September 23.	Ariguanil	Aronmouth via wayp'ts.
September 22.	G. R. Ford	High seas.	September 24.	Orinoco	New Orleans via wayp'ts.
September 22.	Pan American Airways	Barranquilla, Colombia.	September 24.	No. 9673 ¹⁰	San Salvador via wayp'ts.
September 23.	Standard Fruit & S. S. Co.	New Orleans via Habana.	September 24.	No. 145-M ¹⁰	Medellin via wayp'ts.
September 23.	United Fruit Co.	New York via Habana and Kingston.	September 24.		
September 23.	Elders & Fyffes, Ltd.	Aronmouth via Barbados.			
September 23.	145-M ¹⁰	Medellin via wayp'ts.			
September 24.	Colombia	Port Limon, Costa Rica.			
September 24.	Metapan	New York via Kingston.			

PORT OF BALBOA.

* ARRIVALS.			* DEPARTURES.		
Date.	Vessel.	From—	Date.	Vessel.	For—
September 18.	Chiriqui	San Francisco, Calif.	September 18.	Chiriqui	San Francisco, Calif.
September 19.	Real ¹²	Juan Diaz, Rep. Panama.	September 19.	Real ¹²	Panama Bay, R. P.
September 20.	Real ¹²	Juan Diaz, Rep. Panama.	September 21.	Real ¹²	Panama Bay, R. P.

* Motor ship. ⁹ Submarine. ¹⁰ Air mail carrier. ¹¹ Motor boat. ¹² Motor schooner. * Other than ships passing through the Canal.

East Culebra Extension Slide.

Dredging Division activities in the Gaillard Cut section have been concentrated on the removal of slide material from the area between stations 1760 and 1770, which is an extension of East Culebra slide and adjoins the slide of last November 9 which closed the Canal to traffic for two days.

Initial indications of the impending break in the east bank occurred during the night of June 21, the cracks then developed indicating an affected area of approximately $5\frac{1}{2}$ acres, the break line extending back 600 feet from the east prism line and at a maximum elevation of 165 feet above the water level in this section.

Unlike the slide of last November, which involved a sudden precipitation of material into the channel due to unusually heavy rains, the present slide, which is quite similar in geological formation, gave ample warning of its imminence and proceeded in a very orderly fashion, each successive movement being anticipated. As a consequence no interference with shipping has occurred to date, although on two different occasions, namely September 21 and September 26, the channel has been restricted to only one-half its normal width of 300 feet.

Original estimates of the quantity of material involved in this movement indicated that approximately 3,000,000 cubic yards were in motion, and that it would be necessary to remove upward of 1,000,000 cubic yards before stability was restored. This estimate corresponds exactly with that made for the slide of last November, which, however, stopped as unexpectedly as it had started after the removal of only 306,850 cubic yards. However, in the case of the present slide a total of about 600,000 cubic yards have already been removed and it is thought that original estimates will be realized.

Although the back break line of this slide has been extended somewhat since the original break in June, no serious interference with shipping is anticipated, due to the fact that slopes have already been greatly reduced with corresponding retardation of activity. Two 15-yard dipper dredges are engaged 24 hours per day, including Sundays and holidays, in the excavation of this material and will continue on this basis as long as conditions justify.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 27, 1932.

No. 1164.

Peru, Talara Bay, characteristic of light changed. Mr. W. R. Smeltzer of the International Petroleum Company at Talara, Peru, is the authority for the following information:

On November 1, 1932, the characteristic of the white light on Talara lighthouse will be changed from a fixed white light to a flashing white light; flash 45 seconds, eclipse 15 seconds. The range and arc of visibility and the red light underneath the white light will remain unchanged.

Position, latitude $4^{\circ} 34' 55''$ N., longitude $81^{\circ} 17' 30''$ W.

J. L. SCHLEY,
Acting Governor.

Revision of Telephone Directory.

Copy for a revised telephone directory, to be issued as of January 1, 1933, will go to the printer November 16, 1932. All changes or corrections in the present directory should be forwarded to the Telephone Supervisor, Balboa Heights, not later than November 2, 1932. Proof corrections will be made to December 1, 1932.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending September 24, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Ancon.....	Panama R. R. S. S. Line.....	.....	September 11.....	.....	750
Durazzo.....	Hamburg-American Line.....	.....	September 11.....	.....	131
Virgilio.....	Societa Italia-Flotte Riunite.....	.....	September 11.....	.....	29
Nueva Panama.....	United Fruit Co.....	.....	September 11.....	.....	60
Santa Cecilia.....	Panama Mail S. S. Co.....	September 11.....	September 11.....	67	540
Santa Marta.....	United Fruit Co.....	September 11.....	September 11.....	255	348
Los Angeles.....	Hamburg-American Line.....	September 11.....	September 12.....	197	59
Veragua.....	United Fruit Co.....	September 12.....	September 12.....	3	292
Bolivar.....	Colombian S. S. Line.....	September 12.....	September 12.....	22½	853½
Thomas H. Wheeler.....	West India Oil Co.....	September 12.....	September 13.....	1,190	(²)
San Antonio.....	French Line.....	September 12.....	September 13.....	47	(²)
Santa Clara.....	Grace Line.....	September 13.....	September 13.....	367	158
Juan S. Elcano.....	Spanish S. S. Line.....	September 13.....	September 15.....	100	719½
Oakland.....	Hamburg-American Line.....	September 14.....	September 14.....	84	92
Orinoco.....	Hamburg-American Line.....	September 14.....	September 14.....	186	40
Dorclian.....	Leyland Line.....	September 14.....	September 15.....	321	4
Lagarto.....	Pacific Steam Navigation Co.....	September 14.....	September 15.....	58	73
Santa Barbara.....	Grace Line.....	September 15.....	September 15.....	125	524
Emergency Aid.....	McCormick S. S. Line.....	September 15.....	September 15.....	100	(²)
Lockkatrine.....	Royal Mail Line, Ltd.....	September 15.....	September 15.....	(²)	17
Santa Elisa.....	Panama Mail S. S. Co.....	September 15.....	September 16.....	275	18
Irona.....	United Fruit Co.....	September 15.....	September 16.....	702	372
Canadian Highlander.....	Canadian National Steamships.....	September 16.....	September 16.....	106	277
Baarn.....	Royal Netherlands S. S. Co.....	September 16.....	September 16.....	218	4
Rialto.....	Navigazione Libera-Triestina.....	September 16.....	September 17.....	110	(²)
Contessa.....	Standard Fruit & S. S. Co.....	September 16.....	September 17.....	299	174
Cerigo.....	Hamburg-American Line.....	September 16.....	.....	896	.....
San Juan.....	United Fruit Co.....	September 16.....	September 17.....	(²)	50
Albert Voegler.....	Hamburg-American Line.....	September 16.....	September 16.....	17	427
Quirigua.....	United Fruit Co.....	September 16.....	September 16.....	182	211
Guayaquil.....	Panama R. R. S. S. Line.....	September 16.....	September 17.....	692	344
San Marcos.....	Quaker Line.....	September 17.....	.....	50	.....
Ward.....	Rossvelt S. S. Co.....	September 17.....	September 17.....	244	(²)
Sixtola.....	United Fruit Co.....	September 17.....	.....	281	.....
Colombia.....	Royal Netherlands S. S. Co.....	September 17.....	.....	164	.....
Balboa.....	Johnson S. S. Line.....	September 17.....	September 17.....	(²)	28
Nueva Panama.....	United Fruit Co.....	September 17.....	.....	190	.....
Reina del Pacifico.....	Pacific Steam Navigation Co.....	September 17.....	.....	68	.....
Acajutla.....	Pacific Steam Navigation Co.....	.....	September 18.....	.....	962
Cerlgo.....	Hamburg-American Line.....	.....	September 18.....	.....	189
San Marcos.....	Quaker S. S. Line.....	.....	September 18.....	.....	11
Sixtola.....	United Fruit Co.....	.....	September 18.....	.....	302
Nueva Panama.....	United Fruit Co.....	.....	September 18.....	.....	85
Reina del Pacifico.....	Pacific Steam Navigation Co.....	.....	September 18.....	.....	86
Leikanger.....	Westfal, Larsen Line.....	September 18.....	September 18.....	(²)	25
Baracoa.....	Colombian S. S. Line.....	September 18.....	September 18.....	21	669
President McKinley.....	Dollar Line.....	September 18.....	September 18.....	424	(²)
Drecht dijk.....	Holland-America Line.....	September 18.....	September 19.....	179	120
Quirigua.....	United Fruit Co.....	September 19.....	September 19.....	49	473
Colombia.....	Royal Netherlands S. S. Co.....	.....	September 19.....	.....	9
Tacoma.....	Hamburg-American Line.....	September 19.....	September 20.....	68	161
Pearl Marie.....	R. Feuillebois.....	September 20.....	September 20.....	(²)	29
Orinoco.....	Hamburg-American Line.....	September 20.....	September 21.....	(²)	465
Cristobal.....	Panama R. R. S. S. Line.....	September 21.....	.....	1,806	.....
Atago Maru.....	Nippon Yusen Kaisha.....	September 21.....	September 21.....	112	(²)
Kwansai Maru.....	Osaka Shosen Kaisha.....	September 21.....	September 21.....	131½	22
Fella.....	Navigazione Libera-Triestina.....	September 21.....	September 22.....	(²)	289
Barneveld.....	Royal Netherlands S. S. Co.....	September 21.....	September 22.....	66	46
Stella Lykes.....	Lykes Brothers.....	September 21.....	September 22.....	156	21
Tela.....	United Fruit Co.....	September 22.....	September 23.....	876	64
Manizales.....	Grace Line.....	September 22.....	September 24.....	557	93
Melpomene.....	J. R. Ford.....	September 22.....	.....	1	.....
Calamares.....	United Fruit Co.....	September 23.....	September 23.....	199	121½
Tai Shan.....	Barber S. S. Line.....	September 23.....	September 23.....	166	(²)
Calif.....	North German Lloyd.....	September 23.....	.....	912	.....
Cefalu.....	Standard Fruit & S. S. Co.....	September 23.....	September 24.....	119	226
Metapan.....	United Fruit Co.....	September 24.....	.....	472	.....
Colombia.....	Royal Netherlands S. S. Co.....	September 24.....	.....	9	.....
Salvador.....	Pacific Steam Navigation Co.....	September 24.....	.....	294	.....

* No cargo discharged.

* No cargo laded.

Postal Address of The Panama Canal.

The postal address is, "The Panama Canal, Balboa Heights, Canal Zone," or "The Panama Canal, Washington, D. C."

Mail for ships passing through the Canal or touching at either of the terminal ports should be addressed to "Cristobal, Canal Zone."

Supplement No. 16—Tariff No. 10.

THE PANAMA CANAL, PANAMA RAILROAD COMPANY,
EXECUTIVE OFFICE, BALBOA HEIGHTS, C. Z., September 14, 1932.

Item 27.—HOTELS.
(Effective September 1, 1932.)

HOTEL WASHINGTON.
EUROPEAN PLAN.
ROOMS.

Grade.	DAILY ROOM RATES.			
	Dec. to April, incl.		May to Nov., incl.	
	1 Person.	2 Persons.	1 Person.	2 Persons.
A Private tub and shower bath.....	\$3.00	\$10.00	\$6.00	\$8.00
1 Private tub and shower bath.....	6.00	8.00	5.00	7.00
2 Private tub and shower bath.....	5.00	7.00	4.00	6.00
3 Private tub and shower bath.....	4.50	6.50	3.50	5.50
3 Shower bath only.....	4.50	6.50	3.50	5.50
4 Shower bath only.....	4.00	6.00	3.00	5.00
5 Without bath.....	3.50	5.50	2.50	4.50

* Grade 5 rooms rented only in connection with other rooms with baths.

HOTEL TIVOLI.
EUROPEAN PLAN.
ROOMS.

Grade.	DAILY ROOM RATES.			
	Dec. to April, incl.		May to Nov., incl.	
	1 Person.	2 Persons.	1 Person.	2 Persons.
Parlor and bedroom.....	\$12.00	\$16.00	\$12.00	\$16.00
A Private tub and shower bath.....	6.00	8.00	6.00	8.00
1 Private tub and shower bath.....	5.00	7.00	4.00	6.00
2 Private tub and shower bath.....	4.00	5.00	3.50	4.50
3 Without bath.....	3.00	4.50	2.50	4.00
4 Without bath.....	3.00	4.00	2.50	3.50

J. L. SCHLEY,
Acting Governor, The Panama Canal,
2d Vice President, Panama Railroad Company.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective September 27, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.27
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal Record, Balboa Heights, Canal Zone, or

The Panama Canal, Washington, D. C.

Entered as second-class matter February 6, 1918, at the Post Office
at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., October 5, 1932.

No. 10.

Canal Traffic During September.

During the month of September, 1932, 353 commercial vessels and 7 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,598,265.98, and on the launches, \$16.50, or a total tolls collection of \$1,598,282.48.

The daily average of commercial vessels was 11.77, and the daily average of tolls collected was \$53,275.53, as compared with an average of 10.13 transits and \$46,479 in tolls for the previous month, and an average of 13.20 transits and \$60,691.19 in tolls for the month of September, 1931. The average amount of tolls paid by each of the commercial transits was \$4,527.66 as compared with \$4,597.82 for the month of September, 1931.

After showing successive declines for four months, commercial traffic made a substantial increase in September, 1932, and the number of transits and the amount of tolls collected were the largest since May, 1932. In comparison with August, 1932, the traffic in September showed a gain of 39 transits and \$157,417.11 in tolls (or 12.4 per cent and 10.9 per cent, respectively). This increase was due exclusively to a gain in the Atlantic to Pacific traffic which comprised 202 transits as against 151 from the Pacific to the Atlantic. In August, 1932, there were 162 of the former and 152 of the latter. The larger portion of this increased traffic consisted of vessels in ballast destined to the Pacific Northwest to participate in the grain and fruit movement from that region.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 9 months of the current calendar year, with the daily averages of transits and tolls, and the totals for the first 9 months of the calendar years 1931 and 1930:

	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	353	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
July.....	326	1,468,723.36	10.52	47,378.33
August.....	314	1,440,843.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
Total, first 9 months of calendar year 1932.....	3,154	14,432,036.88	11.51	52,671.85
Total, first 9 months of calendar year 1931.....	3,819	17,187,264.37	13.99	62,957.01
Total, first 9 months of calendar year 1930.....	4,394	19,566,101.67	16.10	71,670.70

As compared with the first 9 months of the calendar year 1931, the corresponding period this year has had 665 fewer transits and \$2,755,177.49 less tolls, decreases of 17.4 per cent and 16.0 per cent, respectively; in comparison with the first 9 months of 1930, there occurred a decrease of 1,240 transits and \$5,134,014.79 in tolls, decreases of 28.2 per cent and 26.2 per cent, respectively.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Saragoe ¹	28	12 01	28	13 16	28	21 45	28	21 45	British	International Co.	530 5	66 3	30 3	Talara, Peru	Hull, England	Benzine, naphtha	14,944	8,543
Betty Maerck.....	28	18 50	29	6 58	29	13 50	29	15 25	Danish	Conn. Admin. del Guano	299 8	42 4	20 0	Chincha Is., Peru	Norfolk, Va.	Guano	3,800	2,614
Hindanger ¹²	29	8 15	29	9 21	29	17 00	29	17 00	Norwegian	Westdalen & Co.	398 0	54 7	27 0	Vancouver, B. C.	Rotterdam, Holland	(*)	7,317	5,287
Gracia.....	29	9 30	29	10 34	29	17 40	29	17 40	British	Donaldson Bros.	415 5	51 2	27 0	Vancouver, B. C.	Glasgow, Scotland	General	6,791	4,842
Donau.....	29	10 20	29	11 03	29	18 45	30	1 35	German	North German Lloyd	520 8	63 6	28 0	Vancouver, B. C.	Bremen, Germany	General	9,827	11,007
Santa Teresa.....	29	8 30	29	15 19	29	22 15	30	11 05	American	Panama Mail S. S. Co.	360 2	51 6	23 0	San Francisco, Cal.	New York, N. Y.	General	3,274	5,726
San Simeon.....	30	14 40	30	15 22	30	22 25	30	22 25	American	Quaker Line	410 5	54 3	25 0	Portland, Oreg.	Philadelphia, Pa.	Lumber, general	6,044	4,916
West Cape.....	30	17 00	30	18 10	1	12 40	1	12 40	American	McCormick S. S. Co.	409 5	54 2	25 0	Tacoma, Wash.	Albany, N. Y.	Lumber, general	7,983	6,566
Willbrouk.....	30	17 15	30	18 34	1	13 50	1	13 50	American	Amer-Hawaiian Line	415 0	56 0	23 0	Seattle, Wash.	Newark, N. J.	Lumber, general	9,369	7,717
Columbian.....	1	4 20	1	7 06	1	14 10	1	14 10	American	Amer-Hawaiian Line	404 6	53 9	29 0	San Francisco, Cal.	Boston, Mass.	General	7,059	6,760
Gen. Wm. M. Graham ¹³	1	13 30	1	14 10	1	18 40	1	18 40	American	U. S. Army	156 0	32 0	.....	Paraiso, C. Z.	Cristobal, C. Z.	(*)	883	1,633
Durazzo.....	1	13 30	1	14 10	1	20 45	3	11 35	German	Hamburg-American Line	227 5	34 4	14 8	Guayaquil, Ecuador	Cristobal, C. Z.	(*)	883	1,633

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.					* DEPARTURES.				
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—		
September 25.	Bogota. ¹⁵	Colombian Line	New York via wayports.	September 25.	Metapan.	United Fruit Co.	New York via wayports.		
September 25.	No. 9685 ¹⁵	Pan American Airways.	San Salvador via waypts.	September 25.	Colombia.	Royal Netherlands S. S. Co.	Amsterdam via wayports.		
September 25.	No. 945-M ¹⁵	Pan American-Graeco Airways	Talara via wayports.	September 25.	Cristobal.	Panama R. R. S. S. Line.	New York via Haiti.		
September 26.	Calamares.	United Fruit Co.	Port Limon, Costa Rica.	September 26.	Bogota.	Colombian Line.	New York via Kingston.		
September 26.	Colombie.	French Line	Hayre via wayports.	September 26.	No. 659-M ¹⁵	Pan American Airways.	Barranquilla, Colombia.		
September 26.	No. 145-M ¹⁵	Uruba, Medellin & Cent. Airways	Medellin via wayports.	September 26.	Calamares.	United Fruit Co.	New York via Habana.		
September 26.	No. 659-M ¹⁵	Pan American Airways	Barranquilla, Colombia.	September 26.	Overton.	U. S. Navy.	Puerto Cabezas.		
September 26.	No. 145-M ¹⁵	Pan American-Graeco Airways	Colon, Rep. of Panama.	September 26.	No. 945-M ¹⁵	Pan American-Graeco Airways.	Talara via wayports.		
September 26.	Anapaquina ¹⁴	A. Tagaropolos	Colon, Rep. of Panama.	September 27.	No. 433-H ¹⁵	Pan American Airways.	Lima via wayports.		
September 28.	Darian.	Leyland S. S. Line.	San Salvador via waypts.	September 27.	No. 9685 ¹⁵	Pan American Airways.	San Salvador via waypts.		
September 28.	No. 9638 ¹⁵	Pan American Airways.	Liverpool via wayports.	September 27.	Inapaquina ¹⁴	A. Tagaropolos.	Colon, Rep. of Panama.		
September 28.	No. 144-M ¹⁵	Pan American-Graeco Airways.	Talara via wayports.	September 26.	Anapaquina ¹⁴	French Line.	Colon, Rep. of Panama.		
September 29.	Buenaventura.	United Fruit Co.	New Orleans via waypts.	September 28.	Colombie.	Pan American Airways.	Hayre via wayports.		
September 29.	Pearl Marie ¹⁶	Panama R. R. S. S. Line.	New York via Haiti.	September 28.	No. 659-M ¹⁵	Uruba, Medellin & Cent. Airways.	Barranquilla, Colombia.		
September 29.	Veragua.	G. I. Bryan	Bluefields, Nicaragua.	September 29.	No. 145-M ¹⁵	United Fruit Co.	Medellin, Colombia.		
September 30.	Confessa.	United Fruit Co.	New Orleans via wayports.	September 29.	Irtuna.	Leyland S. S. Line.	New Orleans via waypts.		
September 30.		Standard Fruit & S. S. Co.	New Orleans via Habana.	September 30.	Darian.	United Fruit Co.	St. Kitts, B. W. I.		

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
September 30.	No. 669-M ¹⁵ .	Pan American Airways.	Miami via waypoints.	September 30.	Veraagua.	United Fruit Co.	Port Limon, Costa Rica.
October 1.	Santa Maria.	United Fruit Co.	New York via Kingston.	October 1.	Contessa.	Standard Fruit & S. Co.	New Orleans via waypoints.
October 1.	No. 145-M ¹⁵ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	October 1.	No. 945-M ¹⁵ .	Pan American-Grace Airways.	Chilelayo via waypoints.
October 1.	Annetta I. ¹⁴ .	P. W. Hamilton.	Colon, Rep. of Panama.	October 1.	No. 9088 ¹⁵ .	Pan American Airways.	San Salvador via waypoints.
October 1.	Fortuna ¹⁶ .	A. Ferrari.	Colon, Rep. of Panama.	October 1.	Santa Maria.	United Fruit Co.	New York via waypoints.
October 1.				October 1.	Annetta I. ¹⁴ .	P. W. Hamilton.	Colon, Rep. of Panama.
October 1.				October 1.	Fortuna ¹⁶ .	A. Ferrari.	Colon, Rep. of Panama.
PORT OF BALBOA.							
September 26.	Rakuyo Maru.	Nippon Yusen Kaisha.	Hongkong, China.	September 26.	Rakuyo Maru.	Nippon Yusen Kaisha.	Valparaiso, Chile.
September 29.	Coya.	Grace Line.	Sea. ¹⁷	September 29.	Coya.	Grace Line.	Valparaiso, Chile.
October 1.	John Bakke.	Knutson Line.	Valparaiso, Chile.				
1 Tanker.	¹² Motor ship.	¹³ Mine planter.	¹⁴ Motor boat.	¹⁵ Air mail carrier.	¹⁶ Motor schooner.	¹⁷ Returned to port for repairs.	¹⁸ Wheat, lumber, and general.
	¹⁹ Coffee, cocoa, hides, and ivory nuts.	* Other than ships passing through the Canal.					

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 80 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Facilities for Shipping.

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from 46 tanks aggregating approximately 2,361,040 barrels of storage capacity. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits, and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide the means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective, in the course of handling large traffic through the Canal in over 17 years of operation.

Hours of Departure of Passenger Trains.

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sunday, 7.00 a. m., 12.15 p. m., 4.30 p. m.; Sunday only, 9.20 a. m., 4.00 p. m.

From Panama: Daily except Sunday, 7.05 a. m., 12.20 p. m., 4.35 p. m.; Sunday only, 7.05 a. m., 6.15 p. m.

The time required for passage from one terminal to the other is 1 hour and 45 minutes.

Classification of Cargo Passing Through the Panama Canal, Showing Origin and Destination, During Fiscal Year Ended June 30, 1932.

A statement of all commodities passing through the Panama Canal, showing origin and destination, during the fiscal year ended June 30, 1932, is shown in Tables I and II on pages 130 to 141 of this issue. From the cargo declarations submitted by masters of vessels it has been possible to classify over 90 per cent of the cargo passing from the Atlantic to the Pacific, and over 98 per cent of that passing from the Pacific to the Atlantic.

PRINCIPAL COMMODITIES—ATLANTIC TO PACIFIC.

Commodities shipped from the Atlantic to the Pacific which aggregated more than 100,000 tons in any of the past four fiscal years are listed in the following table:

Commodity.	Fiscal year ended June 30—			
	1929.	1930.	1931.	1932.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Manufactures of iron and steel	2,349,566	2,128,712	1,320,091	781,494
Cotton	331,652	248,345	298,877	747,496
Mineral oils	806,744	682,742	485,520	518,498
Phosphates	231,168	435,994	312,925	239,266
Paper	224,276	259,314	202,478	204,297
Sulphur	238,231	215,831	190,690	197,941
Tin plate	261,899	294,382	224,291	148,852
Canned goods (fish, fruit, vegetables, etc.)	121,472	120,373	100,311	117,857
Coal and coke	227,883	224,439	122,179	95,199
Scrap metal	83,829	196,676	46,904	87,657
Textiles	137,886	120,750	94,254	83,756
Machinery	188,442	180,805	139,928	78,656
Cement	379,963	412,347	206,483	76,870
Ammonia	108,862	153,437	79,100	71,933
Automobiles (exclusive of accessories)	250,688	203,089	104,002	66,673
Tobacco	129,433	118,322	116,946	65,806
Sugar	150,402	101,150	87,436	58,671
Railroad material	239,074	194,578	77,838	26,731
All other	3,371,045	3,184,439	2,470,176	1,967,705
Total	9,882,520	9,475,725	6,680,429	5,635,358

Total cargo from the Atlantic to the Pacific during the year decreased 1,045,071 tons, or 15.6 per cent, in comparison with the fiscal year 1931, and 3,840,367 tons, or 40.5 per cent in 1930. The total cargo tonnage in this direction in 1932 was the lowest for any fiscal year since 1922. Of the 18 commodities listed above, 6 showed increases and 12 decreases. The largest gain was made by cotton, shipments of which increased over 150 per cent more than in 1931, the trade route affected being United States to Far East. Manufactures of iron and steel, as in the past, was the principal commodity in the cargoes moving in this direction, accounting for 13.9 per cent of the total cargo from the Atlantic to the Pacific, in comparison with 19.8 per cent in 1931. Shipments of this commodity declined 538,597 tons, or 40.8 per cent compared with the previous year. The principal decreases occurred in the trade route between United States and west coast of South America, which declined 80.9 per cent, and the route between Europe and west coast of South America, which declined 64.2 per cent. The routes between Europe and Australasia and United States intercoastal were also adversely affected, the decrease of shipments in this commodity having been 41.5 per cent and 40.4 per cent, respectively.

PRINCIPAL COMMODITIES—PACIFIC TO ATLANTIC.

The principal commodities shipped from the Pacific to the Atlantic which aggregated more than 100,000 tons in any of the past four fiscal years are listed in the following tabulation:

Commodity.	Fiscal year ended June 30—			
	1929.	1930.	1931.	1932.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Mineral oils.....	5,197,813	5,700,587	4,824,338	3,116,844
Lumber.....	3,311,875	3,530,879	2,747,485	2,129,787
Wheat.....	2,365,555	1,503,035	1,862,147	1,790,530
Sugar.....	717,931	920,399	1,033,013	1,298,830
Nitrate.....	2,554,565	1,910,793	1,375,450	811,522
Canned goods (fish, fruit, vegetables, etc.).....	921,217	805,365	876,644	787,736
Ores (principally iron).....	1,750,548	2,229,470	1,436,792	618,363
Metals, various.....	671,500	666,057	557,498	472,560
Fruit, dried.....	304,956	206,384	282,791	340,851
Fruit, fresh.....	211,854	144,880	286,049	256,563
Food products in cold storage.....	315,675	335,061	384,526	248,874
Beans.....	154,782	112,679	171,335	172,526
Barley.....	260,142	275,064	235,364	153,206
Wood pulp.....	49,623	108,861	109,163	147,541
Coffee.....	136,369	102,646	149,215	125,223
Flour.....	110,183	103,486	146,640	123,964
Paper.....	62,191	101,422	114,301	116,103
Wool.....	150,712	145,071	157,129	101,147
Copra.....	119,586	109,172	113,587	79,471
Cotton.....	109,825	103,403	95,622	62,005
Rice.....	113,606	89,795	116,330	53,924
All other.....	1,189,978	1,348,993	1,326,952	1,165,060
Total.....	20,780,486	20,554,507	18,402,371	14,172,640

* Does not include fresh fruit.

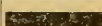
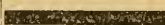
As in previous years, cargo from the Pacific to the Atlantic exceeded greatly the movement in the opposite direction. In 1932, the cargo from the Pacific was over two and one-half times that from the Atlantic; in the previous fiscal year the cargo from the Pacific was nearly three times as great as that from the Atlantic. In comparison with the fiscal year 1931, cargo tonnage routed from the Pacific to the Atlantic declined 4,229,731 tons, or 23.0 per cent, and in comparison with 1930, it declined 6,381,867 tons, or 31.0 per cent. The decline of 23.0 per cent in 1932 in this direction compares with a decline of 15.6 per cent in the opposite direction. In the previous year, the decline was relatively greater in the movement from the Atlantic to the Pacific. Of the 21 items listed above in the Pacific-to-Atlantic movement, 5 showed small increases and 16 showed decreases. Sugar registered the most important gain, amounting to 25.7 per cent. The four principal commodities, aggregating more than 1,000,000 tons, all showed decreases with the exception of sugar. Mineral oils again constituted the leading commodity in this direction, as in the past 10 years. Shipments declined 35.4 per cent below the 1931 total. Of the other leading commodities, nitrates declined 41.0 per cent, lumber 22.5 per cent, wheat 3.8 per cent, and ores (principally iron), 57.0 per cent. The commodities showing increases were sugar, dried fruits, beans, paper and wood pulp, and were relatively small, with the exception of sugar.

CARGO FROM ATLANTIC TO PACIFIC—ORIGIN AND DESTINATION.

During the fiscal year 1932, 73.5 per cent of the cargo passing through the Canal, Pacific-bound, originated on the eastern and Gulf seaboard of the United States, and 17.3 per cent in Europe. As shown in the graph and table below the percentage of cargo originating in the United States in the past fiscal year registered a decided increase in comparison with the three preceding years, while the proportion of the total from Europe made a substantial decline. During the past four fiscal years these areas have contributed over 90 per cent of the cargo moving in this direction.

Four areas absorbed all the cargo in this direction, as follows: West coast of North America, 51.8 per cent; Asia, 31.4 per cent; Australasia, 9.7 per cent; and South America, 7.1 per cent. As will be noted the proportion to the United States made a slight decrease in comparison with the past year, although it was higher than in 1930 and 1929. The percentage destined to Asia made a substantial gain due to the large cotton tonnage shipped to that area. The percentages to both Australasia and South America showed declines in comparison with the previous three years.

The following graphs and figures show the tonnage and percentage of total from and to the principal regions, or origin and destination, for the fiscal year 1932, together with the percentages for the fiscal years 1931, 1930, and 1929:

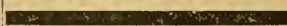
		Long tons.	Per cent of total—			
		1932.	1932.	1931.	1930.	1929.
<i>Origin:</i>						
United States		4,139,746	73.5	65.8	65.5	66.2
Europe		978,365	17.3	23.8	25.8	24.1
All other		517,247	9.2	10.4	8.7	9.7
<i>Destination:</i>						
North America		2,916,846	51.8	54.0	49.0	48.6
Asia		1,767,927	31.4	21.3	22.3	22.2
Australasia		548,172	9.7	11.6	13.7	14.7
South America		402,413	7.1	13.1	15.0	14.5

CARGO FROM PACIFIC TO ATLANTIC—ORIGIN AND DESTINATION.

During the fiscal year 1932, four regions furnished the total cargo tonnage from the Pacific to the Atlantic through the Canal, as follows: West coast of North America, 67.6 per cent; west coast of South America, 21.6 per cent; Asia, 6.9 per cent; and Australasia, 3.9 per cent.

Fifty and eight-tenths (50.8) per cent of the cargo Atlantic-bound through the Canal in the fiscal year 1932 was destined to the eastern seaboard of the United States and 42.5 per cent to Europe. These two areas have absorbed over 93 per cent of the Atlantic-bound cargo during the past four fiscal years.

The following graphs and figures show the tonnage and percentage of the total from and to the principal regions, or origin and destination, for the fiscal year 1932, together with the percentages for the fiscal years 1931, 1930, and 1929:

		Long tons.	Per cent of total—			
		1932.	1932.	1931.	1930.	1929.
<i>Origin:</i>						
North America		9,585,109	67.6	65.8	63.6	63.8
South America		3,061,138	21.6	23.8	27.6	29.0
Asia		982,060	6.9	5.7	4.6	3.6
Australasia		544,333	3.9	4.7	4.2	3.6
<i>Destination:</i>						
United States		7,197,838	50.8	54.1	58.3	54.1
Europe		6,020,665	42.5	39.4	35.6	39.5
All other		954,137	6.7	6.5	6.1	6.4

TOTAL CARGO.

Total cargo in long tons through the Canal during the past four years has been: 1929, 30,663,006 tons; 1930, 30,030,232 tons; 1931, 25,082,800 tons; and 1932, 19,807,998 tons. The total cargo movement in the past year was the lowest for any fiscal year since 1923 when 19,567,875 tons passed through the Canal.

(Continued on next page.)

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending October 1, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Cristobal.....	Panama R. R. S. S. Line.....		September 25		607
Calif.....	North German Lloyd.....		September 25		296
Metapan.....	United Fruit Co.....		September 25		511
Colombia.....	Royal Netherlands S. S. Co.....		September 25		270
Bogota.....	Colombian S. S. Line.....	September 25	September 25	187	746
Nueva Panama.....	United Fruit Co.....	September 25	September 26	244	99
Vancouver.....	Hamburg-American Line.....	September 25	September 26	96	223
Santa Ana.....	Grace Line.....	September 25	September 26	441	359
Sanyo Maru.....	Osaka Shosen Kaisha.....	September 26	September 26	(¹)	19
Calamares.....	United Fruit Co.....	September 26	September 26	$\frac{1}{2}$	474
Orcoma.....	Pacific Steam Navigation Co.....	September 26	September 27	46	(²)
Colombie.....	French Line.....	September 26	September 28	60	653
Wisconsin.....	French Line.....	September 27	September 27	57	1
Santa Maria.....	Grace Line.....	September 27	September 27	284	46
Europa.....	Danish-East Asiatic Co.....	September 28	September 28	4	23
Damsterdijk.....	Holland-America Line.....	September 28	September 29	(¹)	70
Darien.....	Leyland S. S. Line.....	September 28	September 30	220	(²)
Santa Clara.....	Grace Line.....	September 29	September 29	204	206
Iriona.....	United Fruit Co.....	September 29	September 29	1,012	414
Donau.....	North German Lloyd.....	September 29	September 30	66	336
Buenaventura.....	Panama R. R. S. S. Line.....	September 29		940	
Santa Teresa.....	Panama Mail S. S. Co.....	September 29	September 30	530	58
Veragua.....	United Fruit Co.....	September 30	September 30	203	185
Contessa.....	Standard Fruit & S. S. Co.....	September 30	October 1	116	269
Salvador.....	Pacific Steam Navigation Co.....		October 1		796
Santa Marta.....	United Fruit Co.....	October 1	October 1	336	23
San Rafael.....	States S. S. Line.....	October 1		124	
Eisenach.....	North German Lloyd.....	October 1	October 1	28	110
Durazzo.....	Hamburg-American Line.....	October 1		884	

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending September 30, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Nueva Panama.....	Hans Elliot.....	September 17	September 17	39	
Chiriqui.....	United Fruit Co.....	September 18	September 18	555	68
California.....	Panama-Pacific Line.....	September 19	September 19		133
St. Mihiel.....	U. S. Government.....	September 20	September 20	150	3
Kwansai Maru.....	Osaka Shosen Kaisha.....	September 20	September 21	127	
Tai Shan.....	Barber Line.....	September 22	September 23	118	3
Hanover.....	Tampa Inter-ocean S. S. Co.....	September 22	September 24		253
Rangitata.....	N. Z. Shipping Co.....	September 23	September 23	22	
Pennsylvania.....	Panama-Pacific Line.....	September 23	September 23	13	11
Calif.....	North German Lloyd.....	September 25	September 25		19
Santa Ana.....	Panama Mail S. S. Co.....	September 26	September 26	120	95
Santa Maria.....	Grace Line.....	September 26	September 27	67	1
Rakuyo Maru.....	Nippon Yusen Kaisha.....	September 26	September 26	11	1
Vega.....	U. S. Government.....	September 28	September 28	6	16
Santa Clara.....	Grace Line.....	September 29	September 30	106	260
Santa Teresa.....	Panama Mail S. S. Co.....	September 29	September 29	304	
President Harrison.....	Dollar Line.....	September 30	September 30		1

Table I.—Classification of Cargo Passing Through the Panama Canal
ATLANTIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States interoceanal.	United States to west coast Central America.	East coast United States to west coast South America.	East coast United States to Hawaiian Islands.	East coast United States to Australasia.	East coast United States to Philippine Islands.	East coast United States to Far East.	Canadian interoceanal.
Airplanes.....	10	3	4	575	3	8	23	
Agricultural implements.....	7,059	44	931	29	1,344	560	46	149
Alfalfa.....	2							
Alfalfa meal.....	9							
Ammonia.....	2,631			27,810		7,371	19,144	15
Ammunition.....	701	25	8		2	9	2	
Asbestos.....	2,043		6	596			814	607
Asphalt.....	1,198		516	285	19,637	3,941	10,967	123
Automobiles.....	44,557	27	913	133	1,231	4,952	9,556	110
Automobile accessories.....	11,353	7	1,120	14	3,978	1,727	19,221	93
Balsam.....								
Bananas.....								
Bark.....	5							
Barley.....			20					
Beans.....	2,815		420			12	113	50
Blood and tankage.....	143						14	
Bones and bonemeal.....	150						236	
Borax.....	174						7	
Bran.....	18							
Bricks.....	2,423		211	163		917	137	
Burlap.....	541		834					
Calcium carbide.....	1,567	50	44	177		165		224
Camphor.....								
Canned goods:								
Fish.....	6,649		89	31	3	85	143	74
Fruit.....	6,518					38	21	73
Meat.....	1,214		46		2	173	64	262
Milk.....	214	23	1,281	36		584	50	
Soup.....	24,230			182	12	80	83	50
Vegetables.....	18,691		4	173	26	199	73	200
Miscellaneous and unclassified.....	35,642	96	556	223	572	504	569	4,403
Carbon black.....	1,174		64				3,274	
Celite.....	50						100	
Cement.....	5,215	31	1,418	352	50	91	235	30
Chalk.....								
Charcoal.....	663		529	29				
Chemicals.....	31,346	393	2,800	2,103	251	1,132	6,988	630
China and fireclay.....	1,817	2	39			39	42	
Coal.....	13,261		3,245	13,701			100	
Cocoa.....	2,077	26	2		439	157	1,072	
Cocoanuts.....	461				5		75	
Coffee.....	3,114		16			4	19	
Coke.....	4,161					345		
Cold storage:								
Beef.....	182		31					
Butter.....	105						10	
Cheese.....	613		36					
Eggs.....	72							
Fish.....	109						562	
Lard.....	347	8	568	5			6	24
Meat, unclassified.....	37							
Mutton.....	81		10					
Other.....	4,208		41	29			26	
Confectionery.....	9,606		4	39		165	711	2
Copra.....								
Cork.....	646				3			
Corn.....	45,752	88	7			507	148	
Cotton.....	3,220		118			109	741,245	
Cottonseed oil cake.....	1,081							
Cottonseed meal.....	4,437							
Creosote.....						11		
Cyanide.....	493	57		15	33	120	120	
Drugs and medicines.....	16,670	432	325	174	40	276	644	
Dyes.....	217			5		53	4,861	
Dyewoods.....							74	
Earthenware.....	1,218		2	42				
Eggs, dried.....			6					
Explosives.....	551	14	152		35	4	320	
Extract, quebracho.....							29	
Fertilizer.....	4,844			2,533	4	1,246	2,184	
Fish meal.....	225		11					
Flint pebbles.....								
Flour.....	4,236		1,033		1,117	1,799	1,600	203

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.—Continued from page 129.
PACIFIC.

(Figures represent tons of 2,240 pounds.)

East coast Canada to Australasia.	East coast South America to west coast United States.	Cristobal to west coast United States.	Cristobal to west coast Central America.	Cristobal to west coast South America.	West Indies to west coast United States.	Europe to west coast United States.	Europe to west coast of Canada.	Europe to west coast of Central America.	Europe to west coast South America.	Europe to Australasia.	Miscellaneous.	Total.
64			11	13	2	7	26	76	492	2,044	9	626
												12,956
												2
												9
			10			10,543	275	131	177	3,321	507	71,933
									1			756
215							26					4,306
							60			173	22,447	59,462
180	2	6	76	234		50	36	7	219	4,275	109	66,673
48			195	127		2			251	1,164	67	39,367
		32										32
		2,520										2,526
										6		2
												7
									100	84		204
	35	70				199	13	7	247	61		4,042
	5,831										215	6,203
	18,929	1				3,146	64				1,166	23,682
	25							2	32	40		255
											383	426
						487	1,458	272	1,382	254	14	7,723
						14		70			400	1,859
306			19	35		33		47	2,393	2		5,062
			28				11					39
156		2	2	63	1	2,076	259	12	433	485	40	10,603
				18		125	116	7	34	90	2	7,042
	3,308			5	30	14			67	80	1,554	6,821
				141		19		12	968	191	130	3,654
						29	10		25	32	1	24,784
2					14	131	94	2	275	118	35	20,027
479			150	6	3	344	200	64	256	754	105	44,926
												4,512
												150
			79	166		217	365	16,350	29,926	6,472	15,873	76,870
						5,712	99		328			6,139
				38							119	1,378
45				222		8,399	3,126	544	7,107	7,123	227	72,436
						5,222	241		90			7,492
						37	10	10,209	6,109	7,358	485	54,515
305	2,639	920		200	490	823	6		3	25	57	9,241
		262		6					5		11	825
	41,456	11,085	118	76	32	1,394	919		26	45	2,937	61,241
						34,462	551		1,155		4	40,684
	922					4			8		115	1,262
						11			15			155
	25			6		1,311	129	1	156		125	2,396
												72
				2		209	8			46		936
			5	899					344		53	2,259
				2		24			5		2	70
						3			1		5	107
						75	13				27	4,410
				65		214	191	1	7		4	11,012
						10	7					17
						301	15		3			968
	562		2			154			330		12,591	59,987
			103						4		2,543	747,496
											87	1,168
												4,437
						33,630	4,871					38,482
			170	197		535	45					1,785
			99	17		1,563	19	10	58	109	69	20,505
						181	3	50				5,370
					25				10			109
						419	1,073		194	276	11	3,234
												326
									571	128	2	1,486
	360											4,464
	3,600			22		949	236		83	2,913	1,104	19,768
									10			246
						213						213
			32	3,351		73	4		175	424	783	14,880

Table I.—Classification of Cargo Passing Through the Panama Canal
ATLANTIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States interoceanic.	United States to west coast Central America.	East coast United States to South America.	East coast United States to Hawaiian Islands.	East coast United States to Australasia.	East coast United States to Philippine Islands.	East coast United States to Far East.	Canadian interoceanic.
Fruits:								
Dried	2,773		19			169		
Fresh	694		44		48			
Fuller's earth	54		143			19		
Furniture	6,868		6	37		15	123	106
General	260,953	1,037	7,075	10,303	20,680	13,323	37,538	3,880
Glass and glassware	30,223	4	512	363	514	400	1,619	58
Glue	471							
Granite	477							
Graphite	85	1				1	17	
Guano	77							
Gums:								
Kauri								
Other	52						93	
Hair	465							
Hardwoods	8,355		90	25	186		232	
Hats	40		1			1	2	
Hay								
Hemp	132		16				35	
Honey	44							214
Hops								35
Horns and hoofs							66	
Indigo							594	
Infusorial earth								
Ink	261		16	4		12	161	38
Ivory nuts	32						384	
Jute	643	23	608					
Kapok								
Lard substitute	5,036	30					46	
Leather	202	17	35	3		190	252	21
Lime	380		17				1,446	
Linoleum	7,523		2		7	7	20	
Liquors	1,626						14	5
Livestock			3					
Lumber	19,249		724	298	65	25	551	
Malt	1,977	31	90	1			6	
Manufactured goods:								
Iron and steel	461,072	2,294	13,878	22,631	4,683	44,881	53,703	5,042
Machinery	35,390	374	4,437	1,923	1,517	5,297	8,648	
Railroad material	7,529	19	2,872	1,192		662	7,104	
Tinplate	67,316	1	4,039	18,092		2,879	34,478	
Textiles	44,394	230	4,161	575	281	9,874	1,717	182
Miscellaneous	94,119	224	4,453	5,911	677	3,397	9,510	4,839
Marble	652					3	18	
Matches	4,206	192	86			23		11
Metals:								
Antimony			11				53	
Chrome	47							
Copper	1,338			13		4	352	
Gold and silver	27						492	
Iron	13,113		315			11	5,003	
Lead	559		60	16		28	3,622	
Scrap	1,527						86,10	
Tin	100		10	1,932		76	344	
Zinc	539		33	3	16		1,973	
Other and unclassified	1,460		1	2		294	630	
Milk, powdered	224	2	86	5		66	231	
Molasses	1,689							
Musical instruments	354							
Nitrates	9,392			1,803		5	9,278	
Nuts	406						37	
Miscellaneous	11,966		565	22		29	84	
Oils:								
Coconut			15				3	
Cottonseed	12,216	6	27				19	
Crude	2,962		43			2,175	18	
Gas and fuel	224		27,233		240		961	
Gasoline, benzine, and naphtha	545		8,723		698		3,469	
Kerosene	8,729		505		13,771	4,913	82,093	
Linseed	4,208		32		21			
Lubricating and greases	95,540	124	5,160	700	33,042	4,208	46,666	54
Olive	482		51					
Vegetable, unclassified	4,142		860	5	8	66	190	2
Whale	1,056							

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.—Continued.
PACIFIC.—Continued.

(Figures represent tons of 2,240 pounds.)

East coast Canada to Australasia.	East coast South America to west coast United States.	Cristobal to west coast United States.	Cristobal to west coast Central America.	Cristobal to west coast South America.	West Indies to west coast United States.	Europe to west coast United States.	Europe to west coast of Canada.	Europe to west coast of Central America.	Europe to west coast South America.	Europe to Australasia.	Miscellaneous.	Total.
						1,185	1,285		54	132	15	5,632
					1	207	91	3	55	178		1,114
						140	6					447
3,446	1,825	3,133	27,672	24,772	60	22,354	5,301	3,763	41,057	40,251	3,866	532,296
						1,765	2,362	164	2,547	4,278	80	44,911
						18	49					569
						516	86			49		1,128
						25						129
	4,022									10		4,109
					7							7
					7				11			166
	12	14		23		26			30	110	18	483
												9,142
						93			15		12	44
									226	30		27
						31	27		108			532
	1,084				32				1			258
											300	201
				18							1	1,482
												596
												18
						2						492
				111		396	197	169	1,034	10	51	469
											2	3,211
												2
						25					1	5,112
						85			211			746
							13		208	740		2,139
			24	142		164	3,074	447	659	4,543	2,049	8,520
5									10	1	295	12,747
56		6		118		87			5,018	126	86	314
			9	30		15	57	18	304		187	26,319
												2,725
765		7	2,119	436		59,815	19,870	3,599	31,204	53,465	2,060	781,494
183	1	9	14	235		4,184	1,312	260	3,750	10,992	100	78,656
			426	44		223	335	54	1,793	4,461	17	26,731
			111	15		6,433	8,071		2,672	4,766	69	148,852
127			391	532		1,174	1,143	244	6,480	11,983	246	83,756
73		1	286	536	13	3,320	1,707	102	2,738	8,938	438	141,349
	27					749	59	27	253		19	1,804
	24					120	45	98	195	171	22	5,173
							6					67
												47
							5			23	78	1,813
				5								524
				35		1,854	1,098	223	1,454	1,677		24,783
							4	3	337		2	4,651
										25		87,657
									37	500		2,999
					1	15	37		69	180		2,866
						600	159		420		1,514	5,080
						427			33	34	2	1,110
											39	1,728
												354
						5,563	228		501	1,635	8,550	36,980
						217	82				154	1,322
	428			3	55						15	12,740
												29
											27	12,295
					10	524		1	15	40	23,377	29,165
						9			79		106,410	135,156
						26	10		14	2	34,011	47,748
											4,989	115,194
	1,199						21		46	552	4	6,086
						525	544	13	1,058	2,594	867	191,235
						4,239	207	14	850			6,012
						699	88	5	2,235	566	132	9,061
									21			1,077

Table I.—Classification of Cargo Passing Through the Panama Canal
ATLANTIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States intercoastal.	East coast United States to west coast Central America.	East coast United States to west coast South America.	East coast United States to Hawaiian Islands.	East coast United States to Australasia.	East coast United States to Philippine Islands.	East coast United States to Far East.	Canadian intercoastal.
Oils—Continued:								
Wood.....	204		26			6	20	
Other.....	2,007		84			11	65	
Ores:								
Chrome.....	171						30	
Copper.....	28							
Gold and silver.....							355	
Iron.....	450							
Lead.....								
Magnetite.....								
Manganese.....	861				22			
Tin.....	15							
Zinc.....	75						307	
Other.....	236		25				44	
Paint.....	6,818	1	179	48	47	389	480	695
Paper.....	65,678	231	750	2,975	3,951	2,278	24,008	1,226
Paper pulp.....	2,271		1	20	55		312	
Paper roofing.....	365			73			414	136
Patent fuel.....								
Peanuts.....	10,631							
Peat moss.....	10							
Peas.....	115							
Phosphates.....	7,632		96	6,826		4,092	211,092	
Plaster.....	123							
Plaster board.....	569		5	122	33	129		
Porcelain.....	1,108		2			22	35	
Potash.....	63							
Rags.....	473					21	1,851	
Rice.....	7,482		1,060	18				
Rope.....	1,783	2	5				50	
Rosin.....	10,298	11	1,460		1,531	333	30,660	
Rubber:								
Manufactured.....	13,722	6	433	116	237	440	1,043	45
Raw.....	189						14	
Serap.....	355						161	
Salt.....	3,542			73		10		40
Saltpeter.....								
Sand.....	2,699		57	4		93		
Seeds:								
Canary.....	81				5		15	
Cotton.....	72						41	
Flax.....	8							
Grass.....	102							
Other.....	221		37		41		2	48
Shells.....	14,118							
Silk.....			10			3	2	
Silversand.....								
Skins and hides.....	836		16		83	2	161	
Slag.....	1,134							
Slate.....	3,824				30			
Soap.....	31,474	9	27	240		1,777	148	540
Soda.....	3,063	15	69			142	639	
Soda ash.....	8,398		129	21	127	257	160	85
Soda, bicarbonate.....	1,647		22			103	1,265	
Soda, caustic.....	2,409	82	79		30	1,496	11,522	
Starch.....	1,044		4	36	17	55	4	540
Sugar.....	889		31		87		87	
Sulphur.....	119,334		13	1,817	61,505		332	
Syrup.....	2,567	2	40	15	100	198	101	3
Talc.....	211		5			15		
Tallow.....	62	21	40				12	
Tar.....	529		5					
Tartar.....								
Tea.....	203		530				5	37
Tobacco.....	9,633		99	5	9,178	1,925	42,621	416
Toys.....	1,499		1	3		16		
Turpentine.....	1,197		153	5	1,727	12	391	
Vegetables.....	199		2			27	10	
Waste.....	812		3				315	
Wax.....	1,602	76	5,251		360	474	11,957	25
Wheat.....	447		1,268				13,498	
Wine.....	3							
Wool.....	22		2					
Zinc oxide.....	259		2			25		
Total.....	1,917,052	6,396	116,635	127,576	187,393	134,758	1,579,967	25,645

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.—Continued.
PACIFIC.—Continued.

(Figures represent tons of 2,240 pounds.)

East coast Canada to Australia.	East coast South America to west coast United States.	Cristobal to west coast United States.	Cristobal to west coast Central America.	Cristobal to west coast South America.	West Indies to west coast United States.	Europe to west coast United States.	Europe to west coast of Canada.	Europe to west coast of Central America.	Europe to west coast South America.	Europe to Australia.	Miscellaneous.	Total.
				10		163	137	1	88		8	256
												2,577
												171
						3,000						3,058
						1,968						1,968
				2		2,017	18		20	7	17,559	2,869
												17,559
									533			533
				1		210	104		2	32		1,232
												15
						2						384
						3,017				2	51	3,375
			27	6		201	303	1	759	1,855	4	11,813
28,044		99	278			31,454	1,647	1,569	15,670	15,734	8,705	204,297
						11,509	5		2,378	6,826	20	23,397
											3	991
					5				10,800			10,800
						5,832						10,686
						223	26					5,851
						829	44	882	448	6,325	1,000	239,266
												397
269						178	6					1,414
372				2		222	270	21	374	686	11	2,753
						2,769	50		28	556	12,419	15,885
						939						3,284
			17	99	1,438	105	13	52	5,346			15,663
					31	71	1,826		39		3	3,827
					791	67				85	169	45,405
362			4	24					646	765	52	17,895
												202
416						5,279	2,444	1	85	19,875	5,099	516
						1,108						36,855
						11,519			20			1,108
												14,392
	1,968					51	6				11	2,137
	3,949										19	132
												3,957
11	3,665			10		1,589	72			78		1,841
						3,573	75		232	171	1,846	9,932
											1,010	15,130
									77	39		122
	5			2		9,550	203					9,750
						12			3	50	943	2,113
						109				36,854	450	38,547
						52						3,906
				279		63	56	1	249	396	33	35,289
						474	31		244	578	63	5,323
									1,677		45	10,899
			45	9					235			3,301
			61	127					425		3	16,235
				17								1,717
					7,065	1,277	29		279		48,927	53,671
			43	74		779	5		38		11,000	197,941
						17					26	3,072
						63			31			322
				12							64	211
						290						824
						697						697
				435		532	32		1,037			2,878
				10	57	66			321	986	486	65,806
						196	5					1,720
				39					15		130	3,669
		10				694	1		4		235	1,182
						150						1,280
				150	1,128	51	35		1,451		65	22,625
							2		200		2,827	18,242
	30		3	115		25	215	218	1,163	3,757	526	6,055
				9			29		34	50	120	266
				3			63					354
35,929	95,933	18,102	32,613	39,018	7,942	334,160	69,926	39,937	206,908	286,740	372,732	5,635,358

Table II.—Classification of Cargo Passing Through the Panama Canal
PACIFIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States intercoastal.	West coast United States to east coast South America.	West coast United States to Cristobal.	West coast United States to West Indies.	West coast United States to Europe.	West coast Canada to east coast United States.	Canadian intercoastal.	West coast of Canada to Europe.
Airplanes.....	4		343					
Agricultural implements.....	608	6	14	1	149			
Alfalfa.....	6,685		101		344			
Alfalfa meal.....	5,598			21	111			100
Asbestos.....	10							
Asphalt.....	442	172			8,196			
Automobiles.....	1,098	14	14	3	53		2	11
Automobile accessories.....	757	1	2	4	8			
Balsam.....	2							
Bamboo.....	475							
Bananas.....	46							
Bark:								
Cascara.....	315				169			50
Peruvian.....								
Quillay.....								
Other.....	292				64			
Barley.....	121				97,046			34,934
Beans.....	61,080	238	1,607	9,748	823			
Beeswax.....	4							
Blood and tannage.....								
Bones and bone meal.....	44							
Borax.....	7,992	7	28	57	67,363			
Bran.....	31							1,325
Bricks.....	117				1			
Burlap.....	527							
Camphor.....	526							
Canned goods:								
Fish.....	105,681	61	289	774	14,972	1	6,392	15,861
Fruit.....	210,935	154	896	1,562	137,504		1,517	2,562
Meat.....	1,937	14	34	6	90			172
Milk.....	6,709	2	391	10	369			1,268
Soup.....	693			6				
Vegetables.....	39,169	28	245	225	1,804		312	5
Miscellaneous.....	101,582	21	339	550	10,380		724	112
Carbon black.....	212							
Celite filtercd.....	8,469	102			866			16
Cement.....	100	70	508		25			
Charcoal.....	552				50			
Chemicals.....	15,801	183	1	47	1,233		50	24
China and fireclay.....	2,212	6	24		17			
Coal.....	40							
Cocoa.....	61				19			
Cocoa leaves.....								
Coconuts.....	8,192					17		
Coffee.....	1,074		552		370			
Coke.....					8			
Cold storage:								
Beef.....	35				10			154
Butter.....			32					11
Cheese.....	604							238
Eggs.....	2,363		540		29			1,573
Fish.....	248	86			2,188			1
Lard.....	341		80	91	16			
Meat.....	100							
Mutton.....	23							
Other.....	388		83		11			26
Confectionery.....	61		3	6				
Copra.....	126	165			9,937			7,000
Corn.....								
Cotton.....	10,209				9,330			
Cottonseed oil cake.....					1,029			
Crocoote.....				6				
Cyanide.....	7							
Drugs.....	1,300	1	26		272			
Dyes.....								
Earthenware.....	5,123						104	
Eggs, dried.....	1,135		6					
Explosives.....	368	1	7					
Fertilizer.....	1,369							
Fish meal.....	56				527			2,531
Flour.....	65,389	22	1,181	50	19,079		931	25,206
Fruit, dried.....	162,620	1,047	731	553	161,289		14	135
Fruit, fresh.....	24,736	6,358	763	22	292,304			2,462

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.

ATLANTIC.

(Figures represent tons of 2,240 pounds.)

West coast Central America to Cristobal.	West coast South America to east coast of United States.	West coast South America to east coast Canada.	West coast of South America to Cristobal.	West coast South America to Europe.	Australasia to east coast United States.	Australasia to Europe.	Hawaii to east coast of United States.	Philippine Islands to east coast United States.	Far East to east coast United States.	Far East to Europe.	Miscellaneous.	Total.
	3				109	1						350
			12									888
												7,142
												5,830
												10
	18				28						78	8,934
3	8			57	53	42			2		16	1,376
	23			2	127				17		180	1,121
10	261		25								8	306
									1,142			1,617
30											8,765	8,841
	2		39	53					209			837
	5		4	23								37
	272		101	1,650								2,023
6	28		37	354				1,524	304			2,609
	51		17	20,393							644	153,206
8,311	2,461		2,366	14,470	41	19			940	59,383	10,989	172,526
	50		56	21								131
				8								8
	15			15								78
			4	10								75,463
			93	21,578			32				39	23,066
												150
												527
									1,340			1,866
	37		58		2		179		3,500	14,736	858	163,401
2			1	56		52	87,877		183		6,060	449,351
					5	531			191		72	3,052
						135					75	8,950
			18						50			699
	5			610	487	3,008	93		662		1,796	41,859
												120,424
	138											212
25												9,453
	47		3	8	3	3	26		418		20	841
												627
												17,922
												2,259
5	1,486		11,527	2,305	113	1,688					4,100	4,151
	95		11	10		36					41	17,245
	2		4			4		2,222	109			152
34,948	28,915	70	39,196	2,537		1,388	47		8		418	10,968
											16,123	125,228
												8
			99		54	10,219					271	10,688
			5		24	70,687					629	71,531
					15	45,456					11	46,097
						106			69			3,345
						43	46		465		50	4,656
			35			10,504					3	574
					40	94,484					22	10,661
				29	159	5,841		4	10		219	94,766
												6,556
												69
	11				3,099	36,648		29,042			443	79,471
			6	314								7,320
1	7,910		649	32,833		357			406		260	62,005
53			397	30,335							130	31,944
												6
												8
	1											1,786
	11									173		3
												3
4										825	33	6,089
										181		1,316
							1			225		601
												1,376
									1,039		4	4,207
				100	300	750			12		10,914	123,964
	286		15	34	433	24					13,670	340,851
2	2,613		142	1,732		10,161	4,076	250	41		901	256,563

Table II.—Classification of Cargo Passing Through the Panama Canal
PACIFIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States intercoastal.	West coast United States to east coast South America.	West coast United States to Cristobal.	West coast United States to West Indies.	West coast United States to Europe.	West coast Canada to east coast United States.	Canadian intercoastal.	West coast of Canada to Europe.
Fuller's earth	766				30			
Furniture	767		10	60				2
General	111,453	3,945	830	2,632	25,940	5	166	16,844
Glass and glassware	666	21			911			167
Glue	1,244							
Graphite								
Guano	18							
Gum:								
Kauri	11							
Yucca								
Other	289							
Hair	782				2			15
Hardwoods	609		24		1,688			13
Hats	33							
Hay	3,866		75					
Hemp	1,380				20			
Honey	973				661			3
Hops	1,730				134			
Horns and hoofs								
Indigo								
Infusorial earth	3,062	106	407	18	1,009			42
Ink		24	18					
Iodine								
Ivory nuts	40							
Jute	394							
Kapok	1,999							
Leather	15				1			
Linoleum	1,551							
Liquors	353			40			1,413	400
Livestock	125				3			
Lumber	1,496,888	23,028	1,776	20,387	237,861	126,112	41,714	150,556
Malt	10							
Manufactured goods:								
Iron and steel	9,671	129	348	23	531		20	
Machinery	4,695	360	52	79	187		50	23
Railroad material	50				21			
Tinplate	895							20
Textiles	1,779	56	252	111				
Miscellaneous	22,096	435	409	82	11,896	129	92	463
Matches	749							
Metals:								
Antimony	150							
Copper	42,838				25,666			700
Gold and silver	132				77			
Iron	41				450			
Lead	15,812	25		3	3,302		50	56,563
Scrap	3,979				1,259	16	5	
Tin	230							62
Zinc	7,987		23		1,626			65,763
Other	1,724				136			881
Milk, powdered	6,330		10	9	107			239
Molasses								
Musical instruments	1							
Nitrates	350							
Nuts	4,551			49	606			
Oats	42	17			1,103			90,045
Oil:								
Coconut	2,575	5	11	17				
Cottonseed	46							
Crude	6				4,115			
Gas and fuel	147,061	765	35,463		24,193			
Gasoline, benzine, and naphtha	1,357,935	485	2,166	9,729	529,758			
Kerosene	24,004	1,757	59		50,605			
Linsed	45				351			
Lubricating and grease	7,411	448	108	46	176		7	10
Olive	69							
Vegetable	1,371	28	2		370			
Whale								
Wood	289	135	3	18				
Other	3,003		10		6			155
Ore:								
Antimony					382			

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.—Continued.

ATLANTIC.—Continued.

(Figures represent tons of 2,240 pounds.)

West coast Central America to Cristobal.	West coast South America to east coast of United States.	West coast South America to east coast Canada.	West coast of South America to Cristobal.	West coast South America to Europe.	Australasia to east coast United States.	Australasia to Europe.	Hawaii to east coast of United States.	Philippine Islands to east coast United States.	Far East to east coast United States.	Far East to Europe.	Miscellaneous.	Total.
27	4			13					193		82	796
249	1,895		1,759	8,295	2,626	6,144	49	1,597	27,717	7,841	6,621	1,158
3			12	1					2,391			226,608
	90			40					18			4,219
									968			1,405
	2,582			14,700							205	968
												17,505
					274	1,056					164	1,505
					70						50	120
					35	158						493
	5			14					418		15	1,251
1,251	1,166		7	96	3,575	54	25	472			1,120	10,100
48			126	3					140		1	351
			449									4,484
184				411	201	260		8,698	1,433		106	12,693
120	39			1,678		70					24	3,568
				287		3						1,864
4												290
												4
					5							4,644
												47
	73											73
	6,223		8,067	3,587								17,931
			83						14			488
	376		10						10		1	2,410
			12	3		53					5	84
5				1		10					4,837	1,551
						1					10	7,039
705	30		22	778	3,586	826		1,826	4	6,600	17,088	139
												2,129,787
												10
14	20		34	197		1		4	30		50	11,072
18	175		15	93	130	35		4	34		39	6,029
							3				1	75
				2				289	4,931		1,115	913
143	66		186	98	47	7		3	6,717		704	8,535
												43,573
												749
									694			844
6	118,080		61	85,330	1,769	13						274,463
166	1,049		4			42			22		5	1,497
												491
	180		18	1,621		4,000			950		2,027	84,533
8				210		444	613	4				6,556
				15,187	273				9,255		17	25,024
				3,801							1,102	80,302
	129		22	594		1,820			100			5,406
				19		3,060					8	9,782
				3			15,250	16,711				31,961
51	195,189		4,091	595,335							16,486	4
												811,522
19			98	13,536					1,362	6,000		12,563
											3,227	108,089
			151	2,783		249		81,023				83,631
	144,648	419,932		135,176								3,229
	10,000			9,717								703,877
											260	227,449
197			8	200,560								2,100,838
23												76,451
			32	81								509
											3	8,229
	30		40	8	42				20			69
				413					10,009		3	11,903
					4			657	11,275			413
						7			4,716		679	13,060
												7,897
				156					301			839

Table II.—Classification of Cargo Passing Through the Panama Canal
PACIFIC TO

(Figures represent tons of 2,240 pounds.)

Commodity.	United States interoceanal.	West coast United States to east coast South America.	West coast United States to Cristobal.	West coast United States to West Indies.	West coast United States to Europe.	West coast Canada to east coast United States.	Canadian interoceanal.	West coast of Canada to Europe.
Ore—Continued:								
Chrome.....					800			
Copper.....	7,441							
Gold and silver.....								
Iron.....								
Lead.....								
Magnesite.....	1,796							
Manganese.....	1,000							
Tin.....								
Zinc.....	26				47			3,279
Other.....	24				3			
Paint.....	920	7			83			
Paper.....	85,460	4,018	466	1,692	186	6,928	112	413
Paper pulp.....	126,812				6,523	10,267		3,376
Paper roofing.....	258	22			6			
Peanuts.....	3,372			34				
Peas.....	915				44		12	
Phosphates.....	804				25		40	9
Plaster.....	215							
Plaster board.....		13			538			35
Porcelain.....	1,750		20	102			198	
Potash.....	4,054			825				
Quicksilver.....	75							
Rags.....	1,409				37			
Rice.....	284	609	71	17,949	4,307		463	308
Rope.....	645	16	44	97				
Rosin.....	83				20			27
Rubber:								
Manufactured.....	2,101		57		310			
Raw.....	16				45			
Scrap.....	429	22			1,106			
Rye.....	25							1,818
Salt.....								
Sund.....								
Seeds:								
Bird.....	10							
Cotton.....								
Flax.....					388			
Grass.....	2,082		1		5			
Hemp.....	501							
Other.....	5,628			12	91			328
Shells.....	60				41			
Silk, raw.....	13,215			4				
Skins and hides.....	26,153				60	164		169
Slag.....	845				2			
Soap.....	3,662		3	624				
Soda.....	50							
Soda ash.....				12				
Soda bicarbonate.....			1					
Soda, caustic.....		1,169	2					
Starch.....								
Sugar.....	198,994	75		200				
Sulphur.....	269				78			
Syrup.....	6							
Talc.....	1,359	40		24	27			
Tallow.....	4,170	83	192	539	23	11	30	236
Tar.....				1				
Tartar.....	18							
Tea.....	105		357	8	41		778	
Tobacco.....	742			2	61			
Toys.....	71						58	
Turpentine.....		25						
Vegetables.....	5,276		640	496				
Waste.....	1,057			6				
Wax.....	635	276	271	43				
Wheat.....	963	1,047	115		145,197	7,773		1,620,747
Wine.....	2,115			1	500			8
Wool.....	34,309		13		111			294
Total.....	4,705,932	48,000	53,194	69,718	1,834,090	151,423	55,284	2,109,790

Showing Origin and Destination, Fiscal Year Ended June 30, 1932.—Continued.

ATLANTIC.—Continued.

(Figures represent tons of 2,240 pounds.)

West coast Central America to Cristobal.	West coast South America to east coast of United States.	West coast South America to east coast Canada.	West coast of South America to Cristobal.	West coast South America to Europe.	Australasia to east coast United States.	Australasia to Europe.	Hawaii to east coast of United States.	Philippine Islands to east coast United States.	Far East to east coast United States.	Far East to Europe.	Miscellaneous.	Total.
	16,048		18	4,996	15,945							15,945
	150			384	685							29,988
	458,820		48	231	20,616							534
				4,088							815	479,667
				464	11,039							4,951
			25	29,992	115				1,277			1,796
				21,720		3,753						12,503
	15			3,554		7,999						31,409
7	37								316			28,825
								1			70	11,911
									722		16,106	1,125
									171		392	116,103
												147,541
												286
40	19		31	601	57	1,225			96		20	3,534
						984			151		240	3,372
									44			1,857
												219
			59									636
				43								15,495
												4,938
			932		10				1,439			118
3								437	1,835		26,719	2,885
								508	32			53,924
				19	32	7			101			1,367
											81	370
			2				19	15				2,483
									3,838			3,920
			20									1,557
				32								1,863
						28					50	82
												28
			46	137		643						147
				2,051								2,740
	58			186	319	328					13	383
				158								2,992
36	54		23	1,370	50	166			3,552		46	659
69	5			112	892	500			516		15	11,356
10					239				12,246		33	2,210
240	1,172		1,758	3,210				7	4,132		206	25,747
				1,453								53,619
				23								2,305
												4,312
												50
												12
												1
												1,162
												70
527			480	218,929		19,303	287,482	543,955	6,013		22,867	1,298,830
				5,140					130			5,608
									8			14
									43			1,493
				15	266	10,700					51	16,316
												1
	22											40
				11					9,469		87	10,856
								926	102		18	1,851
								132	1,146		14	1,421
												25
	7,714		678		7			75	125		1,201	16,212
			3						1,052			2,118
	29		10	26		148			17		678	2,133
				10		6,210						1,790,530
			32	3,897							8,468	6,864
	755		82	4,961	3,961	52,835			2,670		1,106	101,147
47,525	1,001,749	430,002	74,474	1,532,204	81,501	422,227	395,843	690,417	160,707	94,569	214,000	14,172,640

Notice to Mariners and Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 1, 1932.

No. 1175.

Panama Canal Zone, Colon Naval Radio Station (NAX), name changed.—The name of the naval radio station, which was removed from Colon Beach on August 27, 1929 (see N. M. No. 595) to the vicinity of Fort Davis, will be changed on December 1, 1932 from Colon Radio Station to Gatun Radio Station. The radio call letters (NAX) and the location will remain unchanged.

Position, 9° 18' N., 79° 55' W.

(See H. O. Book No. 205—Radio Aids to Navigation.)

J. L. SCHLEY,
Acting Governor.

Lubricating Oils.

THE PANAMA CANAL, SUPPLY DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 7, 1931.

To all concerned.—For the information of all concerned there is submitted herewith a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils together with a statement of the purpose for which they are generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list.

R. R. WATSON,
Chief Quartermaster.

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, M-2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, H-2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, EH-2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, UH-2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive for preserving boiler tubes.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division.)

Insulating.—Transformer (Electrical Division.)

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1932 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Ancon</i>	September 27 [*]	October 2....	October 5....	October 9....	October 12....	October 17.
<i>Cristobal</i>	October 11....	October 16....	October 19....	October 23....	October 26....	October 31.
<i>Ancon</i>	October 25....	October 30....	November 2....	November 6...	November 9...	November 14.
<i>Cristobal</i>	November 8...	November 13.	November 16.	November 20.	November 23.	November 28.
<i>Ancon</i>	November 22.	November 27.	November 30.	December 4...	December 7...	December 12.
<i>Cristobal</i>	December 6...	December 11..	December 14..	December 19..	December 22..	December 27.
<i>Ancon</i>	December 20..	December 25..	December 28..	January 1....	January 4....	January 9.

* Changed; previously scheduled for September 24.

Steamers sail at 4 p. m. standard time from Pier 65, North River, foot of West 25th St., New York.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Merchandise Shipped to Canal Zone for Orders.

The Panama Railroad Company, a New York corporation, of which the stock is now owned by the United States Government, will warehouse "for orders" at its piers and warehouses at Balboa and Cristobal, Canal Zone, nonperishable and nondangerous merchandise, excepting alcoholic liquors.

The rates are as follows:

(a) For handling cargo from ship's side to storage place, \$1 per ton of 2,000 pounds or 40 cubic feet on general merchandise, and one-half of the transfer rates provided by Item 34, Panama Canal Tariff No. 10, on other commodities.

(b) For handling cargo from storage place to ship's side, *i. e.*, for delivering or reforwarding it, the same rates as for receiving and storing, as per (a), above. The minimum charge for handling any shipment taken out of storage is \$1.

(c) For storage: First 35 days free; thereafter, 3 cents per day or fraction thereof per ton of 2,000 pounds or $1\frac{1}{2}$ cents per day or fraction thereof per ton of 40 cubic feet.

Special rates on special commodities in large quantities may be obtained on request.

Various lines operating out of Cristobal and Balboa to the west coast of Central and South America will accept their proportion of the through rate for the haul beyond the Isthmus, as explained in the following paragraph:

By virtue of the Canal Zone for Orders arrangement shippers are enabled to consign cargo to the Isthmus and subsequently to reconsign it to any port beyond the Isthmus to which there is a through rate from port of origin without sacrificing their right to the through freight rate. This means that when a shipment moves from, say, New York to the Canal Zone, usual local rates will be charged to Cristobal or Balboa, as the case may be; but should the owner wish to reforward to any other port to which there is a through rate from port of origin, he may do so upon payment of the receiving carrier's proportion of the through rate from port of origin to port of ultimate destination, and upon evidence that the shipment, or any part of it, has moved beyond the Isthmus, the initial carrier will refund the difference between its proportion of the through rate applicable and the local rate.

In addition to reconsigning beyond the Isthmus, cargo billed Cristobal for Orders may be reconsigned to Panama City or line points on the Panama Railroad on the basis of through rates from port of origin to Panama City. In this case the Panama Railroad Company's charges will be the difference between the rate charged to Cristobal by the ocean carrier and the through rate from port of origin to Panama City, and the necessary adjustments with the ocean carrier will be made by the Panama Railroad Company without inconvenience to shippers or consignees. The handling charge from storage place to cars is the same as from storage place to ship's side.

Cargo deposited in Hold for Orders Warehouse, Cristobal, which consignees desire transferred to Hold for Orders Warehouse, Balboa, will be assessed a charge of \$1 per ton on general cargo and one-half the transfer rates on other commodities for handling from the warehouse into cars at Cristobal, and a second charge of the same kind for handling from cars into warehouse at Balboa. The same charge will again apply when the cargo is reforwarded from, or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on Hold for Orders cargo discharged from vessels at Balboa.

Cargo consigned to Hold for Orders, Balboa, arriving at Cristobal piers, and/or cargo consigned to Hold for Orders, Cristobal, on which by previous arrangement the destination has been changed to Hold for Orders, Balboa, prior to arrival of the vessel, will be assessed one handling charge of \$1 per ton on general cargo or one-half of the transfer rates on other commodities for handling from shipside across piers and into cars at Cristobal and from cars into the Hold for Orders Warehouse, Balboa. The same charge will apply when the cargo is reforwarded from or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on cargo moving in the opposite direction.

There are no special forms for use in shipping except the warehouseman's order to release the cargo for shipment ("Authority to Deliver Cargo from Storage on Piers"). Shipper takes out his bill of lading and consular invoice and the cargo moves as regular outward local.

Samples of the forms used, "Negotiable Warehouse Receipt," and "Authority to Deliver Cargo from Storage on Piers," will be supplied on request to the Panama Railroad Co., Balboa Heights, C. Z., or 24 State Street, New York City.

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Traffic by Nationality for September, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of September, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for September, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	59	310,871	226,124	374,262	227,809	\$246,967.37	75,197
Danish.....	5	22,899	14,173	24,456	15,163	17,285.97	6,530
Dutch.....	6	39,159	27,773	46,917	27,591	31,314.18	5,613
French.....	3	17,393	10,826	21,213	11,471	13,532.50	1,453
German.....	13	41,142	26,745	45,956	27,483	32,718.67	14,506
Italian.....	3	19,762	12,616	23,918	14,401	14,248.12	850
Japanese.....	12	64,819	50,352	79,716	50,142	59,811.97	32,728
Norwegian.....	25	138,232	91,806	154,615	91,776	103,866.80	46,321
Panamanian.....	7	480	489	944	491	560.64	454
Swedish.....	4	20,070	13,159	21,948	16,294	14,864.61	11,350
United States.....	65	405,190	293,931	492,445	293,360	346,786.98	140,982
Total, September, 1932...	202	1,080,017	772,994	1,286,390	780,981	831,957.81	335,984
Total, September, 1931...	210	1,115,277	815,754	1,354,860	825,726	947,578.84	481,229
Total, September, 1930...	238	1,227,748	915,053	1,517,083	921,034	1,029,728.08	595,589

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	26	143,027	107,603	179,784	109,848	\$134,503.75	177,019
Danish.....	4	21,418	13,360	22,892	14,107	16,700.00	28,752
Danzig.....	2	16,473	14,092	24,218	13,831	17,615.00	33,642
Dutch.....	4	28,368	20,355	34,071	20,532	25,443.75	40,043
French.....	2	10,708	6,969	13,185	7,373	8,711.25	10,828
German.....	14	45,743	29,907	51,528	30,663	37,372.87	54,208
Italian.....	1	6,043	3,669	7,061	4,460	4,586.25	8,334
Japanese.....	9	47,862	37,247	58,948	36,620	46,693.75	54,130
Norwegian.....	7	39,070	27,216	45,694	27,390	34,020.00	67,452
Panamanian.....	8	7,447	4,099	7,745	4,113	5,082.75	3,024
Swedish.....	6	31,528	21,301	36,078	26,113	24,196.23	36,987
United States.....	68	390,687	291,657	473,745	290,305	361,392.57	496,741
Total, September, 1932...	151	788,374	577,475	954,949	585,345	716,308.17	1,011,160
Total, September, 1931...	186	955,596	700,795	1,163,274	708,063	873,156.91	1,273,626
Total, September, 1930...	220	1,086,676	823,905	1,353,509	825,784	1,027,375.50	1,463,993

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	85	453,898	333,727	554,046	337,657	\$381,471.12	252,216
Danish.....	9	44,317	27,533	47,348	29,270	33,985.97	35,282
Danzig.....	2	16,473	14,092	24,218	13,831	17,615.00	33,642
Dutch.....	10	67,527	48,128	80,983	48,123	56,757.93	45,656
French.....	5	28,101	17,795	34,398	18,844	22,243.75	12,281
German.....	27	86,885	56,652	97,484	58,146	70,091.54	68,714
Italian.....	4	25,805	16,285	30,979	18,861	18,834.37	9,134
Japanese.....	21	112,681	87,599	138,664	86,762	106,495.72	86,858
Norwegian.....	32	177,302	119,022	200,309	119,156	137,886.80	113,773
Panamanian.....	15	7,927	4,588	8,689	4,604	5,643.39	3,478
Swedish.....	10	51,598	34,460	58,026	42,407	39,060.84	48,337
United States.....	133	795,877	590,588	966,190	588,665	708,179.55	637,723
Total, September, 1932...	353	1,868,391	1,350,469	2,241,339	1,366,326	1,598,265.98	1,347,144
Total, September, 1931...	396	2,070,873	1,516,549	2,518,134	1,533,789	1,820,735.75	1,754,855
Total, September, 1930...	458	2,314,424	1,738,958	2,870,592	1,746,818	2,057,103.58	2,059,582

New Westfal, Larsen Motor Ship Transits Canal.

The new combination passenger and freight motor ship *Berganger*, owned by Westfal, Larsen & Company, transited the Canal on October 4, 1932, en route from Vancouver to Rotterdam via Tacoma, Seattle, Portland, San Francisco, Havre, and Antwerp, homeward bound on its maiden voyage; transit through the Canal outward was made on August 28, 1932. The vessel is 464 feet long, 61 feet beam, and of 6,826 gross tons. Accommodations are provided for 12 first-class passengers, and cargo spaces include about 108,000 cubic feet of refrigerator installation. On her homeward voyage the vessel had aboard 8,316 tons of cargo. The *Berganger* is reported by the local agent of the line as having made the voyage from Amsterdam to Cristobal in 12½ days and from Balboa to Los Angeles in 6½ days, or 19½ days from Amsterdam to Los Angeles, including half a day in the Panama Canal.

The *Trondanger* and *Moldanger*, sister ships of the *Berganger*, are under construction and are to be introduced in the company's service between Europe and the west coast of North America at a later date.

Tanker Traffic Through the Panama Canal in September, 1932.

During the month of September, 1932, 51 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 309,374, on which tolls amounting to \$273,481.68 were paid. Cargo amounted to 291,210 tons, comprised of 284,380 tons of mineral oils and 6,830 tons of creosote.

In point of net tonnage, tanker traffic decreased 3.0 per cent in comparison with the corresponding month a year ago, tolls decreased 4.8 per cent and cargo tonnage 8.2 per cent.

Tank ships comprised 14.4 per cent of the total commercial transits through the Canal during the month; made up 16.6 per cent of the total Panama Canal net tonnage; were the source of 17.1 per cent of the tolls collected; and carried 21.6 per cent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of September, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for September, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	6	34,637	\$26,361.66	5,822
Dutch.....	1	6,509	4,686.48	.....
Norwegian.....	7	47,747	40,959.15	36,437
United States.....	14	79,863	60,483.09	* 9,030
Total, September, 1932.....	28	168,756	132,490.38	51,289
Total, August, 1932.....	24	143,074	107,504.55	18,106
Total, July, 1932.....	27	171,821	128,874.26	17,676
Total, September, 1931.....	25	149,719	114,502.61	22,823
<i>Pacific to Atlantic.</i>				
British.....	3	18,005	19,585.00	34,116
Danzig.....	2	16,473	17,615.00	33,642
Dutch.....	1	6,365	6,528.75	11,323
Norwegian.....	3	18,450	19,346.25	36,523
Swedish.....	1	6,809	4,902.48	.....
United States.....	13	74,516	73,013.82	124,317
Total, September, 1932.....	23	140,618	140,991.30	239,921
Total, August, 1932.....	25	150,530	156,810.80	290,016
Total, July, 1932.....	24	146,710	151,772.50	275,682
Total, September, 1931.....	30	169,167	172,622.06	294,366

* Includes 6,830 tons of creosote.

The following tabulation shows the tanker traffic through the Canal in September, 1932, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	12	66,240	\$48,891.16	* 6,830
United States to South America.....	1	5,049	3,635.28	.....
United States to Balboa.....	1	5,004	5,386.25	2,200
Canada to South America.....	1	5,278	3,800.16	.....
West Indies to South America.....	1	7,126	7,596.25	10,026
West Indies to Balboa.....	1	5,636	6,001.25	10,531
West Indies to Australasia.....	1	3,409	3,877.50	5,822
Europe to United States.....	6	37,659	27,136.08	.....
Europe to South America.....	3	21,535	15,505.20	.....
Europe to Australasia.....	1	11,790	10,661.25	15,880
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	12	70,844	70,369.98	124,317
United States to Europe.....	2	11,967	12,593.75	23,365
South America to United States.....	1	5,049	5,493.75	9,821
South America to Canada.....	1	4,413	4,710.00	9,351
South America to Europe.....	5	37,864	40,272.50	73,067
Balboa to United States.....	1	5,004	3,602.88	.....
Balboa to South America.....	1	5,477	3,943.44	.....

* Creosote.

Of the tanker traffic passing through the Canal in September, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for September, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
September, 1932.....	14	81,564	\$59,726.08	.....
August, 1932.....	13	80,068	57,648.96	.....
July, 1932.....	14	90,498	65,158.56	.....
September, 1931.....	19	110,757	82,915.73	9,444
<i>From Los Angeles.</i>				
September, 1932.....	10	61,290	60,127.48	105,384
August, 1932.....	11	72,149	75,520.00	143,470
July, 1932.....	13	79,629	79,953.75	145,435
September, 1931.....	18	102,556	100,973.76	170,739

MOVEMENTS OF OCEAN VESSELS. *Week ending at midnight, October 8, 1932.*

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
San Rafael.....	1	19 15	2	6 05	2	13 05	2	14 20	American.....	Quaker Line.....	410.0	54.0	17.8	New York, N. Y.	Seattle, Wash.	General.....	1,900	6,484	4,675
Port Duncidin.....	1	19 45	2	6 57	2	14 42	2	15 55	British.....	Glasgow, Scotland	466.9	59.6	29.1	Glasgow, Scotland	Duncidin, N. Z.	General.....	6,919	9,959	7,226
Mather Luckenbach.....	2	00 10	2	8 15	2	15 16	2	16 25	American.....	Lockenbach Line.....	434.3	57.7	24.0	New Orleans, La.	Tacoma, Wash.	General.....	4,763	7,977	5,764
Fairfield City.....	2	6 00	2	8 20	2	15 50	2	17 00	American.....	Isleham S. S. Lines.....	424.2	56.2	21.0	Mobile, Ala.	Seattle, Wash.	Steel, general.....	2,605	7,611	5,450
Port Darwin.....	2	10 45	2	10 50	2	20 45	2	22 40	British.....	Com'lth & Dom. Line.....	480.0	60.5	25.6	London, England	Premade, Auslia.	General.....	2,181	10,875	8,141
Snapper.....	3	5 15	3	8 30	3	10 51	3	12 51	Panamanian.....	P. Cardone.....	390.6	54.2	18.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast.....	6,100	1	1
Star.....	1	20 45	3	11 35	3	15 47	3	16 55	British.....	Andrew Weir & Co.....	390.6	54.2	18.0	Fresport, Tex.	Melbourne, Auslia.	Sulphur.....	180	5,512	4,134
Durazo.....	2	16 20	3	14 00	3	18 18	3	19 25	German.....	Hamburg-American Line.....	227.0	34.0	13.2	Guayaquil, Ecuador	Guayaquil, Ecuador	General.....	125	1,633	1,041
Nueva Panama.....	3	9 10	3	13 55	3	21 12	3	22 40	Panamanian.....	Haus Elliot.....	108.0	20.0	8.6	Cristobal, C. Z.	Buenaventura, Col.	General.....	125	226	101
Gundine.....	3	22 55	4	6 15	4	15 02	4	16 25	British.....	Anglo-Saxon Pet. Co.....	412.0	53.3	22.11	Cristobal, C. Z.	Los Angeles, Calif.	Ballast.....	6,194	6,194	4,494
Tresilian.....	4	2 40	4	7 10	4	15 34	4	16 14	American.....	Kerr Gifford & Co.....	400.0	53.0	15.0	Barry, England.....	Pacific coast.....	General.....	4,482	6,193	4,465
Harpoon.....	4	10 30	4	10 40	4	12 05	4	12 05	Norwegian.....	Shepard S. S. Co.....	380.5	54.7	13.0	Boston, Mass.	Seattle, Wash.	General.....	1,687	6,457	4,757
Bronny.....	4	4 35	4	12 05	4	18 40	4	19 52	British.....	A. S. Borgestad.....	485.6	62.3	17.1	Immingham, Eng.	Vancouver, B. C.	General.....	2,084	9,258	6,944
Lochgoil.....	4	14 20	4	14 35	4	20 48	4	22 53	American.....	Royal Mail Line, Ltd.....	472.3	57.2	16.8	London, Mass.	Tacoma, Wash.	General.....	1,627	3,984	2,614
Mexican.....	4	22 10	5	6 25	5	13 13	5	14 25	American.....	Amer-Hawaiian Line.....	324.0	46.2	17.0	Bake Charles, La.	Seattle, Wash.	General.....	3,722	8,785	6,567
Point Fermin.....	5	5 00	5	7 30	5	14 44	5	15 50	American.....	Swayne & Hoyt.....	446.5	56.1	22.0	Boston, Mass.	Seattle, Wash.	General.....	.....	5,926	4,262
Walter A.....	5	8 20	5	8 35	5	15 23	5	16 55	British.....	Luckenbach Line.....	390.0	55.0	13.0	S. Shields, England	Vancouver, B. C.	Ballast.....	.....	8,580	5,894
Oterpool.....	5	7 30	5	11 55	5	18 38	5	19 54	Dutch.....	Pool Shipping Co.....	451.0	60.0	21.0	Gramcon, England	Los Angeles, Calif.	Ballast.....	3,665	.....	.....
Murena.....	5	10 20	5	13 05	5	20 34	6	1 43	British.....	Anglo-Saxon Pet. Co.....	455.0	56.0	26.4	Hull, England.....	Hongkong, China.	General.....	1,982	9,267	6,834
Menor.....	5	7 15	5	14 00	5	21 15	5	22 00	German.....	Ocean S. S. Co.....	461.5	61.1	18.11	Hamburg Germany	Vancouver, B. C.	General.....	3,065	18,197	13,526
Cardium.....	2	23 45	6	6 05	6	13 43	6	14 42	British.....	Asiatic Petroleum Co.....	467.0	62.0	19.8	Cracoo, D. W. I.	San Francisco, Cal.	General.....	.....	8,577	5,779
Seattle.....	6	6 45	6	6 55	6	14 42	6	15 42	British.....	N. Z. Shipping Co.....	531.0	70.2	25.8	London, England	Auckland, N. Z.	General.....	.....	8,869	5,131
Rangitiki.....	6	6 00	6	8 25	6	15 12	6	16 25	Norwegian.....	Intercean S. S. Corp.....	398.0	54.9	15.0	Rotterdam, Holl'd	Vancouver, B. C.	Ballast.....	2,942	5,442	4,074
Villanger.....	6	6 00	6	8 25	6	15 12	6	16 25	Norwegian.....	Intercean S. S. Corp.....	398.0	54.9	15.0	Rotterdam, Holl'd	Vancouver, B. C.	Ballast.....	.....	.....	.....
Selandia.....	6	10 50	6	12 20	6	19 02	7	4 37	Danish.....	East Asiatic Co.....	370.0	53.0	17.0	Antwerp, Belgium	Vancouver, B. C.	(?).....	.....	.....	.....
Canadian.....	6	15 05	6	15 15	6	22 06	7	18 40	British.....	Can. Nat. Steamships.....	430.0	56.0	20.6	Montreal, Canada.	Brisbane, Auslia.	General.....	4,083	7,680	5,568
Constructor.....	6	15 25	7	7 00	7	13 10	7	21 42	American.....	Dollar Line.....	516.5	72.0	28.0	New York, N. Y.	Manila, P. I.	General.....	1,556	15,286	10,580
Kinley.....	7	5 10	7	7 00	7	14 33	8	00 40	American.....	Panama-Pacific Line.....	574.4	80.3	27.0	New York, N. Y.	Los Angeles, Calif.	General.....	3,307	24,506	17,565
California.....	6	21 05	7	8 20	7	15 14	7	16 15	British.....	Furness, Withy & Co.....	420.0	53.6	18.0	Falmouth, England	Puget Sd., Wash.	Ballast.....	.....	7,087	5,084
Elstree Grange.....	6	22 25	7	8 40	7	16 06	7	17 25	British.....	Furness, Withy & Co.....	435.9	60.0	18.0	Glasgow, Scotland	Vancouver, B. C.	General.....	732	9,630	6,943
Pioneer.....	7	9 40	7	9 55	7	17 31	7	18 40	American.....	Williams S. S. Corp.....	434.3	57.7	18.0	Baltimore, Md.	Seattle, Wash.	General.....	2,261	7,980	5,945
Georgian.....	7	7 50	7	9 40	7	16 29	7	17 50	German.....	Hamburg-American Line.....	462.0	62.0	17.0	Hamburg, Germany	Vancouver, B. C.	Ballast.....	.....	8,713	5,088
Leuna.....	7	8 05	7	12 05	7	18 31	7	19 34	French.....	French Line.....	472.0	59.0	22.2	Havre, France.....	Vancouver, B. C.	Steel, general.....	845	10,619	7,592
Winnipeg.....	7	8 05	7	12 05	7	18 31	7	19 34	French.....	French Line.....	472.0	59.0	22.2	Havre, France.....	Vancouver, B. C.	Steel, general.....	845	10,619	7,592

Retriever ⁴	7 13.50	7 18.00	8 10.58	8 12.09	British.....	West Coast Cable Co.....	190.2	28.2	15.0	St. Lucia, B. W. I., Baltimore, Md. Cristobal, C. Z.	Callao, Peru Seattle, Wash. Gatun, C. Z.	Ballast, Steel, general.....	759	346
Yorkmar.....	7 16.25	7 18.00	8 11.01	8 12.09	American.....	Calmar S. S. Corp.....	409.8	54.2	20.2	Cristobal, C. Z.	Gatun, C. Z.	Towing barge.....	4,305	6,757
Armosa ⁴	7.....	7.....	7 11.01	8 12.09	American.....	United Fruit Co.....	480.6	68.0	20.6	Cristobal, C. Z.	Gatun, C. Z.	Ballast.....	17	17
No. 31024 ⁵	8 5.15	8 6.15	8 13.35	8 14.50	American.....	Shell Oil Co.....	480.6	68.0	20.6	Baltimore, Md.	Los Angeles, Calif.	Ballast.....	2,811	10,009
Southern Sun ²	7 19.05	8 7.30	8 14.15	8 15.30	Norwegian.....	Barber Wilhelm Line	461.4	60.6	20.1	New York, N. Y.	Shanghai, China.	General.....	4,153	7,075
Pont Chico.....	8 7.20	8 8.05	8 13.17	8 16.00	Norwegian.....	Gulf Pacific Line.....	336.8	52.2	20.0	Houston, Tex.	Seattle, Wash.	General.....	7,023	4,107
Venice Maru.....	8 9.35	8 9.40	8 16.10	8 17.25	Japanese.....	The K. Line.....	405.0	53.0	16.0	New York, N. Y.	Yokohama, Japan.	General.....	6,558	4,621
Planter.....	8 11.12	8 11.12	8 17.35	8 18.30	British.....	T. & J. Harrison.....	420.0	54.6	19.0	Liverpool, England	Vancouver, B. C.	General.....	2,638	6,020
Missourian ²	8 16.20	8 16.55	9 11.30	9 12.26	American.....	Amer-Hawaiian Line.....	444.0	59.8	18.1	Boston, Mass.	Portland, Oreg.	General.....	8,567	6,020
Allantic City.....	8 16.35	8 17.05	9 11.56	9 13.12	British.....	Reardon Smith Line.....	411.0	54.5	14.0	Cardiff, England..	Vancouver, B. C.	Ballast.....	6,555	4,659

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Bonnington Court ²	1 20.30	2 6.25	2 13.20	2 13.20	British.....	Canadian Transp. Co.....	405.5	55.5	26.0	Vancouver, B. C.	Hull, England.....	Wheat, general.....	8,850	7,042	5,208
President Grant.....	2 4.25	2 7.28	2 15.00	2 22.04	American.....	Dollar Line.....	517.0	72.0	29.0	Manila, P. I.	New York, N. Y.	General.....	5,573	15,234	10,470
Nueva Panama ²	1 18.15	2 10.19	2 16.20	3 14.00	Panamanian.....	Fans Elliot.....	108.5	20.6	9.4	Buenaventura, Col.	Cristobal, C. Z.	Coffee.....	171	226	101
Dereche ¹	2 9.15	2 10.28	2 18.20	2 18.20	American.....	Union Oil Co.....	435.0	56.0	27.0	Los Angeles, Calif.	Tiverton, R. I.	Gasoline.....	10,000	7,452	5,199
Pet Doheny ¹	2 15.15	2 16.23	3 12.45	3 12.45	American.....	Richfield Oil Co.....	430.0	59.2	28.0	Los Angeles, Calif.	Tiverton, R. I.	Kerosene.....	10,020	7,773	5,634
Antares.....	9-30 1.55	3 6.20	3 13.35	3 13.35	American.....	U. S. Navy.....	390.0	54.0	19.0	Los Angeles, Calif.	Boston, Mass.	Ballast.....	7,719	7,972	5,687
Takotoyo Maru ¹	3 1.10	3 7.15	3 15.10	3 19.00	Japanese.....	Nippon Yusen Kaisha.....	445.0	58.0	25.5	Iloilo, P. I.	New York, N. Y.	General.....	7,711	7,972	5,687
Nyholm ²	3 00.45	3 8.11	3 15.05	3 15.05	Norwegian.....	Canadian Transp. Co.....	381.2	53.7	23.0	Vancouver, B. C.	New York, N. Y.	General.....	6,237	4,353	
San Rosendo ²	3 2.00	3 8.52	3 15.55	3 15.55	British.....	Anglo-Mexican Pet. Co.	407.1	52.2	19.4	Valparaiso, Chile	Tampico, Mexico.	Ballast.....	6,975	7,049	4,941
Kentuckian ²	3 2.30	3 9.15	3 17.10	3 17.10	American.....	Amer-Hawaiian Line.....	414.5	53.7	26.5	Seattle, Wash.	Boston, Mass.	General.....	8,398	7,330	5,241
Mobile City.....	3 3.30	3 9.45	3 18.00	3 22.20	American.....	Isthmian S. S. Lines.....	395.6	55.0	28.0	Vancouver, B. C.	Avonmouth, Eng.	General.....	6,725	6,775	5,148
Sunamvit ²	3 6.00	3 10.07	3 18.55	3 19.45	Swedish.....	Furness Line.....	339.2	54.7	25.0	San Francisco, Cal.	Liverpool, England	General.....	9,564	7,516	5,021
Beljaunce ²	9-29 18.45	3 12.58	3 20.15	3 20.15	Norwegian.....	Canadian Transp. Co.....	586.4	80.3	30.0	Vladivostok, U.S.S.R.	Hamburg, Germany	General.....	9,845	25,254	18,170
Virginia.....	3 12.35	4 0.09	4 14.55	4 14.55	American.....	Puama-Pacific Line.....	414.0	67.0	26.0	San Francisco, Cal.	New York, N. Y.	General.....	1,548	3,350	2,292
Syrus.....	9-27 5.48	4 7.20	4 14.50	4 14.50	American.....	U. S. Navy.....	401.0	54.0	19.0	Puerto Rico, Alaska	Boston, Mass.	Navy supplies.....	350	3,350	2,292
Red Wing ²	3 23.00	4 8.42	4 17.05	4 17.05	German.....	Hamburg-American Line	309.3	44.1	13.0	Champerico, Guat.	Hamburg, Germany	General.....	11	11	7
Tusaloosa City.....	4 4.40	4 9.18	4 17.45	4 17.45	American.....	Gay & Wiggins.....	33.5	9.3		Balboa, C. Z.	Miraflores Lake	Ballast.....	12,403	11,157	8,336
Berganger ²	4 6.30	4 9.48	4 18.15	4 22.25	American.....	Isthmian S. S. Lines.....	424.2	56.2	25.0	Mukuna, T. H.	Baltimore, Md.	Sugar, pineapples	6,255	7,611	5,450
Pacific Grove ²	4 9.50	4 10.36	4 19.25	4 19.25	Norwegian.....	Intercoastal S. S. Co.	463.4	61.2	27.0	Vancouver, B. C.	Rotterdam, Holl'd	General.....	8,316	9,345	6,933
Knute Nelson ²	4 19.00	5 6.10	5 13.35	5 23.00	Norwegian.....	Furness, Witley & Co.	450.4	60.6	28.0	Vancouver, B. C.	London, England.	General.....	8,357	10,086	7,226
Apalachee ²	5 5.00	5 7.15	5 14.40	5 14.40	British.....	Fred Olsen & Co.....	435.0	56.2	27.0	Vancouver, B. C.	Oslo, Norway	General.....	7,812	8,016	5,854
Meton ²	5 9.45	5 10.14	5 18.10	5 18.10	American.....	Shell Eastern Pet. Co.	425.8	57.0	27.0	Los Angeles, Calif.	Ellensmere Pt., Eng.	Gasoline.....	12,473	7,484	5,212
S-48 ⁶	5 11.25	5 11.25	5 19.10	5 19.10	American.....	U. S. Navy.....	425.8	57.0	27.0	Balboa, C. Z.	Perth Amboy, N. J.	Gasoline.....	9,440	7,484	5,212
Lodington.....	4 8.40	5 12.44	5 20.40	5 20.40	American.....	U. S. Army.....	455.0	60.0	17.0	San Francisco, Cal.	Cristobal, C. Z.	Army supplies.....	287		
Robert E. Hopkins ²	5 13.30	5 14.14	5 21.40	5 21.40	American.....	Tidewater Oil Co.....	424.4	58.0	25.0	San Francisco, Cal.	New York, N. Y.	Gasoline.....	8,966	7,333	5,182
S-12 ⁶	6 6.16	6 6.16	6 13.10	6 13.10	American.....	U. S. Navy.....	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	General.....			
S-13 ⁶	6 6.16	6 6.16	6 13.10	6 13.10	American.....	U. S. Navy.....	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	General.....			

* Cable ship.

* Launch.

* Submarine.

* Barge.

* For orders.

* Sand, coke, and general.

* Wheat, lumber, and general.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
S-10 ¹⁰																	
Mallard ¹¹			6	6 20	6	13 10	American.....	U. S. Navy.....	231.0	30.0		Balboa, C. Z.....	Cristobal, C. Z.....				
No. 2 ¹²			6	6 26	6	16 00	American.....	U. S. Navy.....	187.0	35.6		Balboa, C. Z.....	Cristobal, C. Z.....				
R. J. Hanna ¹³	6	2 05	6	7 29	6	15 15	American.....	James B. Berry Sons.....	435.0	56.2	28.0	San Francisco, Cal.....	Tiverton, R. I.....	Gas oil.....	10,779	7,639	5,135
Harry Luckenbach.....			6	8 48	6	16 00	American.....	Luckenbach Line.....	448.9	60.2	32.0	Seattle, Wash.....	Boston, Mass.....	General.....	10,346	9,262	6,853
Tolten ¹⁴	6	7 57	6	9 28	6	16 25	British.....	Canadian Transp. Co.....	421.3	56.0	25.0	Chemainus, B. C.....	Belfast, Ireland.....	Lumber, wheat.....	8,274	7,384	5,459
Point Gorda.....	6	8 35	6	10 05	6	18 45	American.....	Swayne & Hoyt.....	324.0	46.2	23.0	San Francisco, Cal.....	New Orleans, La.....	General.....	4,111	3,984	2,643
Dolius ¹⁵	6	12 55	6	14 24	6	21 35	British.....	Alfred Holt & Co.....	407.0	52.2	27.0	Sopochini, U.S.S.R.....	London, England.....	Salmon.....	6,925	6,468	4,624
Manizales.....	6	5 00	6	15 02	6	22 50	German.....	Grace Line.....	216.5	32.9	14.0	Guayaquil, Ecuador.....	Cristobal, C. Z.....	General.....	667	1,132	741
Californian ¹⁶	6	21 10	7	6 15	7	13 45	American.....	Amer.-Hawaiian Line.....	445.1	59.8	28.3	Seattle, Wash.....	Boston, Mass.....	General.....	9,773	8,567	6,020
Genoa Maru.....	7	1 30	7	7 04	7	15 00	Japanese.....	Nippon Yusen Kaisha.....	425.0	53.6	25.0	Yokohama, Japan.....	London, England.....	Salmon.....	6,680	6,865	5,073
Bodegraven.....	7	4 00	7	7 57	7	16 40	Dutch.....	Royal Nedh. S. S. Co.....	392.0	58.2	27.0	Corral, Chile.....	Hamburg, Germany.....	General.....	8,236	7,834	6,018
Arizona.....	7	6 28	7	8 20	7	16 45	American.....	The Texas Co.....	382.0	51.3	24.0	Los Angeles, Calif.....	Marcus Hook, Pa.....	Gasoline.....	6,307	5,552	3,757
Point Salinas.....	7	7 15	7	9 15	7	17 30	American.....	Swayne & Hoyt.....	386.8	52.2	23.1	Portland, Oreg.....	Mobile, Ala.....	General.....	6,325	5,705	4,167
Virgilio ¹⁷	7	9 30	7	10 31	7	18 30	Italian.....	Soc Italia-FlotieRiunite.....	482.8	61.8	24.0	Valparaiso, Chile.....	Cenosa, Italy.....	General.....	1,920	12,941	9,329
S-14 ¹⁸			7	11 45	7	19 28	American.....	U. S. Navy.....	231.0	30.0		Balboa, C. Z.....	Cristobal, C. Z.....	General.....	952	1,572	1,011
Cerigo.....	7	13 05	7	14 11	7	22 14	German.....	Hamburg-American Line.....	227.2	34.3	15.0	Guayaquil, Ecuador.....	Cristobal, C. Z.....	General.....	5,199	8,139	5,400
Asuka Maru ¹⁹	7	16 15	7	17 25	8	11 45	Japanese.....	Nippon Yusen Kaisha.....	440.4	57.0	23.0	Itoilo, P. I.....	Boston, Mass.....	General.....	13,751	9,620	6,476
Delhi ²⁰	8	22 12	8	6 15	8	12 55	British.....	British Government.....	433.0	46.0	17.0	San Diego, Calif.....	Kingston, Jamaica.....	Gasoline.....	13,751	9,620	6,476
Sun ²¹	7	15 12	8	7 07	8	15 20	American.....	Sun Oil Co.....	480.6	66.0	29.0	Los Angeles, Calif.....	Chester, Pa.....	General.....	13,138	9,273	7,006
Acajutla.....	7	22 00	8	8 18	8	15 50	British.....	Pacific Steam Nav. Co.....	215.7	33.6		Champerico, Guatemala.....	Cristobal, C. Z.....	General.....	6,192	7,145	5,474
Carl Legien.....	8	6 10	8	8 58	8	16 40	German.....	Hamburg-American Line.....	409.8	53.9	22.0	Valparaiso, Chile.....	Hamburg, Germany.....	General.....	7,296	6,572	4,788
Eleanor.....																	
Christeauson.....	8	15 30	8	16 26	9	13 20	American.....	Arrow Line.....	410.5	54.3	25.0	Portland, Oreg.....	New York, N. Y.....	Lumber, general.....	7,296	6,572	4,788

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.	ARRIVALS.		From—	Date.	Vessel.	Line.	For—
		Day.	Hour.					
October 3.....	Veragua.....			Port Limon, Costa Rica.....	October 2.....	Buenaventura.....	Panama R. R. S. S. Line.....	New York, N. Y.....
October 3.....	No. 669-M ¹⁵			Barranquilla, Colombia.....	October 3.....	Inapanguina ¹⁶	A. Tagaropulos.....	Colon, Rep. of Panama.....
October 3.....	Inapanguina ¹⁶			Colon, Rep. of Panama.....	October 3.....	Anachucuna ¹⁶	A. Tagaropulos.....	Colon, Rep. of Panama.....
October 3.....	A. Tagaropulos.....			Colon, Rep. of Panama.....	October 3.....	Fortuna ¹⁷	A. Ferrari.....	Colon, Rep. of Panama.....
October 3.....	Anachucuna ¹⁶			Colon, Rep. of Panama.....	October 3.....	No. 669-M ¹⁵	Pan American Airways.....	Barranquilla, Colombia.....
October 3.....	Fortuna ¹⁷			Colon, Rep. of Panama.....				

* DEPARTURES.

Regulating Level of Gatun Lake.

The circular of May 9, 1932, prescribing the schedule to be followed in maintaining Gatun Lake during the 1932 rainy season published in THE PANAMA CANAL RECORD of May 11, 1932, has been amended to read as follows:

The following schedule for maintaining Gatun Lake during the 1932 rainy season will be adhered to as closely as conditions permit.

The lake will be allowed to fill to elevation 85.50 before any water is wasted over the spillway. However, spilling for sanitary purposes or for exhibition will be permitted upon approval of the Chief of Surveys. The lake will be held between elevations 85.50 and 86.00 until November 1; filled to elevation 86.50 after November 1; and to elevation 87.00 as water supply conditions may indicate. After spillage is begun, a variation of 0.50 foot from above elevations will be allowed to lessen the number of gate operations.

The change is that filling to elevation 86.50 is advanced from October to November, and the raising to 87.00 from "after November 1" to such time as may be indicated by water supply conditions; the general effect is to make the rise about a month later. Records for November indicate that the water supply in that month is ample, and the deferment of raising the surface will afford a better margin of control for floods which may occur in October and November.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., September 20, 1932.

No. 1155.

Panama, Colon Harbor approach, shoaling reported. Shoals have formed at the ends of the breakwaters at the entrance to Limon Bay as follows:

- (a) A depth of 23 feet about 80 yards 256 degrees from East Breakwater light.
- (b) A depth of 27 feet about 95 yards 97 degrees from West Breakwater light.

Approximate position, 9° 23' 30" N., 79° 55' 30" W.

The above is quoted from Notice to Mariners No. 37, dated Washington, D. C., September 10, 1932.

J. L. SCHLEY,
Acting Governor.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective October 8, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.21
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.51
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.09
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending October 8, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Buenaventura.....	Panama R. R. S. S. Line.....	September 2	September 2	276	350
President Grant.....	Dollar Line.....	September 2	September 2	276	1
Durazzo.....	Hamburg-American Line.....	September 2	September 3	190	180
Nueva Panama.....	United Fruit Co.....	September 2	September 3	12,085	121
Cardium.....	Anglo-Saxon Petroleum Co.....	September 2	September 6	26	(²)
Veragua.....	United Fruit Co.....	September 3	September 3	79	623
Taketoyo Maru.....	Nippon Yusen Kaisha.....	September 3	September 3	191	(²)
Lochgail.....	Royal Mail Line, Ltd.....	September 4	September 4	(¹)	(¹)
India.....	Danish-East Asiatic Line.....	September 4	September 4	166	1
Bolivar.....	Colombian S. S. Line.....	September 4	September 4	2,112	875
Ancon.....	Panama R. R. S. S. Line.....	September 5	September 5	23	
Pearl Marie.....	R. Feuillebeis.....	September 5	September 5	111	123
Seattle.....	Hamburg-American Line.....	September 5	September 5	(¹)	140
Knute Nelson.....	Frod Olsen & Co.....	September 5	September 5	(¹)	1
President McKinley.....	Dollar Line.....	September 6	September 7	663	
Manizales.....	Grace Line.....	September 6	September 6	633	146
Tela.....	United Fruit Co.....	September 6	September 7	1	(²)
Carare.....	Elders & Fyffes, Ltd.....	September 7	September 7	58	39
Winnipeg.....	French Line.....	September 7	September 7	242	41
Bodegraven.....	Royal Netherlands S. S. Co.....	September 7	September 7	217	172½
Quirigua.....	United Fruit Co.....	September 7	September 7	220	(²)
Planter.....	T. & J. Harrison.....	September 7	September 8	(¹)	3
Tai Yang.....	Barber S. S. Line.....	September 7	September 8	3,111	
Velma Lykes.....	Lykes Brothers.....	September 7	September 7	389	
Cixalo.....	United Fruit Co.....	September 8	September 8	953	
Cerigo.....	Hamburg-American Line.....	September 7	September 7	165	222
Cefalu.....	Standard Fruit & S. S. Co.....	September 7	September 8	(¹)	256
Virgilio.....	Italian S. S. Line.....	September 7	September 8	275	
Santa Elisa.....	Panama Mail S. S. Co.....	September 8	September 8	32	140
Venezuela.....	Royal Netherlands S. S. Co.....	September 8	September 8	80	(²)
Asuka Maru.....	Nippon Yusen Kaisha.....	September 8	September 8	138	
Acajutla.....	Pacific Steam Navigation Co.....	September 8	September 8	196	17
Venezuela.....	Royal Netherlands S. S. Co.....	September 4	September 5	(¹)	374
Syra.....	Hamburg-American Line.....	September 4	September 5		

¹ No cargo discharged.² No cargo laded.³ Two packages.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending October 8, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Salvador.....	Pacific Steam Navigation Co.....	October 1	October 1	559	1
John Bakke.....	Knutsen Line.....	October 1	October 2	43	
Nueva Panama.....	Hans Elliot.....	October 1	October 2	991	120
Talamanca.....	United Fruit Co.....	October 2	October 2	214	
Condor.....	Grace Line.....	October 3	October 4	1	
Sirius.....	United States Government.....	October 3	October 4	786	542
Syra.....	Hamburg-American Line.....	September 27	October 4	284	5
Ludington.....	United States Government.....	October 4	October 5	80	70
Selandia.....	East Asiatic S. S. Co.....	October 6	October 7	12	
Manizales.....	Grace Line.....	October 6	October 6		
California.....	Panama-Pacific Line.....	October 7	October 7		

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Regulations for the Impounding of Stray Animals.

By virtue of the authority vested in me by the Act of Congress approved July 5, 1932, relating to the keeping and impounding of domestic animals in the Canal Zone, I hereby establish the following regulations:

1. The owner or custodian of any horse, colt, mule, ass, bull, steer, cow, calf, hog, goat, or sheep, shall not permit any such animal to be at large within or in the neighborhood of any townsite, labor camp, village, or other settlement in the Canal Zone, or on any watershed from which any public water supply is obtained; nor shall such animals be staked or tethered in such neighborhood or place or within 50 feet from any railroad track, or in such manner as to be or create a nuisance.

2. Any animal of the kind or character named in paragraph 1 hereof found at large or tethered contrary to the provisions of said paragraph 1 shall be taken up and impounded by the poundmaster; *Provided*, That any such animal so found at large or tethered may be taken up by any private individual and delivered to the police for impounding.

3. Notice of the impounding of any such aforesaid animal shall be sent to the owner or custodian thereof, if known, and/or shall be posted by the poundmaster in at least two conspicuous public places in the police district in which such animal is impounded for a period of 10 days, including the day upon which the said animal is impounded. Such notices shall contain the name and address of the owner or custodian, if known, a description of the animal, where same is impounded, and to whom application for its release should be made; said notice shall also state that if application for the release of the animal and payment of all costs and expenses are not made said animal will be sold to the highest bidder for cash before the police station named on the tenth day as aforesaid, at an hour to be stated in said notices.

4. If the owner or custodian shall fail to comply with the provisions of paragraph 3 aforesaid, or if the owner or custodian of said animal is unknown or is not found within the said 10-day period, the poundmaster is hereby authorized to execute the provisions of paragraph 3 hereof by selling the animal at the hour and place stated to the highest bidder for cash.

5. No person other than the owner or custodian, or duly authorized agent of the owner or custodian, may procure or attempt to procure the release of any impounded animal.

6. For each horse, colt, mule, ass, bull, or cow impounded, there shall be collected \$1, as a pound fee, and 50 cents per day as a maintenance charge; and for each calf, hog, goat, or sheep, 50 cents shall be collected as a pound fee, and 25 cents per day as a maintenance charge.

7. All amounts collected by the poundmaster from the owner or custodian of any impounded animal, or from its sale, shall be remitted to the Collector of The Panama Canal. There shall be returned to the owner or custodian of any animal sold under the provisions of these regulations, upon application therefor made, at any time within six months from the date of sale, the amount for which the animal was sold, less the pound fees and expenses incurred by the poundmaster, from appropriations, Civil Government, The Panama Canal and Canal Zone.

8. If any impounded animal is suffering from any infectious or contagious disease, or from any disease or injury causing great pain, or if no bid is received for any impounded animal offered for sale and it is of small value, the poundmaster shall destroy such animal.

9. The cost of constructing pounds and caring for and feeding estrays named herein shall be paid from appropriations, Civil Government, The Panama Canal and Canal Zone.

10. The police district commanders of the Balboa and Cristobal Divisions are designated and appointed, ex officio, as poundmasters for their respective jurisdictions.

11. The act of Congress authorizing these regulations provides that any person violating any provision thereof shall be guilty of a misdemeanor.

September 27, 1932.

J. L. SCHLEY,
Acting Governor.

Revision of Telephone Directory.

The copy for a revised telephone directory, to be issued as of January 1, 1933, will go to the printer November 15, 1932. All changes or corrections in the present directory should be forwarded to the Telephone Supervisor, Balboa Heights, not later than November 1, 1932. Proof corrections will be made to December 1, 1932.

Binders for The Panama Canal Record.

Cardboard covers, punched and fitted with brass fasteners forming binders for THE PANAMA CANAL RECORD are offered for sale at 25 cents a set, for the benefit of those who wish to keep a file of the issues for ready reference. Orders may be addressed to The Panama Canal, Balboa Heights, Canal Zone, or The Panama Canal, Washington, D. C.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Tolls Charges for Transit of the Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... .72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton..... .50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessel to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton..... 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake or original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in the current tariff or supplements thereto.

Facilities for Shipping.

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, can bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from ample stocks at both ends of the Canal. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits, and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective in the course of handling large traffic through the Canal in over 17 years of operation.

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

Density of Water in Balboa and Cristobal Harbors.

Place.	Weight of sea water in ounces per cubic ft.			Rainy season. Average temperature. Degrees F.
	Average.	Maximum.	Minimum.	
Cristobal (between docks 8 and 9).....	1018	1020	1013	84.0
Balboa (dock 18).....	1011	1021	1005	83.0

(NOTE.—The above is based on two months' observations at Cristobal and Balboa. Average taken at 12-foot depth. Minimum occurred after heavy rain at 3-foot depth at Cristobal and 12-foot depth at Balboa. The weight of a cubic foot of fresh water at 85° F. is 995 ounces.

Location of Patients and Visiting Hours, at Gorgas Hospital.

The following table shows the distribution of patients in the Gorgas hospital buildings and the visiting hours for the various wards and sections:

Section and Ward.	Visiting Hours.
Section "A:"	
Ward 2, Semi-private, white male.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 3, American male, eye, ear, nose and throat patients.....	Tuesdays, Thursdays and Saturdays, 2.30 to 4.30 p. m., 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 4, Private rooms.....	Daily, same as Ward 2 (above).
Section "B:"	
Ward 5, Male, private rooms, American boys.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 6, Foreign, male and female, private rooms, American girls.....	
Ward 7, White females, private rooms.....	
Ward 8, Obstetrical department, white females.....	No visitors permitted in nursery.
Nursery.....	
Section "C:"	
Ward 9, Colored, male.....	Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 10, White foreign, male.....	
Ward 11, Colored, male (surgical).....	
Ward 12, Colored, male (medical).....	
Ward 13, Colored, male, G. U.....	Tuesdays, Thursdays, Saturdays, Sundays, and holidays, 2.30 to 4.30 p. m.
Ward 14, White, male, G. U.....	
Section "D:"	
Ward 15, American, male (surgical).....	Tuesdays, Thursdays, Saturdays, Sundays and holidays, 2.30 to 4.30 p. m.; 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.
Ward 16, American, male (medical).....	
Ward 17, Colored children.....	Wednesdays, Fridays, Sundays, and holidays, 1.30 to 3.00 p. m.
Ward 18, White children.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 19, Colored, female (medical).....	Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 20, Colored, female, surgical, obstetrical.....	
Isolation section.....	No visitors permitted except to visit tuberculosis patients Thursdays, Sundays and holidays, 1.30 to 3.00 p. m.

Permission to visit outside of visiting hours may be granted upon application to the Superintendent's Office.

Immediate relatives of seriously ill patients will be admitted at any time by and in the discretion of the attending physician, section nurse, and in her absence, the nurse in charge.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal, Washington, D. C.

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at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., October 19, 1932.

No. 12.

Cargo Through the Canal During September, 1932.

On pages 160 and 161 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in September, 1932. This cargo, segregated according to direction as compared with September, 1931, and the differences, are shown in the following tabulation:

	September, 1931.	September, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	481,229	335,984	—145,245
Pacific to Atlantic.....	1,273,626	1,011,160	—262,466
Total.....	1,754,855	1,347,144	—407,711

Cargo tonnage through the Canal declined 407,711 tons (23.2 per cent) in September, 1932, compared with September, 1931. The movement in both directions contributed to the loss, the decline in the Atlantic to Pacific movement having been 30.2 per cent, and in the Pacific to Atlantic movement, 20.6 per cent. In comparison with the preceding month (August, 1932), total cargo tonnage declined 2,309 tons (0.2 per cent), a decline of 3.7 per cent in Pacific-bound cargo having been partially offset by a gain of 1.0 per cent in Atlantic-bound cargo.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the cargo originating in the Atlantic area, that coming from the United States amounted to 208,460 tons, or 62.0 per cent of the total moving from the Atlantic to the Pacific in the past month. This was a decrease of 153,424 tons, or 42.4 per cent, in comparison with the amount coming from the east coast of the United States in September, 1931. Cargo from Europe, which comprised 73,382 tons, or 21.8 per cent of the total in September, 1932, recorded the slight gain of 37 tons compared with the previous year. In September, 1932, cargo from the United States and Europe made up almost 84 per cent of the total moving from the Atlantic to the Pacific. The proportion of the total traffic originating in the United States was 75.2 per cent in September, 1931, and 62.0 per cent in September, 1932. Europe's proportion to the total increased from 15.2 per cent to 21.8 per cent in the same comparison.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in the past month was reported routed as follows: 149,096 tons, or 44.4 per cent, to the United States; 76,257 tons, or 22.7 per cent, to Asia; 50,357 tons, or 15.0 per cent, to Australasia; 24,465 tons, or 7.3 per cent, to South America. The amounts destined to all these areas declined in comparison with September, 1931, as follows: To United States, 67,426 tons, or 31.1 per cent; to

South America, 8,072 tons, or 24.8 per cent; to Australasia, 685 tons, or 1.3 per cent; and to Asia, 61,558 tons, or 44.7 per cent. The proportion of the total traffic destined to the United States declined slightly as compared with September, 1931, and Asia's proportion declined from 28.6 per cent to 22.7 per cent. The proportions destined to South America registered a small gain, and Australasia's proportion increased from 10.6 per cent to 15.0 per cent

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in September, 1932, 562,742 tons, or 55.7 per cent of the total, originated in the United States; 166,291 tons, or 16.4 per cent, in South America; 112,089 tons, or 11.1 per cent, in Canada; 77,686 tons, or 7.7 per cent, in Asia; and 42,760 tons, or 4.3 per cent, in Australasia. Tonnage from Canada increased 14,402 tons, or 14.7 per cent in comparison with September, 1931. That from all other regions mentioned above declined as follows: From United States, 137,717 tons, or 19.7 per cent; from South America, 132,071 tons, or 44.3 per cent; from Asia, 11,440 tons, or 12.8 per cent; and from Australasia, 13,629 tons, or 24.2 per cent. The percentages of the total cargo originating in the United States, Canada, and Asia were higher than in September, 1931, while from South America and Australasia they were lower. The changes were small in the case of the United States, Asia, and Australasia. Canada's proportion increased from 7.7 per cent in 1931 to 11.1 per cent in 1932. South America's proportion declined from 23.5 per cent to 16.4 per cent due to curtailed shipments of nitrates and iron ores.

Destination.—Segregated according to destination, 535,818 tons, or 53.0 per cent of the cargo moving from the Pacific to the Atlantic was destined to ports on the east coast of the United States, and 419,576 tons, or 41.5 per cent, to Europe. These two areas absorbed 94.5 per cent of the total cargo moving in this direction. Cargo destined to both the United States and Europe declined in comparison with September, 1931; to the United States the decline amounted to 200,391 tons, or 27.2 per cent, and to Europe, 13,319 tons, or 3.1 per cent. The percentage of the total destined to the United States was less than in September, 1931, while that destined to Europe increased from 34.0 per cent in 1931 to 41.5 per cent in 1932.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify about 90 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of September, 1932. The remaining 10 per cent consisted, for the most part, of manufactured goods in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for September, 1931, or September, 1932, are listed in the following tabulation:

Commodity.	September, 1931.	September, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Corn.....	3,597	12,977	+9,380
Cotton.....	46,986	24,921	-22,065
Iron and steel.....	72,615	31,077	-41,538
Tinplate.....	11,829	6,990	-4,839
Oils, mineral.....	47,657	58,255	+10,598
Paper.....	16,706	13,375	-3,331
Phosphates.....	21,344	7,842	-13,502
Sulphur.....	21,919	5,871	-16,048

The above 8 commodity groups comprise nearly 48 per cent of the total cargo moving from the Atlantic to the Pacific in September, 1932. Two of the items showed increases, mineral oils and corn, and the balance decreases. Manufactures of iron and steel and cotton registered the heaviest losses.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify over 98 per cent of the cargo moving from the Pacific to the Atlantic during September, 1932. Commodities which aggregated more than 10,000 tons either during the past month or the corresponding month in 1931, are listed below:

Commodity.	September, 1931.	September, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	13,167	16,960	-1,207
Beans.....	25,386	8,196	-17,190
Canned goods (fish, fruit, vegetables, etc.).....	85,589	120,192	+34,603
Cold storage (food products).....	17,153	13,239	-3,914
Fruit, dried.....	32,488	32,180	-308
Fruit, fresh.....	14,043	13,949	-94
Lumber.....	229,333	110,820	-118,513
Metals (principally copper).....	47,984	30,191	-17,793
Nitrates.....	122,661	.....	-122,661
Oils, mineral.....	288,301	241,209	-47,092
Ores.....	55,207	6,938	-48,269
Paper pulp.....	16,649	9,596	-7,053
Sugar.....	117,051	156,644	+39,593
Wheat.....	60,615	107,653	+47,038

* Does not include fresh fruit.

The above 14 commodity-groups comprise almost 86 per cent of the cargo moving from the Pacific to the Atlantic in September, 1932. Three of the items showed increases and 11 showed decreases. The increases were in wheat, sugar, and canned goods. The most important decreases occurred in shipments of nitrates, of which there were none in September, 1932, and of lumber, ores, and mineral oils.

(Continued on next page.)

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 17, 1932.

No. 1190.

HYDROGRAPHIC BULLETIN.

The following notice was copied from the *Hydrographic Bulletin*, Washington, D. C., dated October 5, 1932:

THE LEONIDS.

The Hydrographic Office is cooperating with astronomers who are making a study of meteors and kindred phenomena, and in conformity with this purpose the following article furnished by Prof. C. P. Olivier of the Flower Observatory, University of Pennsylvania, Upper Darby, Pa., is published:

"Since the year 902 A. D., usually at intervals of about 33 years, great showers of meteors have appeared. These are known as Leonids for they radiate from a point in Leo. Their maximum at this epoch will probably be in November, 1932, or 1933, with the best chance for 1932. As a good shower was seen in 1930 and a finer one in 1931, a very much better one is expected in 1932. All persons interested in astronomy are therefore urged to observe during the nights of maximum. These are expected to be November 14-15, 15-16, 16-17, and 17-18; the two middle dates being most probable.

"Counts of all meteors seen per half hour, using G. C. T., from as many ships as possible, are desired for any one of these nights on which large numbers of meteors appear. Also accurate observations of the paths of brilliant fireballs and particularly of long-enduring trains, the latter at minute intervals to determine the drift, should be made. When the position of the ship is exactly given, duplicate observations of such objects from two ships will permit the calculation of their heights and paths, and those of train-drifts will give most important information about the upper atmosphere, obtainable in no other way. The American Meteor Society will undertake the reduction of all such data."

Mariners desiring to assist in the collection of data concerning the approaching display of Leonids are requested to report their observations of this phenomenon to the Hydrographic Office.

J. L. SCHLEY,
Acting Governor.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, September, 1932.—Continued from page 159.
(Figures represent tons of 2,240 pounds.)

FROM—	NORTH AMERICA.						SOUTH AMERICA.				AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.				
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. ‡	Total, Australasia.	Philippine Islands.	China.			Japan.	Far East. †	Total, Asia.	
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports	75,298		206	366,325	79,195	1,551	593	380	1,700		4,224	5,775	779			6,554	9,737	16,890	14,640	845,42	112,132	885	39.3	
South Atlantic ports	3,684				3,684								389	494		883	562	1,471	2,137	4,170	8,737	2.6		
Gulf ports	34,885			2,200	36,885								1,535			1,535	1,132	2,151	25,678	257,29	218	67,638	20.1	
Total, United States	113,667		206	2,560	3,325	119,764	1,551	593	380	1,700	4,224	7,699	1,273			8,972	11,431	20,512	455	1,102	75,500	208,460	62.0	
East coast of Canada	7,886	2,400			10,286								2,023	1,705		3,728						14,014	4.2	
East coast of Central America			1,428		1,428																	1,428	0.4	
Cristobal, C. Z. ‡	758				3,316	851	879	1,086	545		3,361											6,677	2.0	
West Indies	433	50		10,531	11,014	10,026					10,026	5,822				5,822				1		26,863	8.0	
Total, North America	122,744	2,466	1,716	13,097	3,325	145,808	12,428	1,472	1,466	2,245	17,611	15,544	2,978			18,522	11,431	20,512	456	1,102	75,501	257,442	76.6	
EUROPE:																								
British Isles	658,320					3,866	1,869	100	210	795	180	3,154				13,044	1,782	14,826				21,846	6.5	
Belgium	6,886	383	228			7,497	7		50	305		362										7,859	2.3	
Denmark	10					10																10		
France	112	9	21			142	212	244	21	135	4	616				1,020	1,020					1,778	0.5	
Germany	7,254	446	299		991	8,990	362	16	27	36	441											9,431	2.9	
Holland	1,737	144			5,621	7,502	182	15	47	422	666											8,168	2.4	
Italy	299	80	4			433	47		122		169											652	0.2	
Norway	648	6	430	217		1,301	54		7		61					15,880						17,181	5.1	
Spain and Portugal	70	191	1			262																323	0.1	
Sweden	4,499	90		149		4,738					23	1,131										4,738	1.4	
Europe †	115	30	120			265	987	30	35	56												1,396	0.4	
Total, Europe	22,388	4,567	1,103	366	6,612	35,056	3,720	405	390	1,878	207	6,600				28,924	2,802	31,726				73,382	21.8	
East coast of South America																								
Asia	3,855	76				3,931	210	44				254										756	1.6	
Africa	82			1		83																83		
Egypt	25					25										109	109					134		
	2					2																2		
Grand total	149,096	7,129	5,279	13,464	9,937	184,905	16,358	1,921	1,856	4,123	207	24,465	15,544	31,902	2,911	50,357	11,431	20,512	43	212	1,102	75,501	393,984	100.0
Per cent of total cargo:																								
September, 1932	44.4	2.1	1.6	4.0	2.9	55.0	4.9	0.6	0.6	1.2		7.3	4.6	9.5	0.9	15.0	3.4	6.1	12.9	0.3	22.7	100.0		
September, 1931	45.0	2.8	3.1	2.3	0.8	54.0	2.6	1.0	0.8	2.3	0.1	6.8	3.1	7.3	0.2	10.6	2.8	8.2	16.1	1.5	28.6	100.0		
September, 1930	45.2	2.3	1.7	0.1	0.8	49.6	6.4	0.5	1.1	1.6	4.7	14.3	3.3	9.1	0.5	12.9	2.0	8.1	10.7	2.3	23.2	100.0		

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, September, 1932.

(Figures represent tons of 2,240 pounds.)

From —	NORTH AMERICA.										EUROPE.												Grand total.	Per cent of total cargo.			
	UNITED STATES.					Other North America.																					
	North Atlantic ports.	South Atlantic ports.	Total, United States.		East coast of Canada.	East coast of Central America.	Cristobal, C. Z. ¹	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Sweden.	Spain and Portugal.	Europe. ²	Total, Europe.	East coast of South America.			Egypt.	Africa.	
			Gulf ports.	Total, United States.																							
NORTH AMERICA:																											
West coast of U. S.	357,816	8,446	32,656	938	918	50		852	10,841	410,661	84,246	5,106	245	16,583	16,356	9,376	983	1,372	310	20	15,077	149,674	2,377	5	25		
West coast of Canada	633	633	633	633	633	2,371		11	720	3,735	76,674	308	1,993	4,189	2,827	6,486	362	125	3,690	10	818	107,472	882				
West coast of Cen. A.	404		255	255	255			1,858	212	2,474											27						
Bahia, C. Z.			255	255	255			60		315																	
Hawaiian Islands	45,524		1,252	46,776						46,776																	
Total, N. America	403,744	8,446	34,796	446,986	2,421			2,781	11,773	463,961	84,920	5,112	248	20,772	19,210	15,582	1,345	1,497	4,000	20	25,895	257,173	3,250	5	25		
SOUTH AMERICA:																											
Chile	964			964				224	194	1,382	11,057	1,064	550	915	4,641	430		9		29	790	19,485					
Colombia	705			705				3,833		4,538					76							76					
Ecuador	10,140			10,140				2,623		12,763	140	20									50	210					
Peru	6,705			6,705	9,351	7		822		16,885	73,666	225	1,603	13,188	2,771	11,353		5,105		12	1,512	109,435					
West coast S. America	98			98						98					48						1,371	1,419					
Total, S. America	18,612			18,612	9,351	7		7,502	194	35,666	84,863	1,309	2,153	14,103	7,536	11,783		5,114		41	3,723	130,625					
AUSTRALASIA:																											
Australia	522			522	17,198			91		17,811	3,500											3,500					
New Zealand	164			164	169					333	13,570											13,570					
Australasia											4,898			2,648								7,546					
Total, Australasia	686			686	17,367			91		18,144	21,968			2,648								24,616					
ASIA:																											
Philippine Islands	50,904			5,112	56,016				100	56,116																	
China	2,811	122		2,933				228	100	3,261																	
Japan	8,855	1,000		9,855				244	180	10,309													57				
Far East	700			700					81	781	7,162											7,162					
Total, Asia	63,300	1,122		5,112	69,534			472	461	70,467	7,162											7,162					
Grand total	486,342	9,568	39,908	535,818	29,139			710	846	12,428	588,238	274,913	6,723	4,391	37,623	26,746	27,645	1,345	6,611	4,000	61	29,618	419,576	3,316	5	25	1,011,160
Per cent of total cargo:																											
September, 1932	48.2	0.9	3.9	53.0	2.9			1.1	1.2	58.2	27.3	0.7	0.4	3.7	2.6	2.7	0.1	0.7	0.4		2.9	41.5	0.3			100.0	
September, 1931	49.0	3.9	4.9	57.8	4.7			0.7	1.9	65.1	16.1	0.6	0.5	0.3	2.9	1.9	0.4	0.7			10.6	34.0	0.4	0.5		100.0	
September, 1930	46.4	0.5	5.0	51.9	3.0			1.0	2.5	58.4	23.9	1.8	0.1	1.4	3.1	0.5	1.2	0.2			8.0	40.2	0.9	0.5		100.0	

¹ General cargo not routed so as to allow segregation between definite ports.

² Includes both local and transit cargo.

³ Includes Sweden.

* General cargo not routed so as to allow segregation between definite ports.

* Includes both local and transit cargo.

* Includes Sweden.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, October 15, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.	Completed transit.		Cleared for sea.	Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Mauna Ala	9	7 10	9	7 15	9	14 10	9	15 25	420 6	54 0	19 0	Baltimore, Md.	Vancouver, B. C.	Steel, general.	1,879	7,332	5,344
Manizales	8	22 50	9	8 30	9	17 54	German	Grace Line.	216 5	32 9	13 3	Cristobal, C. Z.	Guayaquil, Ecuador	General.	186	1,132	741
Cerigo	8	22 14	9	9 15	9	16 26	German	Hamburg-American Line.	227 2	34 4	13 8	Cristobal, C. Z.	Guayaquil, Ecuador	General.	88	1,572	1,011
Hakonan	9	8 05	9	9 00	9	15 51	Japanese	Mitsui Bussan Kaisha.	437 6	56 6	17 0	New York, N. Y.	Dairen, China.	General.	1,447	7,414	5,055
Tarbank	9	9 15	9	9 30	9	17 11	British	Bank Line, Ltd.	426 0	57 0	17 6	Boston, Mass.	Shanghai, China.	General.	2,200	7,623	5,412
Santa Elisa	8	13 35	9	11 11	9	17 55	American	Panama Mail S. S. Co.	360 3	51 7	22 7	New York, N. Y.	San Francisco, Cal.	General, coffee.	3,118	5,957	4,325
Quebec City	9	10 05	9	12 15	9	19 48	British	Sir W. R. Smith & Sons	400 0	54 3	16 0	Antwerp, Belgium.	Vancouver, B. C.	Ballast.	7,004	5,406	5,406
Cestia	9	13 45	9	13 50	9	20 33	British	Knut Knutsen, O. A. S.	375 8	51 4	14 3	Oslo, Norway.	Vancouver, B. C.	Ballast.	5,681	3,925	3,925
N. P. 1	9	13 45	9	9 05	9	9 05	American	U. S. Navy	400 0	54 0	12 1	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	6,993	5,397	5,397
King City	10	6 20	10	6 35	10	14 16	British	Reardon Smith Line	405 0	55 6	14 2	Barry, England.	Vancouver, B. C.	Ballast.	6,989	5,251	5,251
Aldington	10	8 20	10	8 25	10	15 35	British	Canadian Transp. Co.	405 0	55 6	14 2	Antwerp, Belgium	Vancouver, B. C.	Ballast.	52	226	101
Court	10	8 20	10	8 25	10	15 35	American	U. S. Navy	231 0	21 1	9 0	Cristobal, C. Z.	Ballast.	General.	501	8,388	6,065
S-14	9	23 00	10	9 55	10	16 06	Panamanian	Hans Elliot	108 0	20 0	9 0	Cristobal, C. Z.	Buenaventura, Col.	Navy cargo.	31	46	22
Chamont	10	6 40	10	11 25	10	16 45	American	U. S. Navy	436 8	58 2	24 0	Boston, Mass.	Manila, P. I.	Ballast.	78	49	49
Roseville	10	18 05	10	18 20	11	10 15	Norwegian	A. F. Klavness	426 4	58 5	15 0	Rotterdam, Holland	Los Angeles, Calif	General.	6,160	8,912	6,504
Real	10	8 40	10	12 15	10	19 50	Panamanian	Hans Elliot	62 0	17 0	0	Cristobal, C. Z.	Ballast.	Cotton, oil, etc.	5,650	4,071	4,071
Tura	10	8 40	10	12 15	10	19 50	Panamanian	Hans Elliot	64 2	20 3	0	Cristobal, C. Z.	Ballast.	Cement, cattle.	6,800	5,792	4,073
Kirishima	10	21 05	11	6 10	11	14 22	Japanese.	Kokusai Kaen Kaisha.	443 0	60 0	24 0	New York, N. Y.	Yokohama, Japan.	Sulphur.	2,67	58	58
Maru	11	3 20	11	7 10	11	15 10	British	Anglo-Can. Ship. Co.	405 0	52 4	13 0	Glasgow, Scotland	Vancouver, B. C.	Steel, general.	4,270	7,611	5,454
Cape Orizaba	11	6 10	11	8 25	11	16 30	Danish	West Indian Trad. Co.	384 7	54 4	17 3	Aalborg, Denmark.	Puntarenas, C. R.	Ballast.	2,995	6,423	4,744
Victoria	10	23 15	11	8 25	11	15 20	British	Andrew Weir & Co.	400 0	53 0	25 8	Galveston, Texas	Auckland, N. Z.	Ballast.	6,800	5,792	4,073
Cathness	10	23 15	11	8 25	11	16 40	British	Union of Soc. Sor. Rep.	377 0	52 0	22 3	Kiel, Germany	Vladstok, U.S.S.R.	Ballast.	267	58	58
Alent	5	18 00	11	10 05	11	18 47	U. S. S. R.	Union of Soc. Sor. Rep.	115 2	23 0	11 6	Kiel, Germany	Manila, P. I.	Steel, general.	4,270	7,611	5,454
Avangard	5	18 00	11	10 05	11	18 47	American	Isthmian S. S. Line	425 0	56 0	20 0	Baltimore, Md.	Vladstok, U.S.S.R.	Ballast.	2,67	58	58
Steel Seafarer	11	10 50	11	11 15	11	19 33	American	Union of Soc. Sor. Rep.	115 5	23 9	11 9	Kiel, Germany	Vladstok, U.S.S.R.	Ballast.	2,315	7,107	5,041
Entuziaz	5	18 00	11	11 55	11	19 40	U. S. S. R.	Union of Soc. Sor. Rep.	115 5	23 9	11 9	Kiel, Germany	Vladstok, U.S.S.R.	Ballast.	2,315	7,107	5,041
Tradmont	11	13 35	11	13 45	11	21 40	American	Amer.-Hawian Line	407 8	53 7	18 0	Boston, Mass.	Seattle, Wash.	General.	5,980	9,576	6,673
Pennsylvania	11	13 35	11	21 40	12	10 36	Norwegian	Standard Oil Co.	471 8	64 2	19 0	Teneriffe, Can y Is.	Puerto Bay, Calif.	Ballast.	129	7,420	5,040
Dagbild	11	18 05	11	21 40	12	10 36	Norwegian	Standard Oil Co.	471 8	64 2	19 0	Teneriffe, Can y Is.	Puerto Bay, Calif.	Ballast.	129	7,420	5,040
Silverdandel	11	21 15	12	6 10	12	12 37	British	Kerr Steamship Co.	455 0	61 0	22 6	New York, N. Y.	Yokohama, Japan.	General.	129	7,420	5,040
Hakubusan	11	22 15	12	7 15	12	15 15	Japanese.	Mitsui & Co.	437 6	56 5	15 11	New York, N. Y.	Japan	General.	129	7,420	5,040
Maru	11	22 15	12	7 15	12	15 15	American	Sun Oil Co.	480 6	66 0	22 5	Chester, Pa.	Los Angeles, Calif	Ballast.	12,535	8,224	8,224
Sunoil	12	2 25	12	8 30	12	15 39	Japanese.	Sun Oil Co.	480 6	66 0	22 5	Chester, Pa.	Los Angeles, Calif	Ballast.	12,535	8,224	8,224
Heinrich V.	12	2 55	12	9 30	12	16 37	Danish	W. Tankership Rhederei	521 0	70 0	23 3	Southampton, Eng.	Talara, Peru	General.	3,354	8,543	6,427
Riedemann	12	2 55	12	9 30	12	16 37	Danish	W. Tankership Rhederei	521 0	70 0	23 3	Southampton, Eng.	Talara, Peru	General.	3,354	8,543	6,427
Edward Luck- enbach	12	8 45	12	10 00	12	17 21	American	Luckenbach Line	436 6	57 2	20 8	Boston, Mass.	Seattle, Wash.	General.	3,354	8,543	6,427

Min	12	10	12	10	12	11	12	19	25	British	Sandy & Co	400	0	53	0	15	5	Barry, England	Vancouver, B. C.	6,156	4,484
Democracy	12	9	35	12	14	30	12	21	48	American	Nelson Line	377	0	52	0	23	3	New York, N. Y	Seattle, Wash	5,207	3,969
Loretto	12	13	00	6	00	13	13	38	13	British	Pacific Steam Nav. Co.	404	6	54	2	18	0	Hull, England	Corral, Chile	2,817	5,037
Sidney M.	13	3	00	13	7	15	13	14	13	American	McCormick S. S. Co.	401	0	53	5	20	1	Albany, N. Y	Seattle, Wash	3,028	5,167
Haupmann	13	3	40	13	8	30	13	35	13	British	Anglo-Euad. Offshells	440	0	57	6	18	8	Philadelphia, Pa.	La Libertad, Equa	7,082	5,049
El Aleto	13	4	10	13	11	45	13	18	10	German	Hamburg-American Line	399	0	54	3	18	11	Hamburg, Germany	Valparaiso, Chile	6,555	4,979
Odenwald	13	3	30	13	12	50	13	19	10	Norwegian	Gracoe Line	404	6	61	2	22	6	Amsterdam, Holland	Vancouver, B. C.	2,177	6,083
Trondanger	13	3	30	13	12	50	13	20	14	American	Grace Line	406	0	64	0	24	3	New York, N. Y	San Antonio, Chile	30	3,345
Santa Maria	13	6	15	13	14	02	13	20	14	American	U. S. Army	436	9	58	0	24	2	Brooklyn, N. Y	San Francisco, Cal.	2,448	6,680
Sst. Mibel	13	9	15	13	14	30	13	21	30	American	U. S. Army	436	9	58	0	24	2	Brooklyn, N. Y	San Francisco, Cal.	309	6,680
Major Pullen	13	13	13	13	9	22	13	22	13	American	U. S. Army	436	0	60	0	23	0	Cristobal, C. Z	Gatun, C. Z	309	6,680
Lauch	13	13	13	13	9	22	13	22	13	American	U. S. Army	439	0	60	0	23	0	Cristobal, C. Z	Gatun, C. Z	309	6,680
John Jay	13	12	40	13	15	20	13	19	50	American	Amer. Tankers Corp.	439	0	60	0	23	0	Freeport, Texas	Seattle, Wash	12,000	8,963
Vitana	13	13	25	13	16	35	14	12	07	Norwegian	Canadian Transp. Co	400	6	54	2	15	0	Oslo, Norway	Vancouver, B. C.	6,558	4,633
Nathan Otis	13	20	30	14	6	15	14	14	35	American	Arrow Line	409	6	54	0	17	1	New York, N. Y	Seattle, Wash	2,598	6,653
Chandler	14	6	15	14	7	20	14	15	19	American	Dollar Line	502	0	62	0	26	0	New York, N. Y	San Francisco, Cal.	3,304	12,023
President Hayes	13	22	25	14	8	35	14	15	42	British	Hartol Product Corp.	419	5	65	5	22	0	New York, N. Y	San Francisco, Cal.	1,356	7,060
Solana	14	6	05	14	8	35	14	16	45	British	Com'lth & Dom. Line	477	4	63	0	21	9	London, England	Bluff, N. Z	4,013	10,525
Port Fremantle	14	9	00	14	9	35	14	17	40	British	Amer-Australian Line	410	5	64	2	25	1	New York, N. Y	Brisbane, Australia	6,903	7,704
Australand	14	6	40	14	10	50	14	17	52	British	Royal Mail Line, Ltd	410	5	64	2	25	1	Barry, England	Vancouver, B. C.	7,499	5,155
Messenger	14	6	40	14	10	50	14	17	52	British	Royal Mail Line, Ltd	410	5	64	2	25	1	Barry, England	Vancouver, B. C.	7,487	5,141
Mersey City	14	10	10	14	11	40	14	19	00	British	Reardon Smith Line	411	0	55	0	10	6	Cardiff, England	Vancouver, B. C.	6,982	5,065
Boskoop	14	5	30	15	6	13	15	13	08	Dutch	Royal Neth. S. S. Co.	400	6	58	3	18	0	Hamburg, Germany	Corral, Chile	983	7,817
Nurieton	14	18	10	15	7	20	15	14	23	British	R. Chapman & Son	423	0	58	4	18	0	Newcastle, England	Vancouver, B. C.	6,854	4,746
Acapul	8	15	50	15	9	03	15	15	54	British	Pacific Steam Nav. Co	215	7	34	0	14	3	Cristobal, C. Z	Champerico, Guat	359	1,273
Ata	14	19	25	15	9	13	15	15	56	British	States S. S. Co	315	0	46	0	17	3	Hamburg, Germany	Champerico, Guat	930	3,529
San Bernardino	16	6	30	15	10	15	17	08	18	American	Standard Shipping Co.	410	5	64	2	18	3	Baltimore, Md	San Diego, Calif.	2,050	6,755
San Arriba	15	8	45	15	11	20	15	18	00	Norwegian	Standard Shipping Co.	484	5	65	0	18	0	Rouen, France	Talara, Peru	2,050	6,755
Andrea F.	15	8	45	15	11	20	15	18	00	Norwegian	Standard Shipping Co.	484	5	65	0	18	0	Rouen, France	Talara, Peru	2,050	6,755
Lukenbach.	15	16	35	15	16	50	16	13	41	American	Lukenbach Line	496	0	68	2	22	6	New Orleans, La..	Los Angeles, Calif	5,260	11,487
																				8,762	

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

8	17	20	9	6	12	9	14	35	American	The Texas Co.	416	8	56	1	25	0	Los Angeles, Calif.	New York, N. Y.	Gasoline	8,390	6,756	4,814
8	23	15	9	7	15	9	15	50	Norwegian	Canadian Transp. Co.	381	2	54	7	27	0	Vancouver, B. C.	Avonmouth, Eng.	Wheat	8,052	6,083	4,610
9	12	35	9	13	20	9	20	20	American	Amer.-Hawaiian Line	407	7	53	7	27	0	Portland, Ore.	Boston, Mass.	General	7,661	6,590	4,826
9	13	00	9	13	55	9	21	30	Norwegian	W. L. Conn & Son	385	0	54	6	25	3	Vancouver, B. C.	Rotterdam, Holland	Lumber, grain	7,661	6,590	4,826
9	14	00	9	15	00	9	23	05	Japanese	Osaka Shosen Kaisha	446	0	60	5	23	0	Keelung, Japan	Baltimore, Md	(¹)	2,857	8,262	6,304
9	14	45	9	15	29	9	23	05	Panamaian	Hans Eliott	108	5	60	5	23	0	Buenaventura, Col.	Cristobal, C. Z	Coffee	136	226	101
9	15	00	9	15	40	9	18	40	Panamaian	Hans Eliott	64	2	20	3	0	0	Darien, R. P.	Cristobal, C. Z	Bananas	32	78	49
9	15	00	9	15	40	9	18	40	Panamaian	Hans Eliott	64	2	20	3	0	0	Darien, R. P.	Cristobal, C. Z	Bananas	32	78	49
9	20	00	10	6	21	10	14	10	British	Colonial Sugar Co.	410	5	54	2	27	0	Caracas, Australia	Montreal, Canada	Sugar	8,186	6,953	5,210
9	19	20	10	6	59	10	15	25	British	R. Chapman & Son	423	0	53	2	26	0	Vancouver, B. C.	Avonmouth, Eng.	Wheat, barley	9,307	8,223	4,927
10	1	10	10	8	02	10	16	10	2	Moor Line	375	0	52	5	24	5	Suva, Fiji Islands	Lands End, Eng.	Sugar	7,657	6,051	4,612
10	8	30	9	17	10	17	05	10	British	R. Chapman & Son	412	6	55	5	29	0	Vancouver, B. C.	London, England	Wheat, general	9,800	8,811	4,810
10	9	30	10	17	10	17	35	10	German	North German Lloyd	360	6	51	24	3	0	Corral, Chile	Hamburg, Germany	General	5,750	4,791	3,392
10	15	15	10	16	06	10	23	05	11	Hamburg-American Line	422	3	59	4	28	0	Vancouver, B. C.	Hamburg, Germany	General	8,454	6,344	4,634
10	20	00	11	6	11	11	13	10	11	Graze Line	494	0	64	0	23	1	San Antonio, Chile	New York, N. Y.	General	2,267	10,687	6,633

¹ Tanker.

² Motor ship.

³ General, iron, and cement.

⁴ Launch.

⁵ Submarine.

⁶ Motor schooner.

⁷ Whaler.

⁸ Tug.

⁹ Cotton, tobacco, etc.

¹⁰ Steel, pipe, and general.

¹¹ For orders.

¹² Silk.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Lochmonar ¹⁴ .	11	8.00	11	9.01	11	16.55	11	19.50	British	Royal Mail Line Ltd	485.6	62.2	29.0	Victoria, B. C.	Rotterdam, Holld.	General	8,777	10,772	7,581
Shohi Maru ¹⁴ .	11	7.35	11	9.57	11	18.00	11	18.00	Japanese	Mitsui Bussan Co.	437.0	58.0	26.0	Iloilo, P. I.	New York, N. Y.	General	8,454		
Robert Luckenbach.	11	16.00	11	17.53	12	11.30	12	11.30	American	Luckenbach Line.	445.0	58.0	30.0	Portland, Ore.	Mobile, Ala.	General	10,032	8,695	6,375
Frumenton.	11	17.40	12	7.00	12	14.35	12	14.35	British	R. Chapman & Sons	435.0	60.4	28.0	Vancouver, B. C.	London, England.	Grain	10,837	8,144	6,028
Washington ¹⁴ .	11	17.55	12	7.59	12	14.50	12	20.38	French	Franch Line.	470.3	61.2	27.0	Vancouver, B. C.	Havre, France.	General	8,720	10,334	7,477
Peter Kerr.	12	13.45	12	14.53	12	14.50	12	21.40	American	Quaker Line.	415.0	55.7	26.0	Portland, Ore.	Philadelphia, Pa.	Lumber, general.	8,699	7,704	5,696
Kirsten Maersk	13	1.45	13	7.29	13	14.45	13	17.05	Danish	A. P. Moller Co.	284.9	42.4	20.1	Chincha Is., Peru.	Jacksonville, Fla.	Guano.	3,490	2,460	1,701
Lewis Luckenbach.	13	4.35	13	8.21	13	16.00	13	16.00	American	Luckenbach Line.	496.0	68.2	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	10,007	11,487	8,762
Nebraska.	13	6.15	13	8.38	13	18.25	13	18.25	American	Amer-Hawaiian Line.	471.2	59.1	26.0	Seattle, Wash.	Boston, Mass.	General	7,746	9,032	6,638
Santa Cecilia.	13	10.30	13	14.30	13	20.40	14	10.05	American	Panama Mail S. S. Co.	380.2	51.6	24.0	San Francisco, Cal.	New York, N. Y.	General	2,864	5,797	4,188
Reina del Pacifico ¹⁴ .	13	22.10	14	6.12	14	13.35	13	21.10	British	Pacific Steam Nav. Co.	550.0	76.3	28.0	Talcahuano, Chile.	Liverpool, England	General	3,917	18,871	13,099
Amie Johnson ¹⁴ .	13	17.00	14	7.27	14	16.20	14	19.10	Swedish	Johnson Line.	382.2	52.6	26.0	Vancouver, B. C.	Gottenburg, Swed	General	6,057	6,656	4,919
Ellis, No. 154 ¹⁵ .	14	7.30	14	8.20	14	16.30	16	18.00	American	U. S. Navy	310.0	30.6	10.0	San Diego, Calif.	Norfolk, Va.	General			
Cole, No. 155 ¹⁵ .	14	7.30	14	8.20	14	16.30	16	18.00	American	U. S. Navy.	310.0	30.6	10.0	San Diego, Calif.	Norfolk, Va.	General			
Bernadon	14	7.30	14	8.30	14	16.52	16	18.00	American	U. S. Navy	310.0	30.6	10.0	San Diego, Calif.	Norfolk, Va.	General			
No. 153 ¹⁵ .	14	7.30	14	8.30	14	16.52	16	18.00	American	U. S. Navy	310.0	30.6	10.0	San Diego, Calif.	Norfolk, Va.	General			
J. F. Talbot.	14	7.30	14	8.37	14	16.52	16	18.00	American	U. S. Navy	315.0	30.0	10.0	San Diego, Calif.	Norfolk, Va.	General			
Dupont.	14	7.30	14	8.55	14	17.45	16	18.00	American	U. S. Navy	310.0	30.6	10.0	San Diego, Calif.	Norfolk, Va.	General			
No. 152 ¹⁵ .	12	16.15	14	9.30	14	17.45	14	17.45	American	Swayne & Hoyt.	324.0	46.2	21.0	Powell River, B. C.	Norfolk, Va.	Lumber, general.	2,474	3,984	2,612
Point Sur.	14	9.15	14	10.56	14	20.00	15	2.40	British	Blue Star Line.	423.4	56.0	26.2	N. Westminster, B. C.	Lake Charles, La.	Frozen, general.	6,111	7,744	5,621
Empire Star.	13	20.15	14	14.47	14	22.45	14	22.45	Norwegian.	Canara Guano	392.1	48.7	27.0	Guanapo Is., Peru	Dunkirk, France.	Guano.	6,500	5,381	3,838
Viking II.	13	20.15	14	14.47	14	22.45	14	22.45	Norwegian.	Canara Guano	392.1	48.7	27.0	Guanapo Is., Peru	Dunkirk, France.	Guano.	6,500	5,381	3,838
S-14 ¹⁶ .	15	6.16	15	13.35	15	13.35	15	13.35	American	U. S. Navy	231.0	20.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	General			
S-16 ¹⁶ .	15	6.16	15	13.35	15	13.35	15	13.35	American	U. S. Navy	231.0	20.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	General			
S-17 ¹⁶ .	15	6.28	15	13.35	15	13.35	15	13.35	American	U. S. Navy	231.0	20.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	General			
Chewink.	15	6.34	15	13.35	15	13.35	15	13.35	American	U. S. Navy	180.0	35.6	26.0	Balboa, C. Z.	Cristobal, C. Z.	General			
No. 39 ¹⁷ .	15	6.00	15	7.09	15	14.50	15	17.20	British	U. S. Navy	400.0	54.3	26.0	N. Westminster, B. C.	Cardiff, Wales.	General	7,588	6,979	5,389
Vernon City.	15	6.30	15	7.55	15	15.30	17	12.05	German	Readon Smith Line.	216.5	32.9	14.3	Guayaquil, Ecuador	Cristobal, C. Z.	General	935	1,105	698
Horace.	15	16.17	15	17.38	16	13.25	16	13.25	American	North German Lloyd.	445.0	58.0	23.0	Portland, Ore.	Boston, Mass.	General	9,236	8,699	6,363
Luckenbach.	15	16.17	15	17.38	16	13.25	16	13.25	American	Luckenbach Line.	445.0	58.0	23.0	Portland, Ore.	Boston, Mass.	General	9,236	8,699	6,363
Launch.	15	16.17	15	17.38	16	13.25	16	13.25	American	U. S. Navy.	445.0	58.0	23.0	Balboa, C. Z.	Cristobal, C. Z.	General	9,236	8,699	6,363

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 9...	Dungannon.	The Texas Co.	Port Arthur, Tex.	October 9...	Volma Lykes	Lykes Brothers S. S. Co.	Sto. Domingo via wayp'ts.
October 9...	Baracoa.	Colombian S. S. Line.	New York via wayports.	October 9...	Sixado.	United Fruit Co.	New York via wayports.
October 9...	Antiochia.	Hamburg-American Line.	Hamburg via wayports.	October 9...	Airon.	Panama R. R. S. S. Line.	New York via Haiti.
October 10...	No. 144-M ¹⁸ .	Pan American-Grace Airways.	Talara via wayports.	October 10...	Baracoa.	Colombian S. S. Line.	New York via Kingston.
October 10...	Inapachuca ¹⁹ .	A. Tagaropulos.	Colon, Rep. of Panama.	October 10...	No. 659-M ¹⁸ .	Pan American Airways.	Barranquilla, Colombia.
October 10...	Anapachuca ¹⁹ .	A. Tagaropulos.	Colon, Rep. of Panama.	October 10...	Antiochia.	Hamburg-American Line.	Tampico via wayports.
October 10...	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.	October 10...	Dungannon.	The Texas Co.	Tampico via wayports.
October 10...	Pellerin de la Touche.	French Line.	St. Nazaire via wayports.	October 10...	Quirigua.	United Fruit Co.	New York via wayports.
October 10...	No. 145-M ¹⁸ .	Pan American Airways.	Medellin, Colombia.	October 10...	Anapachuca ¹⁹ .	A. Tagaropulos.	Colon, Rep. of Panama.
October 10...	No. 659-M ¹⁸ .	Pan American Airways.	Barranquilla, Colombia.	October 10...	No. 945-M ¹⁸ .	Pan American-Grace Airways.	Colon, Rep. of Panama.
October 10...	No. 9688 ¹⁸ .	Pan American Airways.	San Salvador via wayp'ts.	October 11...	No. 945-M ¹⁸ .	Pan American-Grace Airways.	Talara via wayports.
October 10...	Magdalena.	Hamburg-American Line.	Hamburg via wayports.	October 11...	Pellerin de la Touche.	French Line.	San Salvador via wayp'ts.
October 12...	No. 300-N ¹⁶ .	Pan American Airways.	Chielayo via wayports.	October 12...	Magdalena.	Hamburg-American Line.	Havre via wayports.
October 13...	No. 659-M ¹⁸ .	Pan American Airways.	San Salvador via wayp'ts.	October 12...	No. 659-M ¹⁸ .	Pan American Airways.	Livingston via wayports.
October 13...	No. 659-M ¹⁸ .	Pan American Airways.	Miami via wayports.	October 13...	No. 145-M ¹⁸ .	Uraba, Medellin & Cent. Airways.	Barranquilla, Colombia.
October 14...	Iriona.	United Fruit Co.	New Orleans via wayp'ts.	October 13...	No. 945-M ¹⁸ .	Pan American-Grace Airways.	Medellin, Colombia.
October 14...	Magallanes.	Spanish Line.	Barcelona via wayports.	October 14...	Iriona.	United Fruit Co.	Chielayo via wayports.
October 14...	Calamaros.	Standard Fruit & S. S. Co.	New Orleans via wayp'ts.	October 14...	Calamaros.	United Fruit Co.	New Orleans via wayp'ts.
October 14...	Guayaquil.	Panama R. R. S. S. Line.	Barcelona via wayports.	October 14...	Fortuna ²⁰ .	A. Ferrari.	Port Limon, Costa Rica.
October 14...	No. 9673 ¹⁸ .	Uraba, Medellin & Cent. Airways.	New York via Haiti.	October 15...	Confessa.	Standard Fruit & S. S. Co.	Colon, Rep. of Panama.
October 15...	Marques de Comillas.	Spanish S. S. Line.	Medellin, Colombia.	October 15...	No. 9673 ¹⁸ .	Pan American Airways.	New Orleans via wayp'ts.
October 15...	Metapan.	United Fruit Co.	Barcelona via wayports.	October 15...	No. 145-M ¹⁸ .	Uraba, Medellin & Cent. Airways.	San Salvador via wayp'ts.
October 15...	Costa Rica.	Royal Netherlands S. S. Co.	New York via Kingston.	October 15...			Medellin, Colombia.
October 15...	Fortuna ²⁰ .	A. Ferrari.	Amsterdam via wayp'ts.	October 15...			
October 15...			Colon, Rep. of Panama.	October 16...			

PORT OF BALBOA.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 9...	Chiriqui.	United Fruit Co.	San Francisco, Calif.	October 9...	A. B. Obarrio ²⁰ .	A. Valdez.	Panama Bay, R. P.
October 10...	Vigilant ²¹ 22.	Stratford D. A. Jelly.	Cocos Island, C. R.	October 9...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.
October 10...	La Purisima ²¹ .	Union Oil Co. of Calif.	Los Angeles, Calif.	October 10...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.
October 9...	A. Valdez.	A. Valdez.	Panama Bay, R. P.	October 10...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.
October 9...	Des Hermanos ²⁰ .	Panama Bay, R. P.	Panama Bay, R. P.	October 10...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.
October 14...	Plus Ultra ²¹ .	Cia. Ecuadoriana de Transp. Maritimes.	Esmeraldas, Ecuador.	October 10...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.
October 14...				October 10...	Chiriqui.	United Fruit Co.	Panama Bay, R. P.

¹ Tanker. ¹⁴ Motor ship. ¹⁵ Destroyer. ¹⁶ Submarine. ¹⁷ Tug. ¹⁸ Air mail carrier. ¹⁹ Motor boat. ²⁰ Motor schooner. ²¹ Motor ship. ²² Yacht.

* Other than ships passing through the Canal.

Commercial Traffic Through the Panama Canal in September, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of September, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for September, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	49	298,693	223,450	364,096	222,951	\$255,012.55	106,480
Europe to Canada:							
British.....	25	131,968	94,910	154,157	94,628	97,198.00	1,960
Danish.....	1	8,275	5,779	10,224	6,430	7,223.75	52
Dutch.....	4	26,670	19,341	32,392	19,216	22,738.95	4,132
French.....	2	11,760	6,521	14,075	7,091	8,151.25	324
German.....	4	26,050	17,134	29,020	17,694	20,943.60	10,450
Italian.....	1	6,012	3,676	6,093	3,768	4,595.00	558
Norwegian.....	8	41,853	25,677	43,031	26,202	29,794.16	2,451
Swedish.....	1	5,337	2,861	5,210	3,747	3,576.25	2,770
Total.....	46	257,925	175,899	294,202	178,776	194,120.96	22,697
United States to Far East:							
British.....	6	35,087	21,760	36,845	21,905	27,200.00	19,852
Japanese.....	8	43,676	34,170	53,294	33,617	42,546.25	29,367
Norwegian.....	2	11,726	6,176	11,335	6,381	7,720.00	6,872
United States.....	3	15,859	11,125	18,138	11,180	13,006.25	6,240
Total.....	19	106,348	73,231	119,612	73,083	91,372.50	62,331
Europe to South America:							
British.....	4	28,281	21,845	38,242	23,326	23,420.98	3,762
Dutch.....	2	12,489	8,432	14,525	8,375	8,575.23	1,481
German.....	1	5,514	3,282	5,710	3,409	4,102.50	1,934
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	292
Norwegian.....	1	6,483	5,398	9,103	5,401	4,667.76	.....
Total.....	9	62,096	44,133	79,298	47,261	47,236.47	7,469
Foreign vessels in ballast (U. S. intercoastal):							
Japanese.....	1	4,950	3,773	6,081	3,681	3,564.00	.....
Norwegian.....	2	9,806	5,366	9,129	5,410	6,707.50	.....
Swedish.....	2	9,248	6,792	11,180	8,301	7,030.86	.....
Total.....	5	24,004	15,931	26,390	17,392	17,302.36	.....
Europe to United States:							
British.....	3	17,347	13,872	22,901	13,750	13,250.26	4,525
Italian.....	1	4,421	3,764	6,107	3,883	3,183.12	.....
Norwegian.....	5	26,549	19,424	32,868	19,329	18,686.39	.....
United States.....	1	8,619	7,026	11,247	6,954	6,205.68	.....
Total.....	10	56,936	44,086	73,123	43,916	41,325.45	4,525
Europe to Australasia:							
British.....	6	37,856	28,015	46,151	23,554	34,347.60	14,826
French.....	1	5,633	4,305	7,133	4,380	5,381.25	1,129
Norwegian.....	1	11,790	8,529	14,362	8,127	10,661.25	15,880
Total.....	8	55,279	40,849	67,651	41,061	50,390.10	31,835
United States to South America:							
British.....	2	8,150	6,758	10,871	6,601	5,868.00	.....
Danish.....	1	1,701	1,324	2,252	1,355	1,224.72	.....
Norwegian.....	1	4,017	3,046	4,953	3,054	2,892.24	.....
United States.....	3	20,755	13,081	25,950	13,081	16,351.25	5,385
Total.....	7	34,623	24,209	44,026	24,091	26,336.21	5,385
Around the world:							
United States.....	3	27,683	18,894	31,521	18,894	23,617.50	7,452

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to Philippines:							
British.....	1	5,704	4,730	7,957	4,995	\$5,912.50	3,500
Danish.....	1	5,964	3,165	5,339	3,341	3,956.25	5,050
United States.....	1	10,427	8,384	14,124	8,378	10,480.00	1,469
Total.....	3	22,095	16,279	27,420	16,714	20,348.75	10,019
United States to Australasia:							
British.....	2	13,676	9,391	14,928	9,420	11,738.75	5,433
United States.....	1	5,241	3,748	5,881	3,666	4,685.00	3,539
Total.....	3	18,917	13,139	20,809	13,086	16,423.75	8,972
United States to Canada:							
British.....	1	5,107	3,034	5,060	3,025	3,677.04	.....
Danish.....	1	5,064	2,750	4,732	2,865	3,437.50	.....
Norwegian.....	1	4,358	2,415	4,111	2,356	3,018.75	.....
United States.....	1	2,617	2,023	3,283	2,001	2,528.75	3,487
Total.....	4	17,146	10,222	17,186	10,247	12,662.04	3,487
South America to Far East:							
Japanese.....	2	11,642	8,240	14,534	8,774	10,425.00	3,361
Canadian intercoastal:							
British.....	2	8,187	6,307	10,445	6,415	7,034.58	2,400
West Indies to South America:							
Norwegian.....	1	7,126	6,077	9,720	5,861	7,596.25	10,026
United States to Central America:							
German.....	1	2,356	1,463	2,446	1,434	1,696.32	.....
Japanese.....	1	4,551	4,169	5,807	4,070	3,276.72	.....
Total.....	2	6,907	5,637	8,253	5,504	4,973.04	.....
West Indies to Balboa:							
Norwegian.....	1	5,636	4,801	7,886	4,719	6,001.25	10,531
Europe to Hawaii:							
Swedish.....	1	5,485	3,506	5,558	4,246	4,257.50	8,580
United States to Hawaii:							
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	2,021
Cristobal to South America:							
German.....	6	4,930	3,497	6,421	3,590	4,371.25	1,377
Panamanian.....	4	404	412	812	404	484.80	400
Total.....	10	5,334	3,909	7,233	3,994	4,856.05	1,777
Canada to South America:							
British.....	1	5,278	4,678	8,889	4,284	3,800.16	.....
Canada to United States:							
British.....	1	5,005	3,142	5,151	3,161	3,927.50	7,896
United States to Balboa:							
United States.....	1	5,004	4,309	7,053	4,353	5,386.25	2,200
South America to United States:							
United States.....	1	4,842	3,426	5,465	3,452	4,282.50	1,709
West Indies to Canada:							
Norwegian.....	1	4,534	2,465	4,114	2,453	3,081.25	.....
South America to Canada:							
Norwegian.....	1	4,354	2,432	4,005	2,483	3,040.00	561
Canada to Australasia:							
British.....	1	4,354	3,273	5,439	3,331	4,091.25	3,728
West Indies to Australasia:							
British.....	1	3,409	3,102	4,906	3,089	3,877.50	5,822
Europe to Central America:							
German.....	1	2,292	1,364	2,359	1,356	1,705.00	745
Central American intercoastal:							
Danish.....	1	1,895	1,155	1,909	1,172	1,443.75	1,428
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,593
Panamanian.....	2	44	48	90	58	52.80	54
Total.....	4	1,485	1,334	2,388	1,362	1,660.30	1,557
Cristobal to Balboa:							
British.....	1	21	21	22	21	15.75	.....
Panamanian.....	1	32	29	42	29	23.04	.....
Total.....	2	53	50	64	50	38.79	.....
Grand total, Sept., 1932.....	202	1,080,017	772,994	1,286,390	780,981	881,957.81	335,984
Grand total, Sept., 1931.....	210	1,115,277	815,754	1,354,860	825,726	947,578.84	481,229
Grand total, Sept., 1930.....	238	1,227,748	915,053	1,517,083	921,034	1,029,728.08	595,589

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States interoastal:							
United States	49	278,325	209,807	339,229	209,622	\$262,258.75	389,326
Canada to Europe:							
British	10	54,157	37,780	61,375	38,009	47,225.00	83,455
Danish	1	8,076	5,689	10,110	6,170	7,111.25	9,719
Dutch	2	15,902	11,977	19,554	12,171	14,971.25	21,367
French	1	7,027	3,873	8,062	4,295	4,841.25	8,180
German	3	21,346	14,245	24,074	14,707	17,806.25	25,799
Italian	1	6,043	3,669	7,061	4,460	4,586.25	8,334
Norwegian	2	15,360	8,858	14,910	9,016	11,072.50	23,524
Swedish	2	10,393	6,211	10,514	7,890	7,763.75	15,206
United States	1	5,450	3,465	5,687	3,450	4,331.25	8,099
Total	24	143,754	95,767	161,347	100,168	119,708.75	203,683
South America to Europe:							
British	5	28,834	24,479	39,780	24,455	30,598.75	36,304
Danzig	2	16,473	14,092	24,218	13,831	17,615.00	33,642
Dutch	2	12,466	8,378	14,517	8,361	10,472.50	18,676
German	4	16,996	10,733	18,586	10,929	13,416.25	23,128
Norwegian	1	6,483	3,398	9,102	5,401	6,747.50	13,158
Swedish	1	5,039	2,751	4,896	3,548	3,438.75	5,883
Total	15	86,291	65,831	111,099	66,525	82,288.75	130,791
Philippines to United States:							
Danish	2	11,498	6,261	10,425	6,514	7,826.25	15,233
Japanese	6	33,313	25,288	40,892	24,834	31,610.00	39,150
Panamanian	1	6,967	3,610	6,801	3,622	4,512.50	2,205
United States	4	32,165	25,121	40,264	24,167	31,401.25	24,102
Total	13	83,943	60,280	98,382	59,137	75,350.00	80,690
Australasia to Europe:							
British	3	31,352	22,579	39,961	24,492	28,223.75	13,570
French	1	3,681	3,096	5,123	3,078	3,870.00	2,648
Swedish	1	5,122	3,129	5,293	4,046	3,911.25	8,398
Total	5	40,155	28,804	50,377	31,616	36,005.00	24,616
Hawaii to United States:							
United States	6	31,788	22,586	36,361	22,561	28,232.50	46,776
United States to Europe:							
British	1	4,236	3,626	5,775	3,657	4,532.50	8,400
Japanese	1	4,736	4,387	5,873	4,258	5,483.75	7,209
Norwegian	3	17,227	12,960	21,682	12,963	16,200.00	30,770
Swedish	1	4,165	3,344	5,655	3,344	4,180.00	7,500
Total	6	30,364	24,317	38,985	24,222	30,396.25	53,879
South America to United States:							
British	1	5,049	4,395	7,203	4,382	5,493.75	9,821
Danish	1	1,844	1,410	2,357	1,423	1,762.50	3,800
United States	2	14,122	9,135	17,793	9,135	11,418.75	6,488
Total	4	21,015	14,940	27,353	14,940	18,675.00	20,109
Australasia to Canada:							
British	2	9,424	6,412	10,525	6,412	8,015.00	13,137
United States	1	5,268	3,748	5,879	3,659	4,685.00	5,007
Total	3	14,692	10,160	16,404	10,101	12,700.00	18,144
Canada to United States:							
United States	2	8,064	5,484	8,970	5,450	6,855.00	10,346
Balboa to South America:							
United States	1	5,477	4,271	6,064	4,148	3,943.44	.....
South America to Cristobal:							
German	6	4,930	3,497	6,421	3,590	4,371.25	5,281
Panamanian	4	404	412	812	404	486.00	759
Total	10	5,334	3,909	7,233	3,994	4,857.25	6,040
Canada to South America:							
United States	1	5,024	3,731	5,835	3,750	4,663.75	6,597
Far East to United States:							
Japanese	1	5,005	4,062	6,571	4,013	5,077.50	609
Balboa to United States:							
United States	1	5,004	4,309	7,063	4,353	3,602.88	.....
Far East to Europe:							
Japanese	1	4,808	3,510	5,612	3,515	4,512.50	7,162

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
South America to Canada:							
British.....	1	4,413	3,768	7,115	3,586	\$4,710.00	9,351
Canadian intercoastal:							
British.....	1	4,121	3,278	5,752	3,551	4,097.50	2,421
Central America to United States:							
German.....	1	2,471	1,432	2,447	1,437	1,779.12	.....
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	560
Balboa to Cristobal:							
Panamanian.....	3	76	77	132	87	84.25	60
Foreign vessels in ballast (U. S. intercoastal):							
Swedish.....	1	6,809	5,866	9,720	7,285	4,902.48	.....
Grand total, Sept., 1932..	151	788,374	577,475	954,949	585,345	716,308.17	1,011,160
Grand total, Sept., 1931..	186	955,596	700,795	1,163,274	708,063	873,156.91	1,273,626
Grand total, Sept., 1930..	220	1,086,676	823,905	1,353,509	825,784	1,027,375.50	1,463,993

Russian Whaling Fleet Transits Canal.

The whaling vessel *Aleut*, and her three attendant whale chasers *Avangard*, *Entuziat*, and *Trudfront*, flying the flag of the Union of Socialist Soviet Republics, arrived at Cristobal on the evening of October 5, en route to the north Pacific on a whaling expedition. The vessels tied up at Cristobal to take on coal and to undergo minor repairs, and made transit of the Canal on October 11. They cleared the same day for Vladivostok, via Honolulu.

The *Aleut* is an up-to-date whaling vessel with modern equipment for spearing and dressing whales and is equipped with facilities for storing the products derived therefrom. The vessel is 377 feet in length, 52 feet beam, and has a gross tonnage of 5,055. The tugs or "whale catchers" are each 115 feet long, 24 feet beam, and of 260 gross tons. An unusual feature of the expedition is that the crew is made up of both men and women; there were 10 women in a total personnel of 186.

Lines to the Panama Canal.

The Panama Canal has issued a new edition of the pamphlet, "Lines to the Panama Canal," with data revised as of July 1, 1932. Copies are being distributed to steamship lines and allied interests, travel bureaus, etc. A summary of the information in the pamphlet is as follows:

Services through the Canal, classified by principal trade routes; passenger connection from the Canal via ocean vessels, with fares and approximate time to various ports; air services from the Canal, with fares and approximate time; list of ocean lines which have agencies on the Isthmus, with the names of their representatives; list of agents on the Isthmus for steamship lines, air lines, oil companies, and other maritime and travel interests, showing their locations and telephone numbers; consular and diplomatic representatives in the cities of Panama and Colon and on the Canal Zone, with their telephone numbers; miscellaneous information concerning tolls charges, facilities for shipping, distances saved by the use of the Canal, etc.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

Traffic by Commodities for September, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of September, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts.....			8	
Agricultural implements.....	569		1,540	20
Alfalfa meal.....		669		669
Ammonium compounds.....	58		6,597	
Animal foods.....	180	1,050	295	1,605
Apparel, wearing (hats, shoes, clothing, etc.).....	141		147	5
Asbestos.....	86	20	161	20
Asphalt and tar.....	46	36	878	584
Automobiles (and auto trucks).....	494	28	3,399	30
Automobile parts and accessories.....	447	185	1,432	187
Bags and bagging, textile.....	332	454	461	555
Bananas.....				61
Barks, miscellaneous.....				306
Barley.....		24		16,960
Beans, edible, dry.....	91	5,128	91	8,196
Beer.....			10	
Beverages, nonalcoholic.....	83	148	110	148
Blood and tankage.....	132		132	
Bones and bone meal.....			922	
Books and printed matter.....	260		283	
Borax.....		1,172		5,407
Bran and pollards.....				3,064
Bricks and tile.....	264	31	446	31
Camphor, crude.....		25		37
Canned and preserved goods:				
Fish.....	95	15,037	391	29,750
Fruit.....	176	33,628	379	68,124
Meat.....	152	218	467	295
Milk.....	14	766	190	1,048
Soup.....	2,589	284	3,176	284
Vegetables.....	1,096	3,781	1,302	3,845
Miscellaneous and unclassified.....	2,729	15,447	3,393	16,846
Carbon black.....	89		559	
Celite.....		862		862
Cement.....	233		2,313	
Chalk.....			97	
Charcoal.....	22	26	22	76
Chemicals.....	2,259	207	5,414	494
Clay, china and fire.....	32	60	52	68
Clorox.....		883		883
Coal.....	825		1,090	
Cocoa and cacao beans.....	94		415	774
Cocoanuts and products.....	73	695	150	933
Coffee.....	191	147	3,879	7,516
Coke.....	763		3,321	
Cold storage and refrigerated products:				
Dairy products.....	166		295	4,848
Eggs.....		1,035		1,057
Fish.....				248
Lard.....	49		77	
Meats.....			11	6,519
Poultry.....	12		12	
Vegetables.....		282		288
Other and unclassified.....	129		148	279
Confectionery.....	745		778	
Copra.....		70		9,497
Copra meal and cake.....				533
Corn.....	12,977		12,977	150
Cotton, raw.....	292	877	24,921	9,922
Cresote.....	6,830		6,830	
Dextrine.....	63		63	

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Drugs and medicines.....	920	31	1,212	39
Dyes.....			449	
Earthenware.....	13	9	133	54
Eggs, dried.....		15		42
Electrical apparatus and appliances.....	704	14	1,045	14
Explosives.....	13		17	17
Extract, quebracho.....			1,187	
Fertilizers ¹	5		99	70
Fish, salted or dry cured.....				11
Fish meal.....			13	340
Floor coverings.....	636	216	646	344
Flour.....	329	5,905	792	8,367
Fruit, dried.....	60	16,018	187	32,180
Furniture and household goods.....	408	95	419	95
Fruit, fresh.....	33	150	33	13,949
General.....	14,103	9,804	33,786	18,394
Glass and glassware.....	1,735	19	2,933	165
Glue.....			3	
Groceries.....	2,062	144	2,452	151
Guano.....				9,050
Gums.....		26		105
Hair, all kinds.....	23	36	28	41
Hay.....		1,374		1,410
Hemp, unmanufactured.....		76	2	1,533
Honey.....		327		568
Hops.....		123		123
Horns and hoofs.....				71
Infusorial earth.....		448		815
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	18,144	964	31,077	979
Ivory nuts.....				400
Jute, unmanufactured.....			20	
Lard substitute.....	814	284	822	284
Lime.....	15		20	
Liquors.....	39	257	1,281	266
Lumber (including manufactured mill products).....	718	87,474	971	110,820
Machinery (other than electrical).....	2,025	267	4,344	392
Malt.....			17	
Manufactured goods ¹	3,319	318	4,384	1,711
Marble and granite.....	17		122	
Matches.....	18	11	48	25
Metals:				
Antimony.....	55		76	
Copper.....	37	4,080	42	14,035
Gold and silver.....		6		26
Iron.....	76		1,037	
Lead.....		921	3	11,938
Scrap.....		551	3,353	722
Tin.....	51	25	227	1,841
Zinc.....	35		702	2,167
Other and unclassified.....	44	98	543	184
Milk, powdered.....		418	51	488
Molasses and syrups.....	605		678	
Newsprint.....		137	2,390	794
Nitrates.....			1,674	
Nuts, edible (including meats).....	89	1,491	249	1,742
Oats.....		31		2,858
Oils, mineral:				
Crude.....			17,003	79,096
Gas and fuel.....		31,656	19,459	32,156
Gasoline, benzine, and naphtha.....	27	82,815	8,805	119,399
Kerosene.....		9,846	803	10,463
Lubricating and greases.....	2,963	65	12,185	95
Oils, vegetable:				
Coconut.....		600		1,600
Cottonseed.....	653		663	7
Linseed.....	61		91	
Olive.....	14		120	
Rapeseed.....				47
Wood.....			20	1,206
Other and unclassified.....	335	34	1,383	735
Oil, fish.....				2,054
Oil, whale.....				50
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		58	81	110
Oilseed cake and meal.....	2,021		2,021	5,223
Ores:				
Antimony.....				56
Copper.....			1,968	1,372
Gold and silver.....				61
Iron.....			323	25

¹ Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Ores—Continued:				
Lead.....			7,618	590
Magnesite.....		23		23
Manganese.....				73
Tin.....				1,683
Zinc.....			10	1,677
Other and unclassified.....		974		1,378
Paints and varnishes.....	266	37	466	69
Paper and paper products ¹	5,407	5,173	10,985	6,048
Paper scrap.....		344	1,079	344
Peanuts.....	1,354		1,598	
Peas, dry.....		58		203
Peatmoss.....			753	
Phosphates.....	263		7,842	
Porcelain ware.....	44	30	209	1,542
Potash.....		840	619	1,840
Pyrethrum flowers.....		5		208
Rags and waste.....		316	244	932
Railroad material.....			1,023	
Rice.....	417	677	530	5,694
Rope and twine.....	186	12	204	40
Rosin.....	244		2,653	
Rubber:				
Manufactured.....	626	60	763	62
Raw.....				75
Scrap.....	117	17	117	51
Salt.....	150		1,893	
Sand.....			2,006	
Seeds (except oilseeds).....		1,230	260	1,576
Shells, oyster.....	1,027		1,027	95
Silk, raw.....		162		1,005
Skins and hides.....	65	3,130	74	4,961
Slag.....		20		20
Slate.....	507		507	
Soaps and products.....	1,804	363	2,114	363
Soda and sodium compounds.....	1,404		2,070	
Sugar.....	168	30,853	188	156,644
Sulphur.....	5,696	24	5,871	478
Talc.....		249		336
Tallow.....		358		959
Tea.....			126	1,689
Textiles ²	3,082	55	5,380	273
Tinplate.....	461	78	6,990	93
Tobacco and manufactures.....	807	12	8,579	28
Toilet preparations.....	129	13	135	43
Turpentine.....	68		68	
Vegetables, dry ¹		462	85	542
Wall board.....			45	487
Wax, paraffin.....	161	22	1,195	32
Wheat.....		92		107,653
Wines.....		136	414	425
Wood pulp.....	117	9,181	6,813	9,596
Wool.....		3,395	5	4,871
Total, September, 1932.....	113,667	398,918	335,984	1,011,160
Total, September, 1931.....	183,375	507,674	481,229	1,273,626
Total, September, 1930.....	224,391	573,197	595,589	1,463,993

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., October 26, 1932. No. 13.

Comparison of Canal Traffic in September, 1932, with September Traffic in Previous Years.

Commercial traffic through the Canal during the month of September, 1932, with 353 transits of commercial vessels, carrying 1,347,144 tons of cargo, was the lowest September traffic with respect to these two features (number of transits and tons of cargo) since 1922. Net tonnage (Panama Canal measurement) was the lowest since 1925; the aggregate tonnage in September of that year (on 388 vessels) was some 37,000 tons lower than the aggregate on 353 transits last month. In comparison with September, 1931, commercial traffic for the past month declined 43 transits (10.9 per cent); 202,482 net tons, Panama Canal measurement (9.8 per cent); and 407,711 cargo tons (23.2 per cent). In comparison with September, 1930, there was a decrease of 105 transits (22.9 per cent); 446,033 net tons, Panama Canal measurement (19.3 per cent); and 712,438 cargo tons (34.6 per cent).

The peak month for September traffic in so far as the number of transits and net tonnage (Panama Canal measurement) are concerned occurred in 1927, when the number of transits was 540 and the net tonnage aggregated 2,532,942 tons. The peak month for cargo tonnage for any month of September was in 1929, when that item was 2,432,783 tons. In comparison with these high figures last month's traffic decreased 34.8 per cent in transits, 26.2 per cent in net tonnage; and 44.6 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of September each year from 1914 to 1932, inclusive, and for comparison the monthly averages for the corresponding fiscal year ending June 30 preceding:

Calendar year.	Month of September.			Fiscal year.	Average per month for fiscal year.		
	Commercial transits.	Panama Canal net tonnage.	Tons of cargo.		Commercial transits.	Panama Canal net tonnage.	Tons of cargo.
1914.....	56	217,527	323,094	1915.....	102	361,197	465,567
1915.....	101	350,291	464,647	1916.....	63	199,687	257,843
1916.....	153	503,645	645,046	1917.....	150	483,213	588,213
1917.....	188	573,166	724,172	1918.....	172	547,839	627,669
1918.....	179	523,341	548,489	1919.....	169	510,416	576,385
1919.....	170	586,186	638,270	1920.....	206	712,170	781,208
1920.....	256	1,008,785	1,009,557	1921.....	241	951,323	966,601
1921.....	221	925,137	754,894	1922.....	228	951,455	907,075
1922.....	240	1,070,410	1,138,183	1923.....	331	1,550,482	1,630,656
1923.....	413	2,044,552	2,168,703	1924.....	436	2,179,073	2,249,559
1924.....	395	1,976,213	2,112,264	1925.....	389	1,904,596	1,996,570
1925.....	388	1,831,039	1,891,988	1926.....	433	2,064,549	2,169,787
1926.....	446	2,186,804	2,239,547	1927.....	456	2,185,651	2,312,351
1927.....	540	2,532,942	2,397,753	1928.....	538	2,454,886	2,469,226
1928.....	487	2,295,053	2,313,011	1929.....	534	2,468,483	2,555,250
1929.....	523	2,425,261	2,432,783	1930.....	515	2,498,385	2,502,519
1930.....	458	2,314,424	2,059,582	1931.....	461	2,316,012	2,090,233
1931.....	396	2,070,873	1,754,855	1932.....	376	1,968,785	1,650,667
1932.....	353	1,868,391	1,347,144	(1).....	350	1,836,905	1,484,954

¹ Canal opened August 15, 1914.

² Average for 10½ months of fiscal year ended June 30, 1915.

³ Average for first 9 months of calendar year 1932.

CANAL WORK IN SEPTEMBER, 1932.

The following is the report of the Governor to the Secretary of War, of Canal work in the month of September, 1932.

BALBOA HEIGHTS, C. Z., October 21, 1932.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of September, 1932:

TRANSITS AND TOLLS.

During the month 353 commercial vessels and 7 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 23 vessels belonging to the United States Army and Navy and 2 vessels owned by the Colombian Government on which no tolls were collected, making a total of 385 transits for the month, or a daily average on all traffic of 12.83.

Tolls on the 353 commercial vessels amounted to \$1,598,265.98, and on the launches to \$16.50, a total of \$1,598,282.48, or a daily average on all traffic of \$53,276.08.

After decreasing successively in May, June, July, and August, commercial traffic made a substantial increase in September, with a gain of 39 vessels, or 12.4 per cent, in comparison with August, 1932. Commercial transits in the past 5 months have been as follows: May, 357; June, 336; July, 326; August, 314; and September, 353. The increase in the past month's traffic was due to a gain in traffic from Atlantic to Pacific. Vessels moving in that direction numbered 202, as compared with 162 in August, an increase of 40; while the number from Pacific to Atlantic decreased by 1, having been 151 in September and 152 in August. The larger portion of this increased traffic from the Atlantic consisted of vessels in ballast destined to the Pacific Northwest to participate in the heavy seasonal grain and fruit movement from that section.

Commercial traffic passing through in the past month in comparison with that in September, 1931, showed a decrease of 43 transits, or 10.9 per cent, and \$222,469.77 in tolls, or 12.2 per cent.

In comparison with the first 9 months of the calendar year 1931, commercial traffic this year shows a decrease of 17.4 per cent in transits; 15.0 per cent in net tonnage (Panama Canal measurement); 21.7 per cent in cargo carried; and 16 per cent in tolls collected; in comparison with the first 9 months of the calendar year 1930, there was a decline of 28.2 per cent in transits; 24.3 per cent in net tonnage (Panama Canal measurement); 36.4 per cent in cargo tonnage; and 26.2 per cent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of September in the two preceding years and in 1932 are shown in the following tabulation:

	September, 1930.	September, 1931.	September, 1932.
Commercial vessels.....	458	396	353
Launches (under 20 tons).....	15	6	7
Noncommercial vessels:			
United States Government.....	26	26	23
Colombian Government.....			2
Vessels for repairs.....	1	2	
Total.....	500	430	385

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	6	7	13
Pedro Miguel.....	18	16	34
Miraflores.....	35	33	68
Total.....	59	56	115

COMMERCIAL TRAFFIC. ¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, for the commercial traffic transiting the Canal each month from the beginning of the calendar year 1932, to the end of September, 1932, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January....	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February....	431	358	2,134,866	1,878,177	1,930,219	1,645,393	1,915,902.78	1,647,797.06
March.....	439	363	2,211,934	1,864,896	1,915,507	1,643,952	1,904,434.22	1,645,366.81
April.....	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,654.67
May.....	428	357	2,184,959	1,956,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June.....	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,848,638.45	1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September..	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
Total.....	3,819	3,154	19,443,749	16,532,143	17,059,100	13,364,587	17,187,264.37	14,432,086.88

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for September in the years 1930, 1931, and 1932, and comparison with the monthly averages for the fiscal year 1932:

	September, 1930.	September, 1931.	September, 1932.	Average per month for fiscal year 1932.
Number of vessels.....	458	396	353	376
Panama Canal net tonnage.....	2,314,424	2,070,873	1,868,391	1,968,785
United States net tonnage.....	1,738,958	1,516,549	1,350,469	1,433,982
Registered gross tonnage.....	2,870,592	2,518,134	2,241,339	2,397,578
Registered net tonnage.....	1,746,818	1,533,789	1,366,326	1,448,846
Tolls.....	\$2,057,103.58	\$1,820,735.75	\$1,598,265.98	\$1,725,614.75
Tons of cargo carried.....	2,059,582	1,754,855	1,347,144	1,650,667

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for fiscal year 1932.
	September, 1930.	September, 1931.	September, 1932.	
Number of transits.....	15.26	13.20	11.77	12.31
Panama Canal net tonnage.....	77,147	69,029	62,280	64,550
Tolls.....	\$68,570.12	\$60,691.19	\$53,275.53	\$56,577.53
Tons of cargo carried.....	68,653	58,495	44,905	54,120

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of September in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for fiscal year 1932.
	September, 1930.	September, 1931.	September, 1932.	
Panama Canal net tonnage.....	5,053	5,243	5,293	5,254
United States net tonnage.....	3,797	3,839	3,826	3,827
Registered gross tonnage.....	6,268	6,375	6,349	6,398
Registered net tonnage.....	3,814	3,883	3,871	3,866
Tolls.....	\$4,491.49	\$4,597.82	\$4,627.66	\$4,595.51
Tons of cargo (including vessels in ballast).....	4,497	4,443	3,816	4,405
Tons of cargo (laden vessels only).....	5,420	5,254	4,953	5,154

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Twelve nationalities were represented in the commercial traffic through the Canal in September, 1932. Vessels of United States registry, with 133, led in the number of transits, while those flying the British flag, with 85, were second. Vessels of these two nationalities made up 61.8 per cent of the total transits for the month. Vessels of Norwegian and German registry were next in numerical importance, with 32 and 27, respectively.

Twelve is the smallest number of nationalities represented in a month's traffic since April, 1922, when there were 11.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of September, 1932, was 1,347,144 tons, a decrease of 407,711 tons, or 23.2 per cent, in comparison with September, 1931. Cargo from the Atlantic to the Pacific aggregated 335,984 tons, compared with 348,271 tons in the previous month, and 481,229 tons in September, 1931. From the Pacific to the Atlantic cargo amounted to 1,011,160 tons, as compared with 1,001,182 tons in the previous month, and 1,273,626 tons in September, 1931. The combined cargo movement in the past month showed but little difference in comparison with the tonnage passing through in the previous month, that in September being less by 2,309 tons, or about two-tenths of one per cent, than that passing through in August.

From the Atlantic to the Pacific, mineral oils totaling 58,255 tons, comprised the leading commodity, followed by manufactures of iron and steel with 31,077 tons, cotton with 24,921 tons, paper with 13,375 tons, and corn with 12,977 tons. Increases occurred in the shipments of mineral oils and corn, while shipments of manufactures of iron and steel, cotton, and paper decreased.

From the Pacific to the Atlantic, mineral oils formed the leading commodity in September, 1932, with shipments totaling 241,209 tons. This item was followed by sugar with 156,644 tons, canned goods with 120,192 tons, lumber with 110,820 tons, wheat with 107,653 tons, dried fruit with 32,180 tons, and metals with 30,191 tons. Substantial increases were recorded in the shipments of sugar, canned goods, and wheat, while the other items listed decreased. Shipments of Chilean nitrates, normally one of the most important commodities shipped via the Panama Canal, were entirely absent from the traffic in September, 1932. This was the first month of Canal operation, since its opening in August, 1914, in which no shipments of nitrate were reported. This was a decrease of 262,466 tons, or 20.6 per cent, in the cargo movement in this direction in comparison with September, 1931, while from the Atlantic to the Pacific there was a decrease of 145,245 tons, or 30.2 per cent.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden vessels and \$0.72 per ton for vessels in ballast, computed on the basis of the Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both the Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.894 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.713 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of September, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of the Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
British.....	\$381,471.12	\$392,077.60	\$10,606.48		\$0.905	\$0.715
Danish.....	33,985.97	41,611.00	7,625.03		.781	.689
Danzig.....	17,615.00	16,473.00		\$1,142.00	1.069	
Dutch.....	56,757.93	60,609.40	3,851.47		.882	.720
French.....	22,243.75	28,101.00	5,857.25		.792	
German.....	70,091.54	82,652.20	12,560.66		.819	.720
Italian.....	18,834.37	24,036.60	5,202.23		.732	.720
Japanese.....	106,495.72	108,880.60	2,384.88		.966	.720
Norwegian.....	137,886.80	142,912.40	5,025.60		.851	.699
Panamanian.....	5,643.39	7,905.40	2,262.01		.712	.760
Swedish.....	39,060.84	46,789.20	7,728.36		.768	.720
United States.....	708,179.55	757,171.00	48,991.45		.913	.720
Total.....	1,598,265.98	1,709,219.40	112,095.42	1,142.00	.894	.713
Net increase for all traffic.....			110,953.42			

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$28,680.70
United States-Canal Zone trade.....	982.73
United States-foreign trade.....	21,293.48
Total.....	48,991.45

¹ Denotes decrease.

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in September, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
British.....	.48	1.24	.84
Danish.....	.40	1.34	.94
Danzig.....		2.04	2.04
Dutch.....	.26	1.41	.91
French.....	.08	1.01	.44
German.....	.44	1.25	.90
Italian.....	.06	1.38	.43
Japanese.....	.59	1.13	.84
Norwegian.....	.89	1.73	1.25
Panamanian.....	1.01	.41	.44
Swedish.....	.76	1.50	1.22
United States.....	.44	1.31	.91
Averages, September, 1932.....	.48	1.32	.92
Averages, September, 1931.....	.58	1.35	.99
Averages, September, 1930.....	.71	1.53	1.07

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of September, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	22	132,004	\$95,042.88	3	17,290	\$12,448.80
Laden.....	6	36,752	37,447.50	20	123,328	128,542.50
All others—						
Ballast.....	52	245,567	174,090.20	2	2,493	1,797.12
Laden.....	120	665,119	574,962.60	126	645,263	573,519.75
Noncargo-carrying ships:						
Yachts.....	1	554	398.88			
Others.....	1	21	15.75			
Total.....	202	1,080,017	881,957.81	151	788,374	716,308.17
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	119	636,450	536,550.82	92	479,329	442,640.44
Motor.....	78	442,916	344,916.52	56	308,969	273,583.48
Motor schooner.....	3	76	75.84	3	76	84.25
Other craft (yachts, naval, etc)—						
Miscellaneous.....	2	575	414.63			
Total.....	202	1,080,017	881,957.81	151	788,374	716,308.17

Of the 211 steam driven cargo-carrying vessels, 156 were oil burning, 52 coal burning, and 3 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of September, 1932. If tolls had been

assessed against these vessels at commercial rates, the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Ammunition ships.....				1	3 4,405	\$5,506.25
Cargo ships.....	1	3 3,424	\$4,292.50	1	3 7,050	3,525.00
Cruisers.....	1	3 10	7.50			
Launches.....	2	3 1,900	950.00			
Mine sweepers.....	6	3 5,256	2,628.00	1	3 876	438.00
Submarines.....	1	3 3,394	4,242.50			
Supply ships.....	1	3 5,102	3,673.44	1	3 4,860	6,075.00
Tankers.....						
U. S. Army vessels:						
Mine planters.....	1	3 1,208	604.00	1	3 1,208	604.00
Transports.....	2	3 20,100	25,125.00	2	3 7,816	9,770.00
Tugs.....	1	3 92	69.00			
Total, U. S. Government.....	16		41,591.94	7		25,918.25
Colombian Government vessels:						
Dredges.....	1	3 400	300.00			
Tugs.....	1	3 240	300.00			
Grand total.....	18		42,191.94	7		25,918.25

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of September, 1932, carried cargo as follows: Atlantic to Pacific, 7,676 tons; Pacific to Atlantic, 1,216 tons; total, 8,892 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of September, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	5	12	\$9.00
Pacific to Atlantic.....	2	10	7.50
Total.....	7	22	16.50

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of September, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	28,762	34,292	63,054
Local cargo shipped..... tons..	4,442	1,009	5,451
Transit cargo arriving..... tons..	1,341,098	1,347,975	2,689,073
Transit cargo clearing..... tons..	1,340,923	1,340,976	2,681,899
Cargo received for transshipment..... tons..	20,763	1,381	22,144
Cargo transhipped..... tons..	20,796	4,203	24,999
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	113	45	158
Number of releases issued.....	673	206	879
Tons received.....	803	433	1,236
Tons withdrawn.....	692	459	1,151
Packages received.....	7,629	1,535	9,164
Packages withdrawn.....	5,045	1,985	7,030
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	11		11
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	2,067		2,067

	Cristobal.	Balboa.	Total.
Coal issued, miscellaneous:			
Panama Canal departments..... tons	57	6	63
Panama Railroad Company..... tons	7		7
U. S. Army, including vessels..... tons	28		28
Individuals and companies..... tons	100	1	101
Transferred to Navy..... tons	7		7
Total sales and issues..... tons	2,266	7	2,273
Coal on hand, September 1, 1932..... tons	37,229		37,229
Coal on hand, October 1, 1932..... tons	34,963		34,963
Coal received from Navy..... tons		7	7
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls	3,274.07	11,141.95	14,416.02
Panama Railroad Company..... bbls	16,292.01	519.95	16,811.96
U. S. Army and Navy..... bbls	628.26	247.44	875.70
Individuals and companies..... bbls		104.05	104.05
Total sales and issues..... bbls	20,194.34	12,013.39	32,207.73
Fuel oil on hand, October 1, 1932..... bbls	38,555.26	79,139.38	117,694.64
Diesel oil borrowed from Union Oil Co..... bbls	210.21		210.21
Diesel oil issued during September, 1932..... bbls	210.21	1,657.92	1,868.13
Diesel oil on hand, October 1, 1932..... bbls	2,914.35	24,881.81	27,796.16
Miscellaneous transfers..... bbls	526.15	2,114.01	2,640.16
Gasoline and kerosene pumped for The Panama Canal..... bbls	12,088.19	20,361.45	32,449.64
Gasoline pumped for individuals and companies..... bbls	1,586.82	14,023.16	15,609.98
Oil pumped for individuals and companies:			
Receipts..... bbls	68,662.74	173,989.50	242,652.24
Issues..... bbls	143,872.96	63,273.80	206,146.76
Oil pumped for U. S. Navy..... bbls	1,878.00	59,515.50	61,393.50
Total fuel oil, gasoline, and kerosene hauled..... bbls	249,019.41	346,948.73	595,968.14
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	12	3	15
Measured for Panama Canal net tonnage.....	4		4
Re-measured for Panama Canal net tonnage.....	10	5	15
Panama Canal net tonnage corrected.....	6	3	9
U. S. equivalent tonnage corrected.....	17	6	23
Services of harbor equipment:			
Tugs, total operating hours.....	175½	127½	303½
Launches, total operating hours.....	872	1,003½	1,875½
Revenue from tug service, pilotage, etc:			
Tug revenue.....	\$5,935.00	\$3,867.50	\$9,802.50
Pilotage.....	12,302.00	6,002.00	18,304.00
Seamen.....	9,392.00	7,016.00	16,408.00
Launch service.....	1,357.00	1,928.50	3,285.50
Wharfage.....	10,064.09	4,418.86	14,482.95
Ships measured.....	110.00		110.00
Miscellaneous.....	343.00	108.00	451.00
Clearances issued.....	193	211	404
Bills of health issued.....	201	212	413

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal.....	392	2,571,860	1,562,680	371	2,355,146	1,447,372
Vessels entering port but not transiting Canal.....	50	277,584	160,922	5	38,573	22,677
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	93	702,270	421,741	86	633,062	382,869
<i>Ships clearing.</i>						
All vessels, including those transiting Canal.....	395	2,574,875	1,565,894	367	2,345,420	1,436,286
Vessels clearing port but not transiting Canal.....	50	269,420	156,369	7	38,650	22,712
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	93	702,270	421,741	86	641,265	385,974

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:									
From Atlantic ports.....	1,127	574	1,701	157	189	346	1,284	763	2,047
From Pacific ports.....	89	76	165	146	254	400	235	330	565
Total disembarking.....	1,216	650	1,866	303	443	746	1,519	1,093	2,612
Embarking:									
For Atlantic ports.....	949	374	1,323	95	239	334	1,044	613	1,657
For Pacific ports.....	81	81	162	140	207	347	221	288	509
Total embarking.....	1,030	455	1,485	235	446	681	1,265	901	2,166
Remaining on board:									
From Atlantic to Pacific ports.....	1,528	2,448	3,976				1,528	2,448	3,976
From Pacific to Atlantic ports.....				982	1,064	2,046	982	1,064	2,046
From Atlantic to Atlantic ports.....	615	85	700				615	85	700
From Pacific to Pacific ports.....				15	60	75	15	60	75
Total remaining on board.....	2,143	2,533	4,676	997	1,124	2,121	3,140	3,657	6,797
Total arriving on Canal Zone.....	3,359	3,183	6,542	1,300	1,567	2,867	4,659	4,750	9,409
Total departing from Canal Zone.....	3,173	2,988	6,161	1,232	1,570	2,802	4,405	4,558	8,963

NOTE.—In passengers "remaining on board," those from the Atlantic to Pacific and Pacific to Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.....	202	74	36.6	4,484
Pacific to Atlantic.....	151	57	37.7	2,545
Total.....	353	131	37.1	7,029

In addition to the foregoing, 47 passenger-carrying vessels called at the port of Cristobal and 4 at Balboa without transiting the Canal, making a total of 182 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of September, 1932, 39 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of September, 1932, together with the total sales in the corresponding month in 1931 and 1930.

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$758.93	\$3,568.17	\$7,660.58	\$29.65	\$3,059.98	\$15,077.31
Government vessels.....	99.80	1,267.43	2,301.92	85.81	514.85	4,269.81
P. R. R. vessels.....		324.10	102.82	566.86	6.49	1,000.27
Total sales, September, 1932.....	858.73	5,159.70	10,065.32	682.32	3,581.32	20,347.39
Total sales, September, 1931.....	1,352.68	7,457.71	16,426.87	1,133.44	5,078.83	31,449.53
Total sales, September, 1930.....	2,322.33	12,651.79	25,887.66	1,070.77	6,925.23	48,857.78
Sales at Balboa to:						
Commercial vessels.....	380.27	1,703.08	3,851.38	256.82	2,133.00	8,324.55
Government vessels.....	339.05	1,671.03	9,483.67	128.05	1,850.38	13,472.18
P. R. R. vessels.....			3.54			3.54
Total sales, September, 1932.....	719.32	3,374.11	13,338.59	384.87	3,983.38	21,800.27
Total sales, September, 1931.....	610.43	6,549.76	19,841.22	586.26	5,884.32	33,471.99
Total sales, September, 1930.....	623.92	1,832.55	19,395.51	1,209.37	10,660.30	33,721.65

The aggregate sales to commercial vessels during the month was \$23,401.86; to Government vessels, \$17,741.99; and Panama Railroad vessels, \$1,003.81, making the total sales to all vessels, \$42,147.66. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of September, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial.*			Sept., 1930.	Sept., 1931.	Sept., 1932.
	North.	South.	Total.	North.	South.	Total.			
Gatun.....	146	190	336	6	10	16	457	402	352
Pedro Miguel.....	147	193	340	12	15	27	473	415	367
Miraflores.....	148	193	341	16	13	29	471	414	370
Number of vessels put through locks.									
Gatun.....	149	202	351	22	31	53	530	453	404
Pedro Miguel.....	151	202	353	28	39	67	522	459	420
Miraflores.....	152	202	354	45	56	101	519	456	455

* Includes tolls paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	29	27	27
Panama Canal equipment.....	13	34	68
Launches under 20 tons measurement.....	9	4	4
Colombian Government vessels.....	2	2	2

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in September, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
	<i>Cubic feet.</i>	<i>Cubic feet.</i>	<i>Cubic feet.</i>
Lockages.....	1,455,200,000	1,185,310,000	1,169,510,000
Leakage.....	30,000,000	50,000,000	40,000,000
Maintenance.....	20,590,000		23,120,000
Total, September, 1932.....	1,505,790,000	1,235,310,000	1,232,630,000
Total, August, 1932.....	1,375,910,000	1,064,510,000	1,137,980,000
Total, September, 1931.....	1,692,640,000	1,336,100,000	1,324,790,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of September, 1932, are shown in comparative form in the following tabulation:

	September.		September—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagres River at Alhajuela.....	4,212	2,809	4,790	1,830	3,213
Maximum momentary discharge for the month.....	21,500	6,748	63,200		
Gatun Lake watershed, total yield.....	10,016	6,605	11,946	6,507	8,776
Gatun Lake watershed, net yield.....	9,406	6,026	11,238	5,945	8,195
Draft of Gatun Lake for lockages and power.....	2,703	2,645	2,917	2,038	2,610

* September 6-7, 1887. * Ten-year record (1921-1930, inclusive).

The monthly mean discharge of the Chagres River at Alhajuela for September, 1932, was 2,809 c. f. s., which is 14 per cent below the 31-year average of 3,213. The maximum mean discharge on record for September is 4,790 c. f. s. in 1917, and the minimum, 1,830 c. f. s. in 1911. The maximum momentary discharge for the month was 6,748 c. f. s. at elevation 95.96 feet on the 20th, and the minimum was 2,040 c. f. s. at elevation 92.56 feet on the 18th. The maximum momentary discharge on record

for September (1879-1932, inclusive) is 63,200 c. f. s. at elevation 109.95 feet on September 6-7, 1887, the minimum (1907-1932, inclusive) is 1,130 c. f. s. at elevation 92.45 feet on September 12, 1911. There were no rises of 5 feet or more at Alhajuela during the month.

Gatun Lake varied in elevation during September from a minimum of 85.45 feet on the 6th and 22d to a maximum of 86.06 feet on the 30th, averaged 85.64 feet, and ended the month at elevation 86.04 feet. The total yield on the Gatun Lake watershed was 6,605 c. f. s., which is 25 per cent below the 19-year average of 8,776 c. f. s. The maximum total yield on record for September is 11,946 c. f. s. in 1917, and the minimum is 6,507 c. f. s. in 1930.

Miraflores Lake varied between elevations 54.50 feet on the 22d and 53.30 feet on the 1st and 30th, averaged 53.84 feet, and ended the month at elevation 53.51 feet.

SEISMOLOGY.

Three seismic disturbances were recorded during the month, all within 250 miles. The N-S and E-W drums and clocks of the Wood-Anderson seismographs were returned to the manufacturer for repairs and adjustments. The N-S and E-W Bosch-Omori 100-kg. instruments only are now in operation.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 5,541,900 kilowatt hours, and the computed water consumption was 4,194,184,534 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 8,600 kilowatt hours, and the fuel oil consumption was 28.33 barrels. Diesel engines were in service three times during the month, twice for peak load purposes caused by operations of dry dock pumps, and once for test purposes.

The installation and placing in operation of the supervisory control dispatching equipment was completed at the Gatun hydroelectric station and the Miraflores substation during the month. Installation of supervisory control equipment and placing same in operation was completed during the month at Summit, Cristobal, and Balboa substations. This completes the installation of remote control for these stations. Operation has been successful.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 16 vessels during the month. There were 382 work orders issued during the month, as compared with 457 issued during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of September, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	4	11	12
United States Army and Navy.....	7	5	6
Panama Canal equipment.....	4	2	5
At Balboa:			
Commercial.....	2	7	9
United States Army and Navy.....	5	1	4
Panama Canal equipment.....	2	10	6
Total.....	24	36	42
Vessels in dry dock.			
At Cristobal:			
Commercial.....		1	1
United States Army and Navy.....	1	4	4
Panama Canal equipment.....		1	1
At Balboa:			
Commercial.....	1	1	2
Panama Canal equipment.....	1	3	2
Total.....	3	10	10

Repairs on the United States submarine *S-48* were completed during the month; repairs to the U. S. S. *Memphis* and U. S. S. *Overton* were carried forward. Work on the S. S. *Coya* was completed during the month.

MUNICIPAL ENGINEERING DIVISION.

In connection with the installation of oil lines to the coaling dock at Cristobal, there were laid 1,875 feet of 16-inch W. I. screw pipe, 4,890 feet of 16-inch W. I. victaulic pipe, 1,950 feet of 10-inch screw pipe, 1,775 feet of 6-inch G. I. pipe, ten 16-inch valves, 2 expansion couplings, and 5 braces on 10-inch risers; also there were painted 2,300 feet of 16-inch pipe and 2,300 feet of 10-inch pipe. Work on this project is 75 per cent complete. In connection with the installation of water line from the west side of the Canal to Bruja Point, with branch to Palo Seco, there were laid 3,340 feet of 6-inch pipe and 1,780 feet of 3-inch pipe.

In connection with the Thatcher Highway, which was opened to the public on September 1, 200 lineal feet of 6-inch sewer pipe were laid and 10½ square yards of sidewalk were constructed in connection with the erection of rest room at the west ferry slip.

Work on a number of improvement projects in the Canal Zone and in the cities of Colon and Panama was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 697,087,750 gallons.

DREDGING DIVISION.

The general movement of East Culebra slide extension continued throughout the month, shoaling the channel to within 10 feet of the center line on September 21, and again on September 26. Additional breaks also occurred behind the previous back break line, precipitating material into the sliding area. The movement of material into the Canal prism while more or less continuous during the month was augmented on 6 distinct occasions by greatly accelerated movements extending over the entire 700-foot frontage of the slide during the early part of the month, with the succeeding movements affecting a shorter frontage but resulting in greater encroachment upon the channel width. The center of the movement with respect to its effect upon the channel was at station 1765. On September 29 the channel was restored to full width and depth for the first time since July 20, but in the afternoon of the 29th material again pushed out to within 30 feet of the center line. At no time during the month was the available channel for shipping less than 150 feet in width and 40 feet in depth, taking into account space occupied by the dredges. A total of 417,650 cubic yards of material was removed from this slide during the month.

Movement of West Culebra slide on the 450-foot west base line showed an average of eight-tenths foot toward the Canal between stations 1775 plus 00 and 1795 plus 00 W., and an average of three-tenths foot to the south between stations 1773 plus 00 and 1777 plus 00 W.

There were numerous small bank breaks in the Cut during the month. There was no interference to shipping on account of slides during the month.

The total excavation during September, 1932, was 675,400 cubic yards as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
East Culebra slide extension.....	83,650	334,000	417,650
South Cucaracha slide.....	1,650	3,600	5,250
Canal prism, Miraflores Lake—			
Project No. 6.....	152,700	25,000	177,700
Maintenance.....	39,100		39,100
Balboa inner harbor:			
Maintenance.....	35,700		35,700
Total.....	312,800	362,600	675,400

Ferry service across the Canal was transferred from Pedro Miguel to the Pacific entrance on September 1, 1932, the new service connecting La Boca on the east bank of the Canal with the Thatcher Highway on the west bank. Service was operated on a continuous schedule between 6 a. m. and 9 a. m. and between 4 p. m. and 9.15 p. m., with hourly service from 9 a. m. to 4 p. m. During the month the service operated 30 days, making 1,534 single trips. Eight hundred seventy-four (874) Panama Canal, 59 United States Army, and 16,457 other vehicles, a total of 17,390, were ferried across the Canal during the month. This traffic was over three times the number of vehicles (5,574) transported by the ferry at Pedro Miguel in August, and exceeded by 68 per cent the maximum month's traffic at Pedro Miguel, which was 10,365 vehicles, in April, 1931.

MADDEEN DAM DIVISION.

The average working force for both the Government and the contractors for September was 287 gold and 831 silver employees.

Rock and earth were excavated from the right abutment, blocks 11 and 12, spillway apron, and diversion channel. Concrete was poured in blocks 16, 17, 18, and 19, and the counterforted wall center section, upstream wing and rock test pit under the downstream wing. The concrete railway trestle on block 17-S was used for the first time on the 10th, and the 8-cubic yard train of concrete was abandoned for the 6-cubic yard train on the same date. The concrete pouring hours were changed on the 14th for the purpose of avoiding the afternoon rains, and the starting time was fixed at 6 p. m. Pouring was suspended for four days due to motor at loading terminal burning out. The total concrete poured during the month totaled 6,995.09 cubic yards, making a total to date of 10,251.41 cubic yards.

Driving sheet piling in the levee was completed on the 3d, and unwatering begun. Although there is considerable leakage the pumps have no difficulty in keeping the excavation dry and it appears there will be no delay to the work from this cause.

In connection with clay grouting area No. 1 (saddles 10 and 11), 507 lineal feet of hole were drilled, 31 lineal feet of 4-inch stand pipe set, and 231 lineal feet of 2-inch grout pipe placed. A total of 1,006.7 cubic yards of grout were placed of which 256.9 cubic yards were placed by air, 399.8 cubic yards by pump, and 350 cubic yards by ram.

SCHOOLS.

The Canal Zone white schools opened on September 22. (Previously school opened always on October 1.) The colored schools operate on a 12-month basis. Compared with October, 1931, the white school attendance was increased by 55 pupils and that of the colored schools by 239 pupils, with no additional white teachers and 7 additional colored teachers to take care of the increased enrollment.

The following tabulation shows the enrollment and number of teachers for October, 1931, and September, 1932:

	October, 1931.	September, 1932.
White schools:		
Pupils belonging on last day of month.....	2,834	2,889
Teachers (including superintendent and assistants, principals, and supervisors).....	119	119
Colored schools:		
Pupils belonging on last day of month.....	4,136	4,375
Teachers (including principals).....	94	101

Two new 2-teacher colored schools were opened on July 1, 1932, one at Chiva-Chiva and one at Frijoles. The 1-teacher colored school at Las Cascadas was closed in July.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on September 30, 1932, was 24,173, composed of 8,144 Americans, 2,792 of whom were men, 2,550 women, and 2,802 children; 179 Europeans, 73 of whom were men, 27 women, and 79 children; and 15,850 West Indians and other nationalities, 4,216 of whom were men, 2,834 women, and 8,800 children. The total number of persons in quarters on September 30, 1931, was 24,070.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of September 21, 1932, with a comparison of the working force for the preceding month and for September, 1931:

	Total employees.		As of September 21, 1932.		
	September, 1931.	August, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	108	90	56	40	96
Electrical.....	414	346	153	188	341
Municipal Engineering.....	790	659	77	561	638
Lock Operation.....	919	911	232	678	910
Dredging.....	1,143	984	169	804	973
Madden Dam.....	324	181	44	134	178
Mechanical.....	1,298	1,236	432	765	1,197
Marine.....	795	654	180	457	637
Fortifications.....	126	103	13	73	86
Total.....	5,917	5,164	1,356	3,700	5,056

	Total employees.		As of September 21, 1932.		
	September, 1931.	August, 1932.	Gold.	Silver.	Total.
Supply Department:					
Quartermaster.....	1,712	1,508	195	1,386	1,581
Commissary.....	1,551	1,465	228	1,232	1,460
Cattle Industry-Plantations.....	95	100	2	98	100
Hotel Tivoli.....	113	100	8	91	99
Hotel Washington.....	103	87	7	80	87
Transportation.....	305	298	72	224	296
Total.....	3,879	3,558	512	3,111	3,623
Accounting Department.....	210	196	190	5	195
Health Department.....	1,157	1,094	271	822	1,093
Executive Department.....	915	921	564	362	926
Total.....	2,282	2,211	1,025	1,189	2,214
Panama Railroad Company:					
General Manager.....	275	84	25	74	99
Transportation.....	163	299	67	229	296
Receiving & Forwarding Agency.....	1,055	594	71	521	592
Coalng Stations.....	200	95	21	77	98
Total.....	1,698	1,072	184	901	1,085
Grand total, September, 1931.....	13,776				
Grand total, August, 1932.....		12,005			
Grand total, September, 1932.....			3,077	8,901	11,978

Additions to the gold force on the Isthmus in September, 1932, were as follows: Employed in the United States, 8; reemployed in the United States, 1; employed on the Isthmus, 1; reemployed on the Isthmus, 4; total, 14. Separations from the gold force totaled 16, as follows: Resigned, 6; discharged 8; died, 2. At the end of the month there were on file 839 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 176 and separations from service, 305; the number seeking employment was estimated at approximately 3,000.

VITAL STATISTICS.

A total of 151 deaths occurred during the month of September, 1932, among the population of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon (30,000), total population 149,570, which is equivalent to an annual death rate of 12.12 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 24; cancer, 11; pneumonia (broncho and lobar), 10; diarrhea and enteritis, 10; organic diseases of the heart, 9; syphilis, 8; and nephritis (acute and chronic), 7. There was 1 death from erysipelas, 1 from leprosy, and 1 from whooping cough. There were 18 deaths among nonresidents, which are not included in the above statistics.

There were 354 live births and 11 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 29.28. Deaths among children under one year of age numbered 28, giving an infant mortality rate, based on the number of live births reported, of 79.10.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 138, of whom 22 were employees (13 white and 9 colored), 18 were members of employees' families (10 white and 8 colored), 5 were contractor's employees at Madden Dam, 15 were Canal Zone agriculturists, 47 were other civilian nonemployees, and 31 were Army and Navy personnel. Of the 40 employees and members of employees families, 32 were probably infected outside of our sanitated areas as they gave a history of working, living, or having been in unsanitated areas at night previous to their becoming sick.

There was one death from malaria among residents, an adult resident of Panama City, whose disease was probably contracted during a visit to the interior of the Republic.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$331,235.98, of which \$314,763.08 was for the Department of Operation and Maintenance, and \$16,472.90 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$22,378.98.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenue and expenditures for the month of August, 1932, as compared with August, 1931, with the figures for the first two months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of September at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	August, 1931.	August, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,770,213.21	\$1,440,880.70	\$3,618,888.41	\$2,909,649.27
Other receipts.....	251,442.78	232,985.66	506,872.39	473,124.85
Total transit revenues.....	2,021,655.99	1,673,866.36	4,125,760.80	3,382,774.12
Total transit expenses.....	1,064,823.35	886,828.23	2,114,014.76	1,766,692.45
Net transit revenues.....	956,832.64	787,038.13	2,011,746.04	1,616,081.67
Three per cent fixed capital charge	1,266,455.35	1,272,757.12	2,532,910.70	2,545,514.24
Surplus or (deficit).....	(309,622.71)	(485,718.99)	(521,164.66)	(929,432.57)
Business revenues.....	1,458,194.29	1,186,916.89	2,704,076.13	2,337,863.87
Business expenses.....	1,415,014.19	1,134,294.98	2,608,064.06	2,250,405.35
Net business revenues.....	43,180.10	52,621.91	96,012.07	87,458.52
Three per cent fixed capital charge..	59,742.86	60,007.90	119,485.72	120,015.80
Surplus or (deficit).....	(16,562.76)	(7,385.99)	(23,473.65)	(32,557.28)
Combined revenues.....	3,479,850.28	2,860,783.25	6,829,836.93	5,720,637.99
Combined expenses.....	2,479,837.54	2,021,123.21	4,722,078.82	4,017,097.80
Net revenues.....	1,000,012.74	839,660.04	2,107,758.11	1,703,540.19
Three per cent fixed capital charge..	1,326,198.21	1,332,765.02	2,652,396.42	2,665,530.04
Surplus or (deficit).....	(326,185.47)	(493,104.98)	(544,638.31)	(961,989.85)

() Indicates deficit.

Respectfully,

J. L. SCHLEY,
Governor.

Old Motor Ship Transits Canal.

The Danish motor freighter *Selandia*, owned and operated by the East Asiatic Company, of Copenhagen, transited the Canal on October 6, 1932, en route from Antwerp to Vancouver, via wayports. The *Selandia*, built in Copenhagen in 1912, is said to have been the first successful ocean-going motor vessel. With the success of the *Selandia* more ships of the type were built, gradually improving in size, efficiency, and economy. The vessel is 360 feet in length, 52 feet beam, and of about 4,970 gross tons. This is her first visit to the Panama Canal since December 15, 1921.

In the past fiscal year motor shipping comprised 32.1 per cent of the total number of vessels using the Canal.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 21, 1932.

No. 1196.

Panama Canal, Pacific entrance, wrecked schooner. Between San José Rock and Flamenco Island the wreck of the schooner *Leonidas* lies in 30 feet of water; in position San José Rock bears 157 degrees; Flamenco Island light bears 266 degrees. Dangerous to navigation. Spars awash at low water.

J. L. SCHLEY,
Governor.

Change in Coaling Plants Organization.

The Division of Coaling Plants of the Panama Railroad Company was abolished, effective October 1, 1932, and the activities heretofore handled under that division are being administered by the Receiving and Forwarding Agency of the Panama Railroad Company.

This consolidation has resulted in some reduction in the force employed, with resultant savings in cost of operation, and was decided on as a measure of economy. Methods of placing orders for coal, bunkering of vessels, etc., are not affected by the change in organization.

Oil Plant Operations After 7 P. M.

THE PANAMA CANAL, SUPPLY DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 24, 1932.

To steamship agents and fuel oil companies:

1. On account of the continued decline in business activities of the Fuel Oil Plants it is necessary to effect further economies in operation. This will be done by shortening the week-day working hours of employees during the second and third shifts if advance information is not in hand that ships will require Oil Plant service later in the day.

2. If it is desired to handle a vessel for bunkers or discharge after 7 p. m. this information must be in the possession of the Oil Plant not later than 6 p. m. of the day on which the ship is to be handled. Failure to give such notice may result in no service being available.

3. The above arrangement will be effective November 1, 1932.

4. The present restrictions on Sunday and holiday Oil Plant service will be continued. Such restrictions have not resulted in serious inconvenience to shipping as all concerned have given excellent cooperation in furnishing advance information. It is believed that the proposed restrictions on week-day service will be equally as practicable if the same degree of cooperation is shown.

ROY R. WATSON,
Chief Quartermaster.

APPROVED:

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending October 22, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Nueva Panama.....	Hans Elliot.....	October 9	October 9	77	.....
Santa Elisa.....	Panama Mail S. S. Co.....	October 9	October 9	138	8
Chiriqui.....	United Fruit Co.....	October 9	October 9	471	240
Santa Barbara.....	Grace Line.....	October 10	October 11	102	27
La Purisima.....	Union Oil Co.....	October 11	October 12	2,588	.....
Point Sur.....	Swayne & Hoyt.....	October 12	October 14	1,437	.....
St. Mibiel.....	U. S. Army.....	October 13	October 14	41	11
Santa Maria.....	Grace Line.....	October 13	October 14	101	66
Santa Cecilia.....	Panama Mail S. S. Co.....	October 13	October 13	93	26
President Hayes.....	Dollar Line.....	October 14	October 14	5	1
Plus Ultra.....	Cia. Ecuadorian de Transp.....	October 14	October 16	219	.....
Acajutla.....	Pacific Steam Navigation Co.....	October 15	October 15	.....	1
Nueva Panama.....	Hans Elliot.....	October 16	October 16	39	.....
Mariquita.....	Shell Oil Co.....	October 16	October 17	2,000	.....
Benjamin Franklin.....	Fred Olsen & Co.....	October 17	October 18	192	.....
Pennsylvania.....	Panama-Pacific Line.....	October 17	October 18	5	135
Iocoma.....	International Petroleum Co.....	October 20	October 24	125	.....
Virginia.....	Panama-Pacific Line.....	October 21	October 21	11	89

Official Circulars.

Appointments.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 21, 1932.

To all concerned.—Having been appointed as Governor of The Panama Canal, and having duly qualified this date, the undersigned hereby assumes his duties as such.

J. L. SCHLEY.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 21, 1932.

To all concerned.—Lieut. Col. Clarence S. Ridley, U. S. A., is hereby appointed Engineer of Maintenance, effective this date.

J. L. SCHLEY,
Governor.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, October 22, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.				Beam.	Salt draft.			Nature.	Tons.	Gross.	Net.
Cressington	15	18 55	16	6 10	16	15 41	16	16 55	British	United British S. S. Co.	405.5	55.5	17.0	Swansea, England.	Vancouver, B. C.	Salt.	1,022	7,075	5,308
Court 2	15	00 05	16	6 20	16	15 50	16	17 50	Venezuelan.	The Caribbean Pet. Co.	279.0	46.6	12.4	Maracaibo, Venez.	Balboa, C. Z.	Gasoline.	2,000	6,907	4,955
Mariposa	15	20 05	16	6 30	16	16 16	16	17 50	British	Mar. Ship. & Trad. Co.	406.0	56.0	15.0	Barry, England.	Vancouver, B. C.	Ballast.	5,778	6,907	5,916
Appledore	15	21 05	16	8 35	16	16 41	16	17 50	American	Lykes Bros. Ripley Co.	434.0	57.6	23.6	Houston, Tex.	Manila, P. I.	Gasoline.	4,604	6,269	4,658
Dryden	15	22 15	16	8 35	16	17 15	16	18 32	Japanese	Kokusa Kaisha	385.0	50.0	21.5	Savannah, Ga.	Japan	(⁶)	2,687	7,156	5,094
Captown Maru	15	23 35	16	9 45	16	17 37	16	18 32	American	Amer-Hawaiian Line.	407.7	53.7	19.0	Boston, Mass.	Portland, Oreg.	General.	2,504	7,611	5,450
Dakota	15	23 35	16	10 10	16	20 37	16	21 40	American	Isthmian S. S. Lines.	424.0	56.0	18.0	Baltimore, Md.	Los Angeles, Calif.	General.	7,644	6,336	4,389
Steel Exporter.	16	5 10	16	10 10	16	20 37	16	21 40	American	Skelly Oil Co.	400.8	54.3	25.9	Texas City, Tex.	Seattle, Wash.	Gasoline.	839	13,787	9,856
Phoenix 1	16	7 00	16	11 05	16	21 29	16	23 40	American	Nav. Libera-Tristina	523.0	64.0	23.0	Genoa, Italy	Vancouver, B. C.	General.	11,556	6,772	5,867
California.	16	7 03	16	12 15	16	22 33	16	23 40	Italian	Imperial Oil Co.	510.9	68.2	23.0	Montreal, Canada	Talara, Peru	Ballast.	1,124	5,503	3,772
Canadoline 2	17	00 05	17	6 30	17	15 22	17	18 50	British	R. S. Dalgleish, Ltd.	450.0	55.0	17.0	Cardiff, England.	Vancouver, B. C.	Ballast.	400	1,105	698
Glentworth.	17	7 40	17	7 50	17	16 21	17	17 30	British	R. S. Dalgleish, Ltd.	450.0	55.0	17.0	Dunkirk, France.	Noumea, N. Caled.	General.	5,729	4,102	3,358
Recherbe	17	1 50	17	12 05	17	19 40	17	20 30	French	Messageries Maritimes	350.4	55.0	18.1	Cristobal, C. Z.	Guayaquil, Ecuador	General.	2,065	9,062	6,358
Cal.	15	15 30	17	12 05	17	19 30	17	20 30	German	North German Lloyd	216.5	32.9	14.1	Cristobal, C. Z.	Vancouver, B. C.	Ballast.	5,612	4,354	3,191
Brighton	17	12 45	17	13 00	17	20 17	17	21 30	British	Dale & Co.	409.6	54.0	16.6	Servola, Italy	Vancouver, B. C.	Ballast.	2,058	6,779	4,921
Bonnamin	17	8 15	17	14 10	17	21 05	18	2 00	Norwegian.	Fred Olsen & Co.	452.0	59.5	20.3	Oslo, Norway	Vancouver, B. C.	General.	3,765	8,458	6,067
Franklin 2	16	22 00	17	9 50	17	16 41	17	18 35	Panamanian	Hane Elliot	492.0	62.0	17.0	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	4,242	9,414	6,790
Real	18	6 15	18	6 35	18	13 28	18	15 00	British	Dale & Co.	300.0	53.5	14.6	Tyne, England	Vancouver, B. C.	Ballast.	4,212	10,446	7,631
Carlton	18	5 25	18	12 10	18	19 16	18	20 35	British	United Steam Nav. Co.	403.5	54.1	18.0	Barry, England	Vancouver, B. C.	Ballast.	8,878	6,588	5,888
Dacey	18	5 25	18	12 10	18	19 16	18	20 35	British	Amer-Hawaiian Line.	404.0	54.0	18.6	Boston, Mass.	Seattle, Wash.	General.	3,240	6,289	4,723
Kansas.	18	14 20	18	14 35	18	21 18	18	22 20	American	Soc. Italia-Flotte Rinnite	482.0	61.8	25.3	Genoa, Italy	Valparaiso, Chile	General.	6,209	4,303	3,403
Orazo 2	17	13 50	19	6 00	19	13 24	19	14 30	Italian	Amer-Australian Line.	479.7	62.2	22.0	Philadelphia, Pa.	Fremantle, Aus. Ia.	General.	1,383	6,628	5,019
Paroara	18	19 25	19	7 15	19	14 47	19	15 55	British	McCormick S. S. Co.	410.5	51.4	16.8	Buenos Aires, Arg.	San Francisco, Cal.	General.	4,736	8,349	2,950
West Cactus.	18	23 35	19	8 35	19	15 51	19	17 00	American	The Union Sulphur Co.	356.0	51.0	23.0	Mobile, Ala.	Everett, Wash.	Sulphur, coke.	4,242	9,414	6,790
Herman Frasch	19	00 05	19	8 35	19	15 51	19	17 00	American	The Union Sulphur Co.	356.0	51.0	23.0	Mobile, Ala.	Everett, Wash.	Sulphur, coke.	4,242	9,414	6,790
Kwansai Maru 2	19	6 10	19	9 25	19	16 20	19	17 40	Japanese.	Osaka Shosen Kaisha	461.0	61.0	22.4	Boston, Mass.	Shanghai, China.	Oil, cotton, etc.	4,212	10,446	7,631
Buenos Aires	19	00 45	19	10 53	19	17 38	19	18 35	Japanese.	Osaka Shosen Kaisha	461.0	61.0	22.4	Buenos Aires, Arg.	Kobe, Japan	General.	8,878	6,588	5,888
Maru 2	19	6 20	19	11 50	19	18 55	19	20 00	Swedish	Anglo-Saxon Pet. Co.	482.0	61.6	22.0	Hamburg, Germany	Los Angeles, Calif.	Ballast.	3,240	6,289	4,723
Polux 2	19	6 20	19	11 50	19	18 55	19	20 00	Swedish	Anglo-Saxon Pet. Co.	482.0	61.6	22.0	Hamburg, Germany	Los Angeles, Calif.	Ballast.	6,209	4,303	3,403
Nebraska.	19	6 00	19	12 32	19	19 58	19	21 00	British	Royal Mail Lines, Ltd.	450.0	58.0	19.0	Rotterdam, Holland	Vancouver, B. C.	General.	4,087	9,294	6,861
Hoyager 2	19	8 10	19	13 40	19	21 00	19	22 00	Norwegian.	Westfal, Larsen & Co.	382.0	54.0	16.8	Buenos Aires, Arg.	Vancouver, B. C.	General.	6,021	4,916	3,916
Doris Kellogg 1	19	22 35	20	6 20	20	13 35	20	14 55	American	Kellogg S. S. Co.	390.0	54.2	19.6	New York, N. Y.	Los Angeles, Calif.	Ballast.	1,864	15,234	10,470
Dorothy	20	2 50	20	7 10	20	14 30	20	15 35	American	Luckenbach Line	448.9	60.2	22.0	Providence, R. I.	Seattle, Wash.	General.	4,087	9,294	6,861
Lukenbach.	20	2 50	20	7 10	20	14 30	20	15 35	American	Luckenbach Line	448.9	60.2	22.0	Providence, R. I.	Seattle, Wash.	General.	4,087	9,294	6,861
Sacramento	20	10 40	20	10 50	20	17 07	20	18 20	British	Reardon Smith Line	401.6	54.3	14.3	Cardiff, England.	Vancouver, B. C.	Ballast.	6,021	4,916	3,916
Valley	20	10 40	20	10 50	20	17 07	20	18 20	British	Reardon Smith Line	401.6	54.3	14.3	Cardiff, England.	Vancouver, B. C.	Ballast.	6,021	4,916	3,916
President	20	14 50	21	6 05	21	13 40	21	15 30	American	Dollar Line	517.0	72.2	27.0	New York, N. Y.	Manila, P. I.	General.	1,864	15,234	10,470
Grant	20	14 50	21	6 05	21	13 40	21	15 30	American	Dollar Line	517.0	72.2	27.0	New York, N. Y.	Manila, P. I.	General.	1,864	15,234	10,470

Nueva Panama ²	16	20	05	21	6	15	21	13	40	21	15	45	Panamanian	Hans Elliot.	108	0	20	6	8	1	Cristobal, C. Z.	Buenaventura, Col.	General	175	226	101
Virginia	21	4	55	21	7	20	21	14	36	22	00	35	American	Shaw, Savill & Albion.	586	4	80	3	28	1	New York, N. Y.	San Francisco, Cal.	General	3,927	25,54	18,170
Matara.	21	7	45	21	8	30	21	15	33	22	1	30	British	Shaw, Savill & Albion.	500	0	63	0	28	1	Auckland, N. Z.	San Francisco, Cal.	General	3,325	13,500	9,233
Schwaben.	20	16	00	21	9	33	21	16	22	21	17	15	German	North German Lloyd.	491	5	63	5	19	7	Hamburg, Germany	Portland, Oreg.	General	2,968	10,002	6,743
Kalma ¹ .	20	19	30	21	8	34	21	17	22	21	18	30	Swedish	Anglo-Saxon Pet. Co.	464	6	59	5	19	7	Rotterdam, Holland	San Francisco, Cal.	Ballast			
Heranger ¹ .	20	23	40	21	9	40	21	17	55	21	19	00	Norwegian.	Westfal, Larsen & Co.	398	0	54	8	16	3	Rotterdam, Holland	Vancouver, B. C.	Ballast		6,864	5,260
Pacific Enter- prise ¹ .	21	10	25	21	12	10	21	18	48	21	19	50	British	Furness, Withy & Co.	435	9	60	0	18	0	Manchester, Eng.	Vancouver, B. C.	General	448	9,641	6,989
Buenos Aires ² .	22	2	50	22	10	15	22	18	30	22	18	48	Swedish	Johnsonsen Moller Co.	428	9	56	2	18	7	Stockholm, Sweden	Vancouver, B. C.	General	1,702	7,591	5,661
Nel Maersk ² .	22	11	43	22	12	10	22	19	18	22	20	20	Danish	East Asiatic Co.	418	0	54	6	17	0	Baltimore, Md.	Iloilo, P. I.	General	4,123	7,410	5,553
Falstria ² .	22	15	30	22	18	10	23	10	35	23	22	15	Danish	East Asiatic Co.	365	0	52	0	20	0	Norrsundby, Den.	Vancouver, B. C.	General	3,864		

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Hidelford ¹ .	15	19	00	16	6	10	16	16	10	16	18	20	Norwegian.	Anglo-Saxon Pet. Co.	451	9	59	2	26	0	San Francisco, Cal.	United Kingdom.	Gasoline	10,110	8,013	5,402
President	16	2	45	16	7	13	16	15	00	16	22	45	American	Dollar Line.	516	5	72	2	30	0	Manila, P. I.	New York, N. Y.	General	6,940	15,299	10,589
Lincoln.	15	23	00	16	8	16	16	16	15	16	16	15	American	Williams S. S. Corp.	415	1	55	7	26	4	Seattle, Wash.	Baltimore, Md.	Lumber, general	9,500	7,731	5,805
Wilzipo.	15	7	10	16	8	25	17	21	55				American	Frank C. Ekman	55	7	16	5	8	0	San Francisco, Cal.	Tampa, Fla.	Ballast		42	42
Shamrock	15	7	10	16	8	25	17	21	55				American	Frank C. Ekman	462	0	59	7	27	0	Tampa, Fla.	London, England	Gasoline	11,069	8,229	5,542
Shamrock Dory	16	3	00	16	9	52	16	17	50	16	17	50	Norwegian.	Anglo-Saxon Pet. Co.	407	7	53	7	25	0	Los Angeles, Calif.	Boston, Mass.	General	6,227	7,097	5,065
O.B.Soransen ¹ .	16	8	55	16	10	12	16	18	20	16	20	00	American	Amer-Hawalian Line.	108	5	20	6	10	0	Portland, Oreg.	Cristobal, C. Z.	Coffee	136	226	101
Nueva Panama ² .	16	11	40	16	13	57	16	20	05				Panamanian	Hans Elliot.	62	2	17	1	5	0	Buenaventura, Col.	Cristobal, C. Z.	Bananas	35	46	22
Real ¹ .	16			16	15	16	16	22	00	17	9	50	Panamanian	U. S. Navy.	477	1	60	0	27	0	Darien, R. P.	Guantanamo, Cuba	General		5,684	4,070
Patoka ¹ .	15	20	00	17	6	21	17	14	35	17	14	35	American	Amer-Hawalian Line.	386	8	52	2	23	0	San Diego, Calif.	New York, N. Y.	General	6,963	4,917	3,531
Willfar.	16	23	45	17	8	43	17	17	10	17	17	10	Danish	Canadian Transp. Co.	350	2	50	8	25	5	Vancouver, B. C.	Sharpness, Eng.	General	5,976	6,754	4,967
Stensly.	17	00	15	17	9	01	17	18	00	17	18	00	American	McCormick S. S. Co.	427	0	52	0	25	0	Powell River, B. C.	Buenos Aires, Arg.	General	8,825	9,664	6,552
Northern Sun ¹ .	17	4	40	17	9	36	17	18	30	17	18	30	American	Union Oil Co.	480	6	66	0	28	0	Los Angeles, Calif.	Chester, Pa.	Gasoline	10,510		
La Brea ¹ .	17	5	15	17	9	57	17	19	46	17	19	45	American	Union Oil Co.	435	0	56	2	29	3	Tacoma, Wash.	Baltimore, Md.	Gas oil			
Abasco.	17	7	48	17	10	32	17	22	05	17	21	05	American	McCormick S. S. Co.	409	6	54	1	25	4	Albany, N. Y.	Harvey, France	Lumber, general	7,002	6,827	4,993
Zenon.	17	12	25	17	13	02	17	22	35	18	18	18	French	French Line.	425	0	55	0	26	0	Valparaiso, Chile	Maracaibo, Venez.	Ballast	6,474	8,982	4,834
Martquita.	10	15	50	17	13	48	17	23	15	17	23	15	Venezuelan	Shell Oil Co.	279	0	47	0	1	0	Bahia, C. Z.	New York, N. Y.	General	9,986	25,262	18,194
Pennsylvania.	17	10	05	18	7	28	18	14	09	18	14	36	British	Anglo-Saxon Pet. Co.	586	4	80	3	30	0	San Francisco, Cal.	Liverpool, England	General	2,430	7,764	4,705
Aconcagua.	12	22	15	18	7	10	18	15	18	15	15	15	British	Roland Line.	422	8	56	2	25	0	Valparaiso, Chile	Boston, Mass.	Lumber	7,500	6,581	4,795
Portmar.	18	3	00	18	8	13	18	16	15	18	16	15	American	Calmar S. S. Corp.	409	8	60	2	25	0	Seattle, Wash.	Glasgow, Scotland	General	6,946		
Pacific Presi- dent ¹ .	18	3	00	18	8	52	18	16	50	18	16	50	British	Furness, Withy & Co.	450	4	60	8	25	0	San Francisco, Cal.	Mobile, Ala.	General	4,696	3,984	2,612
Point Montara.	18	16	00	18	16	43	19	12	45	19	12	45	American	Gulf-Pacific Line.	335	0	46	0	22	0	San Francisco, Cal.	Boston, Mass.	General	6,162	6,766	4,767
Hawalian.	18	23	38	19	6	02	19	13	55	19	15	20	American	Amer-Hawalian Line.	404	6	53	9	25	0	Tacoma, Wash.	Baltimore, Md.	Pineapples, gen.	3,170	7,611	5,450
Steel Inventor.	19	00	12	19	7	09	19	15	10	19	15	10	American	Iskham S. S. Lines	424	2	56	2	17	0	Honolulu, T. H.	Boston, Mass.	Lumber, general	5,322	6,755	4,745
Henry S. Grove	19	6	00	19	8	15	19	16	50	19	16	50	American	Argonaut S. S. Co.	404	6	53	9	26	0	Seattle, Wash.	Vallee, Norway	Crude oil	16,771	12,535	8,224
Heinrich V.	19	7	00	19	8	48	19	17	25	19	17	25	Danzig	W. Tankers Schiff Rhederei.	521	1	70	2	31	0	Talara, Peru.	Boston, Mass.	Lumber, general	7,309	6,602	4,824
Riedemann ² .	19	9	25	19	10	24	19	18	05	19	18	05	American	Shepard S. S. Co.	409	8	54	2	40	0	Seattle, Wash.	Tampa, Fla.	General	5,977	5,696	4,125
Sage Brush.	19	6	35	19	11	58	19	19	20	19	19	20	American	Swayze & Hoyt	386	8	52	2	23	0	Seattle, Wash.	Paraiso, C. Z.	Ballast		73	52
Point Brava.	19			19	13	14							American	D. C. Starr	75	0	20	0	10	0	Bahia, C. Z.	Trieste, Italy	General	8,951	7,823	6,029
Pilgrim ² .	19	19	00	20	6	15	20	13	52	20	20	36	Italian	Navy, Libera-Triestina.	436	6	55	4	27	0	Vancouver, B. C.	Hamburg, Germany	General	9,584	9,965	6,656
Felre.	19	19	00	20	7	09	20	14	19	20	20	15	German	North German Lloyd.	495	5	63	8	27	0	Vancouver, B. C.					
Este.	19	20	00	20	7	09	20	14	19	20	20	15	German	North German Lloyd.	495	5	63	8	27	0	Vancouver, B. C.					

Towing Steamers.

For orders.

Coffee, cocoa, etc.

Rosin, cotton, etc.

Yacht.

Sail boat.

Motor schooner.

Motor ship.

Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Manizales	20	7 18	20	8 15	20	15 11	24	14 10	German	Grace Line	216 5	32 9	16 2	Guayaquil, Ecuador	Cristobal, C. Z.	General	742	1,132	741
Edgar F. Luckenbach	20	8 00	20	9 14	20	16 25	20	16 25	American	Luckenbach Line	425 0	57 3	31 0	Seattle, Wash.	Boston, Mass.	General	8,700	8,568	6,648
Skotaa	20	19 50	21	6 25	21	14 10	21	16 05	Norwegian	Anglo-Saxon Pet. Co.	431 1	59 0	27 0	Los Angeles, Calif.	England	Gasoline	10,113	8,323	5,768
Birmingham	20	19 00	21	7 20	21	14 55	21	14 55	American	Isthmian S. S. Lines	395 5	55 0	27 0	Vancouver, B. C.	Rotterdam, Holland	General	7,607	7,304	5,188
City	20	19 15	21	8 09	21	15 35	21	15 35	Norwegian	Intercean S. S. Corp.	398 0	54 7	26 3	Vancouver, B. C.	Amsterdam, Holland	(*)	7,415	6,853	5,246
Brinauger	20	21 35	21	8 53	21	17 05	21	17 05	American	Arrow Line	402 6	53 0	25 0	Seattle, Wash.	Boston, Mass.	Lumber, general	6,200	6,575	4,912
Gen. M. H. Sherman	21	3 00	21	9 15	21	19 00	21	19 00	American	States S. S. Co.	386 8	52 2	27 0	Portland, Ore.	Philadelphia, Pa.	Lumber, general	5,963	5,735	4,075
Sun Gabriel	21	5 30	21	9 37	21	20 15	21	20 15	British	Anglo-Ecuador. Offsheds.	440 8	57 6	22 0	La Libertad, Ecua.	Philadelphia, Pa.	Crude oil	9,830	7,555	5,049
El Aleto	21	6 32	21	10 20	21	21 55	21	21 55	American	Shell Oil Co.	435 0	56 2	28 4	Los Angeles, Calif.	Fall River, Mass.	Gas oil	10,500	7,470	5,114
W. S. Miller	21	9 20	21	10 40	21	21 50	23	13 30	German	Hamburg-American Line	237 5	34 4	14 4	Guayaquil, Ecuador	Cristobal, C. Z.	General	692	1,632	1,041
Durazzo	21	11 20	21	12 06	21	22 50	22	00 20	British	Colonial Sugar Co.	430 0	54 0	27 1	Townsville, Aus. lia.	Halifax, Canada	Sugar	8,400	7,093	5,021
Leverbank	21	22 15	22	6 12	22	13 25	22	13 25	British	Canadian Transp. Co.	420 0	54 0	26 0	Vancouver, B. C.	Montreal, Canada	Lumber, general	6,430	6,996	5,346
more	22	1 00	22	7 06	22	14 45	22	14 45	British	Dale & Co.	440 5	57 5	25 0	Vancouver, B. C.	London, England	General	9,700	7,679	5,828
Pukaskan.	22	1 00	22	8 45	22	16 05	22	15 40	American	Shell Oil Co.	480 5	68 0	29 4	Los Angeles, Calif.	Perth Amboy, N. J.	Gasoline	13,617	9,713	6,536
Mercury	22	2 20	22	8 45	22	16 05	22	15 40	British	Pacific Steam Nav. Co.	215 0	33 5	14 0	Champerico, Guat.	Cristobal, C. Z.	General	148	1,270	735
Salvador	22	5 52	22	9 00	22	17 15	22	17 15	American	Dutton Lumber Corp.	410 0	54 2	25 0	Everett, Wash.	Poughkeepsie, N. Y.	Lumber	7,375	6,581	4,784
Herman F. Whiton	22	9 50	22	10 48	22	18 40	22	18 40	American	Associated Oil Co.	431 0	59 2	26 0	San Francisco, Cal.	Bayonne, N. J.	Gasoline	9,132	7,817	5,112
Tulsagas	22	12 10	22	12 44	22	19 50	23	7 00	Japanese	Osaka Shosen Kaisha.	446 0	60 5	20 0	Penang, Malay Pen.	Baltimore, Md.	General	3,095	8,982	0,274
Tokai Maru	22	15 05	22	15 50	23	00 02	23	00 02	Swedish	A. B. Graham, Vane'yer	418 8	55 1	28 6	Vancouver, B. C.	London, England	Wheat, lumber	9,800	7,274	5,213
Pajala	22	15 05	22	15 50	23	00 02	23	00 02	Swedish	A. B. Graham, Vane'yer	418 8	55 1	28 6	Vancouver, B. C.	London, England	Wheat, lumber	9,800	7,274	5,213

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.	* ARRIVALS.		* DEPARTURES.	
		Line.	Date.	Vessel.	Line.
October 16	Dellian	Leyland S. S. Line	October 16	Marques de Comillas	Spanish S. S. Line
October 16	Bogota	Colombian S. S. Line	October 16	Metapan	United Fruit Co.
October 16	No. 144-M	Pan American-Grace Airways	October 16	Magallanes	Spanish S. S. Line
October 16	No. 9688	Pan American Airways	October 16	Guayaquil	Panama R. R. S. Line
October 17	Cala naves	Pan American Airways	October 16	Bogota	Colombian S. S. Line
October 17	No. 145-M	United Fruit Co.	October 17	Inayacuima	A. Tagaropoulos
October 17	No. 145-M	United Fruit Co.	October 17	Inayacuima	A. Tagaropoulos

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 17....	No. 669-M ¹³ .	Pan American Airways.	Barranquilla, Colombia.	October 17....	Anachuena ¹⁴ .	A. Tagaropulos	Colon, Rep. of Panama.
October 17....	Inapachuena ¹⁴ .	A. Tagaropulos	Colon, Rep. of Panama.	October 17....	No. 669-M ¹³ .	Pan American Airways.	Barranquilla, Colombia.
October 17....	Magdalena ¹⁴ .	Hamburg-American Line	Colon, Rep. of Panama.	October 17....	Calamares	United Fruit Co.	New York via waypts.
October 18....	No. 12367 ¹³ .	Seafla Airways	Puerto Barrios and Limon.	October 17....	Costa Rica	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
October 18....	Melpomene ¹³ .	G. R. Ford	San Salvador via waypts.	October 18....	No. 300-N ¹³ .	Pan American-Grace Airways.	Talara via waypts.
October 19....	Cristobal	Panama R. R. S. S. Line.	Serrana Bank.	October 18....	No. 9688 ¹³ .	Pan American Airways.	San Salvador via waypts.
October 19....	Pearl Marie ¹³ .	G. I. Bryan	New York via Haiti.	October 18....	Doblan	Leyland S. S. Line	Cuba.
October 19....	No. 9685 ¹³ .	Pan American Airways.	Colon, Rep. of Panama.	October 19....	Magdalena ¹³ .	Hamburg-American Line	Hamburg via waypts.
October 19....	No. 945-M ¹³ .	Pan American-Grace Airways.	San Salvador via waypts.	October 19....	Pearl Marie ¹³ .	G. I. Bryan	Bluefields, Nicaragua.
October 20....	Tela	United Fruit Co.	Chiclayo via waypts.	October 20....	No. 669-M ¹³ .	Pan American Airways.	Barranquilla, Colombia.
October 20....	No. 659-M ¹³ .	Pan American Airways	New Orleans via Habana.	October 20....	No. 145-M ¹³ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
October 21....	Cefalu	Standard Fruit & S. S. Co.	Miami via waypts.	October 20....	Tela	United Fruit Co.	New Orleans via waypts.
October 21....	Cavina	Elders & Fyffes, Ltd.	New Orleans via Habana.	October 21....	No. 144-M ¹³ .	Pan American-Grace Airways	Chiclayo via waypts.
October 21....	Veragua	United Fruit Co.	Avonmouth via waypts.	October 21....	No. 9775 ¹³ .	Pan American Airways	San Salvador via waypts.
October 21....	No. 145-M ¹³ .	Uraba, Medellin & Cent. Airways	New York via waypts.	October 22....	Cefalu	United Fruit Co.	Port Limon, Costa Rica.
October 22....	Stella Lykes	Lykes Brothers S. S. Co.	Medellin, Colombia.	October 22....	Cavina	Standard Fruit & S. S. Co.	New Orleans via waypts.
October 22....	Costa Rica	Royal Netherlands S. S. Co.	Tampa via wayports.	October 22....	Annetta I. ¹⁴ .	Elders & Fyffes, Ltd.	Avonmouth via Kingston.
October 22....	Santa Maria	United Fruit Co.	Port Limon, Costa Rica.	October 22....	Fortuna ¹³ .	P. W. Hamilton	Colon, Rep. of Panama.
October 22....	Annetta I. ¹⁴ .	P. W. Hamilton	New York via Kingston.	October 22....	No. 9685 ¹³ .	A. Ferrari	Colon, Rep. of Panama.
October 22....	Fortuna ¹³ .	A. Ferrari	Colon, Rep. of Panama.	October 22....	No. 145-M ¹³ .	Pan American Airways.	San Salvador via waypts.
October 22....			Colon, Rep. of Panama.	October 22....	No. 145-M ¹³ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 16....	All America.	All America Cables.	Callao, Peru.	October 18....	Real ¹³ .	Hans Elliot	Panama Bay, R. P.
October 18....	Real ¹³ .	Hans Elliot	Panama Bay, R. P.	October 22....	All America.	All America Cables	La Libertad, Ecuador.
October 30....	Locoma ¹ .	International Petroleum Co.	Talara, Peru.				

¹ Tanker. ¹⁰ Motor ship. ¹¹ For orders. ¹² Wheat, fruit and general. ¹³ Air mail carrier. ¹⁴ Motor boat. ¹⁵ Motor schooner.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending October 22, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Ancon	Panama R. R. S. S. Line.		October 9		627
Manizales	Grace Line.		October 9		200
Velma Lykes	Lykes Brothers.		October 9		46
Sixaola	United Fruit Co.		October 9		221
Cerigo	Hamburg-American Line.		October 9		90
Santa Elisa	Panama Mail S. S. Co.		October 9		574
Kinai Maru	Osaka Shosen Kaisha.	October 9	October 9	323	24
Barcooa	Colombian S. S. Line.	October 9	October 10	51	860
Dungannon	Texas Oil Co.	October 9	October 10	10,440	(²)
Nueva Panama	United Fruit Co.	October 9	October 10	152	52
Antiochia	Hamburg-American Line.	October 9	October 10	129	10
Alda	North German Lloyd	October 10	October 10	6	86
Quirigua	United Fruit Co.	October 10	October 10	30	753
San Francisco	Hamburg-American Line.	October 10	October 11	76	35 ¹ / ₂
Pellerin de la Touche	French Line.	October 10	October 12	15	470
Santa Barbara	Grace Line.	October 11	October 11	109	85
Lochmonar	Royal Mail Line, Ltd.	October 11	October 11	(¹)	70
Washington	French Line.	October 12	October 12	139	60
Magdalena	Hamburg-American Line.	October 12	October 12	123	53
Democracy	Nelson Line.	October 12	October 12	100	(²)
Loreto	Pacific Steam Navigation Co.	October 12	October 13	14	120
Santa Maria	Grace Line.	October 13	October 13	183	414
Odenwald	Hamburg-American Line.	October 13	October 13	16	170
Trondanger	Westfal, Larsen & Co.	October 13	October 13	(¹)	30
Santa Cecilia	Panama Mail S. S. Co.	October 13	October 14	355	7
Reina del Pacifico	Pacific Steam Navigation Co.	October 14	October 14	82	52
President Hayes	Dollar Line.	October 14	October 14	3	(²)
Calamares	United Fruit Co.	October 14	October 14	185	90
Annie Johnson	Johnson Line.	October 14	October 14	(¹)	48
Irióna	United Fruit Co.	October 14	October 14	1,011	323
Arta	North German Lloyd	October 14	October 14	55	335
Boskoop	Royal Netherlands S. S. Co.	October 14	October 15	(¹)	171
Contessa	Standard Fruit & S. S. Co.	October 14	October 14	95	360
Magallanes	Spanish S. S. Line.	October 14		104	
Guayaquil	Panama R. R. S. S. Line.	October 14		911	
San Bernardino	Stats S. S. Line.	October 15	October 15	64	(²)
Metapan	United Fruit Co.	October 15		360	
M. de Comillas	Spanish S. S. Line.	October 15		5	
Costa Rica	Royal Netherlands S. S. Co.	October 15		91	
Cali	North German Lloyd	October 15		928	
Acajutla	Pacific Steam Navigation Co.		October 15		360
Marques de Camillas	Spanish Line.		October 16		511
Metapan	United Fruit Co.		October 16		376
Guayaquil	Panama R. R. S. S. Line.		October 16		279
California	Italian Line.	October 16	October 16	80	(²)
Bogota	Colombian S. S. Co.	October 16	October 16	285	215 ¹ / ₂
President Lincoln	Dollar Line.	October 16	October 16	672	2
Delilian	Leyland S. S. Line.	October 16	October 18	294	(²)
Nueva Panama	Hans Elliot.	October 16	October 21	39	74
Cali	North German Lloyd		October 17		299
Calamares	United Fruit Co.	October 17	October 17	48	1,117
Benjamin Franklin	Fred Olsen & Co.	October 17	October 17	178	(²)
Zenon	French Line.	October 17	October 18	572	34
Orazio	Italian Line.	October 17	October 19	112	(²)
Magdalena	Hamburg-American Line.	October 18	October 19	14	436
Nebraska	Royal Mail Line, Ltd.	October 19	October 19	192	44
Melpomene	G. R. Ford	October 19	October 21	1 ¹ / ₂	(²)
Pearl Marie	Fuellebois.	October 19	October 19	(¹)	43
Buenos Aires Maru	Osaka Shosen Kaisha.	October 19	October 19	75	(²)
Cristobal	Panama R. R. S. S. Line.	October 19		1,679	
Este	North German Lloyd	October 20	October 20	59	7
Tela	United Fruit Co.	October 20	October 20	632	179
Feltre	Italian Line.	October 20	October 20	(¹)	118
Schwaben	North German Lloyd	October 20	October 21	156	212
President Grant	Dollar Line.	October 20	October 21	(¹)	316
Manizales	North German Lloyd	October 20		800	
Veragua	United Fruit Co.	October 21	October 21	84	249
Cefalu	Standard Fruit & S. S. Co.	October 21	October 22	193	265
Durazzo	Hamburg-American Line.	October 21		702	
Cavina	Elders & Fyffes, Ltd.	October 21	October 22	(²)	(²)
Costa Rica	Royal Netherlands S. S. Co.	October 22		24	
Buenos Aires	Johnson Line.	October 22	October 22	185	(²)
Stella Lykes	Lykes Brothers	October 22		2,662	
Santa Marta	United Fruit Co.	October 22		356	
Santa Teresa	Grace Line.	October 22		380	
Tokai Maru	Osaka Shosen Kaisha.	October 22		513	
Salvador	Pacific Steam Navigation Co.	October 22		148	

* No cargo discharged.

* No cargo laded.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., November 2, 1932. No. 14.

Canal Traffic During October.

During the month of October, 1932, 394 commercial vessels and 9 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,714,779.06, and on the launches, \$38.55, or a total tolls collection of \$1,714,817.61.

The daily average of commercial vessels was 12.71, and the daily average of tolls collected was \$55,315.45, as compared with an average of 11.77 transits and \$53,275.53 in tolls for the previous month, and an average of 12.58 transits and \$58,827.44 in tolls for the month of October, 1931. The average amount of tolls paid by each of the commercial transits in the past month was \$4,352.23, as compared with \$4,676.03 for the month of October, 1931.

The number of vessels making the transit in October, 1932, was the greatest since September, 1931, when 396 were passed through. Tolls collected, however, were relatively slightly lower, this feature having been exceeded several times since September, 1931. In May, 1932, the amount collected exceeded that of last month by about \$2,600. The increase in transits is due to extra vessels introduced in the trade between Europe and North America, to take care of the seasonal movement of grain and fruit from the Pacific northwest.

In comparison with September, 1932, last month's commercial traffic made an increase of 41 transits (11.6 per cent), and \$116,513.08 in tolls (7.3 per cent). In comparison with the corresponding month last year there was an increase of 4 transits (1.0 per cent), while tolls collected decreased by \$108,871.68 (6.0 per cent).

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 10 months of the current calendar year, with the daily averages of transits and tolls, and the totals for the first 10 months of the calendar years 1931 and 1930:

	Total for month.		Daily averages	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	358	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
July.....	326	1,468,728.36	10.52	47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
Total, first 10 months of calendar year 1932.....	3,548	16,146,865.94	11.63	52,940.54
Total, first 10 months of calendar year 1931.....	4,209	19,010,915.11	13.85	62,535.90
Total, first 10 months of calendar year 1930.....	4,911	21,855,083.75	16.15	71,891.72

As compared with the first 10 months of the calendar year 1931, the corresponding period this year has had 661 fewer transits and \$2,864,049.17 less tolls, decreases of 15.7 per cent and 15.1 per cent, respectively; in comparison with the first 10 months of 1930, there occurred a decrease of 1,363 transits and \$5,708,217.81 in tolls, decreases of 27.8 per cent and 26.1 per cent, respectively.

Canadian National Steamships to Transship at Cristobal.

The Canadian National Steamships, Ltd., has arranged to make transshipments at Cristobal between ships in its Montreal-New York-New Zealand-Australia service and connecting lines which serve Central and South America, Mexico, and the West Indies. Such transfers of cargo were formerly made in New York, and the transshipment at Cristobal is expected to afford savings in time.

For some time past this company has been operating one sailing per month from Montreal, which service covered both New Zealand and Australia, but under a new schedule it has renewed the old practice of separate services for New Zealand and Australia, and its vessels make regular calls at Cristobal on both outward and homeward voyages.

The Canadian National Steamships is also operating a service between the Atlantic and Pacific coasts of Canada by way of the Canal, without calls at the Canal ports.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 28, 1932.

No. 1199.

Panama Canal, Pacific entrance, wreck buoy established. On October 26, 1932, a small unlighted nun buoy, red and black horizontal striped, was placed 100 feet 137 degrees true from wreck of the schooner *Leonidas*. (See Notice to Mariners No. 1196, dated October 21, 1932, Balboa Heights, C. Z.) Position of buoy, latitude 8° 54' 30" N., longitude 79° 30' 59" W.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 29, 1932.

No. 1200.

Colombia, east coast, Cartagena, light information. The following information concerning the lights in the vicinity of Cartagena, Colombia, was received by the Hydrographic Office in a radiogram from the S. S. *Santa Ana*:

Cartagena lights were observed showing as follows: Tesoro Island light, one flash every 6.5 seconds. Salmedina Bank light vessel, one flash every 5 seconds. Fort San Fernando light, two flashes every 9.5 seconds. St. Domingo Battery, one flash every 13.5 seconds.

(Signed) STEPHENSEN.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 29, 1932.

No. 1201.

Panama, south coast, off Morro Puercos, soundings. The commanding officer of the U. S. S. *Patoka* reports soundings taken off the south coast of Panama as follows: On October 15, 1932, the U. S. S. *Patoka* obtained fathometer soundings off Morro Puercos, Panama, with the following results:

Latitude 7° 09' 45" N., longitude 80° 18' W., sounding 250 fathoms (this is inside the plotted 100 fathom curve on H. O. Chart No. 1019). Latitude 7° 11' N., longitude 80° 15' 15" W., sounding 74 fathoms (charted sounding 63 fathoms). Latitude 7° 11' 45" N., longitude 80° 13' 30" W., sounding 130 fathoms.

These soundings are all in excess of those indicated on the above named chart.

The positions of the ship at times of soundings were accurately fixed by three and four point bearings.

J. L. SCHLEY,
Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., October 31, 1932.

No. 1204.

The following Notices to Mariners are quoted from the Notices to Mariners issued by the Hydrographic Office, Washington, D. C.:

Island of Haiti, Haitian Republic, Port-au-Prince Harbor, information concerning aids. The commanding officer of the U. S. S. *Woodcock* reports the following concerning aids in Port-au-Prince Harbor: (a) An unlighted red and black nun buoy is moored 1 mile 36' 30" from the extremity of the Texaco Oil Dock. The beacon showing a flashing red light charted in this position does not exist.

(b) The buoy shown on H. O. Chart 2660 about 1 mile 45" from Texaco Oil Dock does not exist and will be expunged.

Ecuador, Gulf of Guayaquil, Guayas River, changes in aids. The following changes have been made in the aids in the Guayas River:

(a) An unwatched flashing white light every 3.5 seconds, flash 0.2 second, eclipse 3.3 seconds, has been established in latitude 2° 38' 40" S., longitude 80° 02' 10" W., in the charted position of the light buoy with flashing white light, which has been discontinued.

(b) An unwatched flashing white light 1.5 seconds, flashing 0.5 second, eclipse 1 second, has been established in Morro Channel about 5 miles southwestward of (a) 2° 41' 05" S., longitude 80° 06' 12" W.

(c) The black and white buoy marking Baja Rock has been discontinued. Approximate position, 2° 29' S., 79° 51' W.

(d) The light buoy with flashing white light southward of Green Island has been discontinued. Approximate position, 2° 42' S., 79° 56' W.

(e) The visibility of Espanola Point light is 14 miles. Approximate position, 2° 47' S., 79° 55' W.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending October 29, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Cristobal	Panama R. R. S. S. Line		October 23		607
Manizales	Grace Line		October 24		(¹)
Durazzo	Hamburg-American Line		October 23		241
Costa Rica	Royal Netherlands S. S. Co.		October 23		188
Stella Lykes	Lykes Brothers		October 24		97
Santa Marta	United Fruit Co.		October 23		175
Santa Teresa	Panama Mail S. S. Co.		October 23		564
Tokai Maru	Osaka Shosen Kaisha		October 23		47
Salvador	Pacific Steam Navigation Co.		October 29		648
Real	Hans Elliot	October 23	October 24	(¹)	47
Amerika	East Asiatic Co.	October 23	October 24	10½	50
Martinique	Colombian S. S. Co.	October 23	October 24	627	428
Veragua	United Fruit Co.	October 24	October 24	5	673
Haarlem	Royal Netherlands S. S. Co.	October 24	October 24	14	(¹)
Cuba	French Line	October 24	October 26	106	76
Modavia	Donaldson Brothers	October 25	October 25	(¹)	68
Santa Clara	Panama Mail S. S. Co.	October 25	October 25	125	73
San Clemente	Quaker Line	October 26	October 27	106	4
Canadian Conqueror	Canadian National Steamships	October 26	October 26	16	270
Canadian Cruiser	Canadian National Steamships	October 27	October 27	79	(¹)
Oregon	French Line	October 27	October 27	64	320
Osiris	Hamburg-American Line	October 27	October 28	61	545
Iriona	United Fruit Co.	October 27	October 28	914	470
Belfast Maru	Kawasaki Dockyard Co.	October 27	October 27	59	(¹)
Toronto	Barber S. S. Line	October 27	October 27	284	(¹)
Nueva Panama	Hans Elliot	October 27	October 27	116	58
Santa Ana	Panama Mail S. S. Co.	October 27	October 28	415	5
Santa Barbara	Panama Mail S. S. Co.	October 27	October 27	205	385
Buenaventura	Panama R. R. S. S. Line	October 27	October 29	983	513
Quirigua	United Fruit Co.	October 28	October 28	354	157
Cerigo	Hamburg-American Line	October 28		964	
Contessa	Standard Fruit & S. S. Co.	October 28	October 29	85	195
Orduna	Pacific Steam Navigation Co.	October 28	October 28	53	18
Daytonian	Leyland S. S. Line	October 29		265	
Portland	Hamburg-American Line	October 29		71	
Sixtoala	United Fruit Co.	October 29	October 29	341	138
Potter	Roosevelt S. S. Co.	October 29	October 29	152	(¹)
President Coolidge	Dollar Line	October 29	October 29	380	(¹)
Margaret Johnson	Johnson Line	October 29	October 29	(¹)	4

¹ No cargo discharged.

² No cargo laded.

Telegraphic Address of The Panama Canal.

The cable and radio address of The Panama Canal, on the Isthmus, is "Pancanal, Panama;" in the United States, "Pancanal, Washington."

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, October 29, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator).	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Dorothea ¹	22	19 45	23	6 10	23	13 01	23	15 45	American...	Union Oil Co.	435.0	56.0	16.0	Boston, Mass.	Los Angeles, Calif.	Ballast.	7,452	5,199	
Fortbank	22	3 45	23	7 10	23	14 18	23	15 45	British.	Andrew Weir & Co.	421.8	56.8	16.8	Philadelphia, Pa.	Nauru Island.	Ballast.	7,349	5,108	
Empire Arrow ²	23	5 00	23	8 35	23	15 15	23	16 30	American.	Stand. Vap. Transp. Co.	408.3	62.7	20.0	New York, N. Y.	Los Angeles, Calif.	Ballast.	9,841	6,946	
Santa Teresa ³	22	20 35	23	10 30	23	16 50	23	19 15	American.	Panama Mail S. S. Co.	300.2	51.6	22.1	New York, N. Y.	San Francisco, Cal.	General.	2,937	7,923	5,983
Arizona ⁴	23	11 00	23	11 30	23	18 12	23	19 15	American.	Amer.-Hawaiian Line.	434.0	53.0	19.0	Baltimore, Md.	Tacoma, Wash.	General.	2,906	7,983	5,983
Oregonian.	23	12 05	23	12 40	23	19 57	23	20 05	American.	Amer.-Hawaiian Line.	407.0	53.0	19.0	Baltimore, Md.	Portland, Oreg.	General.	2,683	6,754	4,800
Durazo.	21	21 50	23	13 30	23	20 57	23	22 15	German.	Hamlyn-American Line	227.0	34.0	13.7	Cristobal, C. Z.	Guayaquil, Ecuador	General.	241	1,633	1,041
Memphis City.	23	14 10	23	14 35	23	21 47	23	22 50	American.	Island S. S. Lines	424.2	62.2	21.6	Baltimore, Md.	Honolulu, T. H.	General.	3,845	7,611	5,450
America ²	23	16 35	24	5 55	24	13 13	24	14 10	Danish.	East Asiatic Co.	405.4	66.2	18.6	Copenhagen, Den.	Vancouver, B. C.	General.	145	1,060	8,076
S. A. Perkins.	23	22 20	24	7 10	24	15 09	24	16 35	American.	Gulf-Pacific Line.	380.5	53.1	21.6	New Orleans, La.	Los Angeles, Calif.	General.	4,939	5,659	4,059
S-48 ³	24	7 30	24	15 18					American.	U. S. Navy	240.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-10 ³	24	8 20	24	16 20					American.	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-11 ³	24	8 20	24	16 50					American.	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-13 ³	24	8 20	24	16 50					American.	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Fernhill ²	24	1 40	24	9 35	24	17 19	24	18 55	Norwegian.	Fern Line.	378.0	54.6	19.6	Houston, Texas.	Yokohama, Japan.	Cotton, oil	4,423	6,081	4,538
Justin.	24	4 35	24	9 40	24	18 09	24	19 15	German.	North German Lloyd.	449.0	58.0	16.7	Bremen, Germany	Gray's Har., Wash.	Ballast.	7,933	5,799	
Manizales.	20	15 11	24	14 10	24	20 45	24	21 50	German.	Grace Line.	216.5	32.9	12.1	Cristobal, C. Z.	Manta, Ecuador.	Ballast.	1,132	741	
Mallard ⁴	24	8 20	24	16 16					American.	U. S. Navy	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	47	46	22
Real ⁵	23	23 40	24	13 55	24	21 18			Panamanian	Haus Elihu.	62.0	17.0		Cristobal, C. Z.	Balboa, C. Z.	General.	4,017	5,919	4,436
Ryutoku Maru.	24	15 55	24	17 50	25	11 41	25	12 20	Japanese.	Kokusei Kaisha.	385.0	51.0	22.0	New York, N. Y.	Kobe, Japan.	Cotton, general.	4,017	5,919	4,436
Madras City ²	25	2 20	25	6 15	25	15 07	25	16 30	British.	Sir W. R. Smith & Sons.	383.0	53.6	13.5	New York, N. Y.	Vancouver, B. C.	Ballast.	4,337	6,035	
Thurston Castle ²	25	6 40	25	7 30	25	15 45	25	19 00	British.	Barber S. S. Line.	444.0	60.3	20.0	New York, N. Y.	Shanghai, China.	General, tobacco.	4,337	8,805	6,035
Fresno Star.	25	8 30	25	8 35	25	16 45	25	17 55	British.	Blue Star Line.	449.5	58.0	21.0	Tyne, England.	Seattle, Wash.	Ballast.	8,336	5,493	
R. J. Hanna ¹	25	8 35	25	8 45	25	16 28	25	19 25	American.	James B. Berry Sons.	435.0	56.2	19.0	Tiverton, R. I.	San Francisco, Cal.	Ballast.	7,639	5,135	
Modava ²	24	19 20	25	9 45	25	17 03	25	18 30	British.	Donaldson Brothers.	387.0	53.7	15.9	Glasgow, Scotland	Vancouver, B. C.	General.	460	6,719	4,979
City of Athens.	25	11 40	25	12 00	25	18 15	25	19 25	British.	Ellerman & Bucknall.	451.0	57.0	20.3	Boston, Mass.	Manila, P. I.	General.	3,513	8,617	6,603
Elizabeth Kellogg ¹	25	13 30	25	13 45	25	20 48	25	22 00	American.	Praetor & Gamble.	391.9	51.2	22.0	New York, N. Y.	San Francisco, Cal.	Cottonseed oil	3,900	5,410	3,761
A. B. Obarrio ²	23	18 15	25	18 15	25	16 47			Panamanian	A. Valdez.	57.8	19.7		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	57	29	
Texan.	25	16 45	25	18 25	26	10 49	26	12 35	American.	Amer.-Hawaiian Line.	471.0	57.2	18.0	Boston, Mass.	Tacoma, Wash.	General.	2,400	9,154	6,966
Baron Polwarth.	25	16 40	25	19 25	26	12 05	26	13 30	British.	Hogarth Shipping Co.	350.9	50.0	15.0	Sheerness, England	Guayaquil, Ecuador	Ballast.	4,289	3,079	
Paul Luckenbach.	26	4 15	26	6 25	26	15 26	26	16 30	American.	Luckenbach Line.	471.0	59.2	18.1	Boston, Mass.	Seattle, Wash.	General.	2,794	9,027	6,559
Malayan.	26	7 10	26	7 25	26	15 43	26	16 55	British.	Prince Line, Ltd.	461.0	60.3	25.0	New York, N. Y.	Yokohama, Japan.	General.	6,121	9,209	6,245
Prince ²	26	7 35	26	8 05	26	16 12	26	17 55	American.	Sun Oil Co.	480.6	66.0	21.0	Chester, Pa.	Los Angeles, Calif.	Ballast.		9,020	6,476

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Defdijik ¹⁰ ...	25	5 45	25	7 55	25	17 55	25	20 55	Dutch.	N. Pacific Coast Line.	490.8	64.7	31.0	Vancouver, B. C.	Rotterdam, Holland	General.	11,047	5,172	8,266
Asroabce...	25	6 00	25	8 59	25	17 05	25	21 15	French.	Messageries Maritimes.	351.0	52.5	22.0	Noumea, N. Calid.	Dunkirk, France.	General.	3,650	5,580	3,797
Lena Lucken- bach...	25	8 15	25	9 37	25	17 55	25	17 55	American.	Luckenbach Line.	425.0	53.8	27.0	San Francisco, Cal.	Mobile, Ala.	Sugar, general.	7,124	7,217	5,295
Grant...	24	19 20	25	10 31	25	17 20	26	00 10	American.	U. S. Army.	508.0	53.3	23.0	San Francisco, Cal.	New York, N. Y.	Army supplies.	231		
Santa Clara...	24	18 10	25	11 25	25	19 45	25	23 05	American.	Grace Line.	483.0	53.9	23.0	San Antonio, Chile.	New York, N. Y.	General.	2,915	11,680	7,442
San Angelo...	25	10 25	25	11 07	25	19 45	25	19 45	American.	Quaker Line.	409.5	54.2	23.0	Portland, Oreg.	Baltimore, Md.	Lumber, general.	6,638		
Canadian	25	16 45	25	17 43	26	11 35	26	23 07	British.	Can. Nat. Steamships.	400.0	52.0	20.0	Cairns, Australia.	Montreal, Canada.	Sugar, general.	5,234	5,954	4,139
Conqueror ¹⁰ ...	25	20 40	26	6 25	26	13 15	26	14 00	British.	Furness, Withy & Co.	420.0	57.9	23.4	Vancouver, B. C.	Glasgow, Scotland	General.	6,827	7,979	5,916
Pacific Trader ¹⁰ ...	25	19 00	26	7 21	26	14 55	26	17 35	German.	Hamburg-American Line.	450.7	57.2	26.4	Magallanes, Chile.	Hamburg, Germany	General.	8,813	7,684	5,218
Pescidon...	26	5 15	26	8 21	26	16 05	26	16 05	British.	W. R. Smith & Co.	400.2	54.2	26.0	N. Westminster, B. C.	Manchester, Eng.	General.	7,200	6,961	5,365
Bradynhe...	26	6 00	26	9 16	26	16 50	26	16 50	British.	Canadian Transp. Co.	400.1	53.2	25.0	Vancouver, B. C.	Avonmouth, Eng.	Wheat.	7,230	5,615	3,757
Oakworth ¹⁰ ...	26	6 20	26	9 55	26	17 05	26	23 00	French.	French Line.	431.0	57.2	23.0	Vancouver, B. C.	Havre, France.	General.	5,413	7,771	4,650
San Antonio...	26	6 30	26	11 04	26	18 15	26	18 15	American.	Amer-Hawaiian Line.	491.5	58.2	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	9,100	10,491	7,601
Virginia...	26	6 30	26	11 04	26	18 15	26	18 15	American.	Amer-Hawaiian Line.	491.5	58.2	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	9,100	10,491	7,601
Moveria ¹⁰ ...	26	7 15	26	11 16	26	19 15	26	21 20	British.	Donaldson Line.	385.6	51.6	25.0	Vancouver, B. C.	Glasgow, Scotland.	General.	4,749	6,576	4,724
General W. M. Graham...	26	16 40	26	16 40	26	21 25			American.	U. S. Army.	180.2	32.0		Pedro Miguel, C. Z.	Cristobal, C. Z.	(¹⁰)			
Counselor...	26	14 45	26	15 51	26	23 00	27	00 05	British.	T. & J. Harrison.	395.5	52.5	24.0	N. Westminster, B. C.	Liverpool, England	General.	6,859	5,753	3,857
Belfast Maru...	27	8 00	27	8 43	27	15 20	27	18 45	Japanese.	Kawasaki Dockyard Co.	405.0	53.0	16.0	Kobe, Japan.	New York, N. Y.	General.	350	7,043	5,077
Carrillo...	27	9 00	27	9 53	27	16 30	27	21 55	American.	United Fruit Co.	378.8	50.3	23.0	Portland, Oreg.	New York, N. Y.	Fresh pears.	2,063	5,509	3,681
Canadian	27	9 00	27	10 15	27	17 25	27	21 10	British.	Can. Nat. Steamships.	430.0	56.2	19.3	Auckland, N. Z.	Montreal, Canada.	General.	2,786	7,680	5,518
Cruiser...	27	9 00	27	10 15	27	17 25	27	21 10	British.	Can. Nat. Steamships.	430.0	56.2	19.3	Auckland, N. Z.	Montreal, Canada.	General.	2,786	7,680	5,518
Nueva	26	22 15	27	10 38	27	17 15	28	10 35	Panamanian.	Hans Elliot.	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	155	226	101
Panama ¹⁰ ...	26	6 40	27	12 37	27	18 45	28	10 05	American.	Grace Line.	380.2	51.6	24.0	San Francisco, Cal.	New York, N. Y.	General.	3,120	5,710	4,011
Santa Ana...	27	8 15	27	14 07	27	20 10	28	00 40	Norwegian.	Barber Line.	381.8	53.2	19.0	San Carlos, P. I.	New York, N. Y.	General.	2,469	5,674	3,614
Toronto ¹⁰ ...	27	17 00	27	17 38	28	11 15	28	11 15	British.	Canadian Transp. Co.	400.0	52.2	25.0	Vancouver, B. C.	London, England.	Grain, general.	7,482	9,958	4,114
Elmworth ¹⁰ ...	27	17 00	27	17 38	28	11 15	28	11 15	British.	Canadian Transp. Co.	400.0	52.2	25.0	Vancouver, B. C.	London, England.	Grain, general.	7,482	9,958	4,114
House boat...	28	6 28	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Siota ¹⁰ ...	28	6 28	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Drag boat No. 7...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Drag boat No. 8...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Launch...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Launch...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Launch...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Launch...	28	6 20	28	15 55	28	15 55			American.	U. S. Navy.	155.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	(¹⁰)			
Baron	27	23 35	28	7 16	28	15 50	28	16 45	British.	Guanco Co. of Lima.	341.8	48.6	21.0	Guanape Is., Peru.	Plymouth, England	Guano.	4,840		
Newlands ¹⁰ ...	27	23 35	28	7 16	28	15 50	28	16 45	British.	Guanco Co. of Lima.	341.8	48.6	21.0	Guanape Is., Peru.	Plymouth, England	Guano.	4,840		
Barnbet...	28	10 05	28	10 55	28	18 10	31	5 52	German.	Knohr & Burchard.	307.0	45.4	21.0	Mazatlan, Mexico.	Bilbao, Spain.	Chick peas.	4,042	3,294	2,356
Cerrito...	28	10 05	28	10 55	28	18 10	31	5 52	German.	Knohr & Burchard.	307.0	45.4	21.0	Mazatlan, Mexico.	Bilbao, Spain.	Chick peas.	4,042	3,294	2,356
Degode...	23	13 01	28	15 01	28	22 00	28	22 00	American.	Union Oil Co.	435.0	56.0	30.0	Balboa, C. Z.	Baltimore, Md.	Furnace oil.	9,644	7,452	5,199

Steel Voyager.....	28 14 19 28	15 27 28	23 20	American	Isthmian S. S. Lines	393.5	55.0	27.0	N. Westm'ar, B.C.	Dublin, Ireland.....	General	7,440	7,330	5,249
Teno.....	28 22 50 29	6 20 29	14 45 29	British	W. Hamilton & Co	422.8	56.2	27.0	Callao, Peru.....	Glasgow, Scotland.....	General	4,721	7,764	4,672
President.....	29 6 15 29	7 16 29	15 45 29	American	Dollar Line.....	615.0	81.3	31.0	Manila, P. I.....	New York, N. Y.....	General	8,850	27,813	20,118
William A. McKenney.....	29 00 03 29	8 18 29	17 10 29	American	McCormick S. S. Co.....	395.0	55.0	27.0	Tacoma, Wash.....	New York, N. Y.....	Lumber, general	8,053	6,993	5,099
Canadian Winner.....	29 6 30 29	9 22 29	17 45 29	British	Can. Nat. Steamships	399.8	52.2	25.0	Vancouver, B. C.....	Montreal, Canada.....	Lumber, general	6,313	5,885	4,073
Lapwing.....	29 7 40 29	9 30 29	17 10 29	American	U. S. Navy.....	174.0	35.0	12.0	Pearl Harbor, T. H.....	Cristobal, C. Z.....				
Potter 10.....	28 20 55 29	9 40 29	18 35 29	American	Roosevelt S. S. Co.....	395.5	55.0	24.0	Iloilo, P. I.....	Baltimore, Md.....	Gas, sugar, gen.	6,084	7,329	5,233
Seaborg 10.....	29 11 45 29	12 23 29	20 25 29	Swedish	Stockholm Shipping Co.	480.5	64.4	27.0	Los Angeles, Calif.....	River Thames, Eng.....	Gasoline	12,942		
Margaret Johnson 10.....	29 11 50 29	1 05 29	21 25 29	Swedish	Johnson Line.....	407.3	54.1	26.0	Seattle, Wash.....	Stockholm, Sweden.....	Fruit, general	5,980	7,048	5,337
Taira 12.....	29 9 03 29	9 03 29	18 25 29	Panamanian	Lafargue Brothers.....	64.2	20.3		Darien, R. P.....	Cristobal, C. Z.....	Lumber	41	78	49

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 23.....	No. 9673 ¹¹	Pan American Airways.....	San Salvador via wayp'ts.	October 23.....	Santa Marta.....	United Fruit Co.....	New York via wayports.
October 23.....	No. 300-N ¹²	Pan American-Grace Airways.....	Talara via wayports.	October 23.....	Costa Rica.....	Royal Netherlands S. S. Co.....	Amsterdam via wayports.
October 23.....	Martinique.....	Colombian S. S. Line.....	New York via wayports.	October 23.....	Cristobal.....	Panama R. S. S. Line.....	New York via Haiti.
October 24.....	Vega.....	United Fruit Co.....	Port Limon, Costa Rica.	October 24.....	Anacuena ¹⁴	A. Tagaropulos.....	Colon, Rep. of Panama.
October 24.....	Cuba.....	French Line.....	Havre via wayports.	October 24.....	Inacuena ¹⁴	A. Tagaropulos.....	Colon, Rep. of Panama.
October 24.....	No. 145-M ¹³	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	October 24.....	Martinique.....	Colombian S. S. Line.....	New York via Kingston.
October 24.....	No. 659-M ¹³	Pan American Airways.....	Barranquilla, Colombia.	October 24.....	No. 659-M ¹³	Pan American Airways.....	Barranquilla, Colombia.
October 24.....	Anacuena ¹⁴	A. Tagaropulos.....	Colon, Rep. of Panama.	October 24.....	Stella Lykes.....	Lykes Brothers S. S. Co.....	Sto. Domingo via wayp'ts.
October 24.....	Inapaquina ¹⁴	A. Tagaropulos.....	Colon, Rep. of Panama.	October 24.....	Vega.....	United Fruit Co.....	New York via wayports.
October 25.....	Betleron.....	Associated Oil Co.....	High seas.	October 25.....	Betleron.....	Associated Oil Co.....	Tiverton, R. I.
October 26.....	No. 9988 ¹³	Pan American Airways.....	Talara via wayp'ts.	October 25.....	No. 9673 ¹³	Pan American Airways.....	Talara via wayports.
October 26.....	No. 945-M ¹³	Pan American-Grace Airways.....	New Orleans via Habana.	October 25.....	No. 945-M ¹³	Pan American-Grace Airways.....	Talara via wayports.
October 27.....	Buenaventura.....	United Fruit Co.....	New Orleans via Haiti.	October 26.....	Cuba.....	French Line.....	Medellin, Colombia.
October 27.....	No. 669-M ¹³	Pan American Airways.....	Miami via wayports.	October 27.....	No. 145-M ¹³	Uraba, Medellin & Cent. Airways	Miami via wayports.
October 27.....	Fortuna ¹⁵	A. Ferrari.....	Colon, Rep. of Panama.	October 27.....	No. 659-M ¹³	Pan American Airways.....	Buenaventura, Colombia.
October 28.....	Quirigua.....	Standard Fruit & S. S. Co.....	New York via wayports.	October 28.....	No. 300-N ¹³	Pan American-Grace Airways.....	New Orleans via wayp'ts.
October 28.....	Contessa.....	United Fruit Co.....	New Orleans via Habana.	October 28.....	Iriona.....	United Fruit Co.....	Port Limon, Costa Rica.
October 28.....	No. 145-M ¹³	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	October 28.....	Quirigua.....	A. Ferrari.....	Colon, Rep. of Panama.
October 29.....	Skaola.....	United Fruit Co.....	Liverpool via wayports.	October 29.....	Fortuna ¹⁵	Pan American Airways.....	San Salvador via wayp'ts.
October 29.....	Daytonian.....	Leyland S. S. Line.....		October 29.....	No. 9988 ¹³	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
October 29.....				October 29.....	No. 145-M ¹³	Standard Fruit & S. S. Co.....	New Orleans via wayp'ts.
October 29.....				October 29.....	Contessa.....	Panama R. S. S. Line.....	New York.
October 29.....				October 29.....	Buenaventura.....		

PORT OF BALBOA.

October 23.....	Sambu ¹⁵	Hans Elliot.....	Darien, Rep. of Panama.	October 23.....	Sambu ¹⁵	Hans Elliot.....	Panama Bay, R. P.
October 23.....	Talamanca.....	United Mail S. S. Co.....	San Francisco, Calif.	October 23.....	Des Hermanos ¹⁵	United Mail S. S. Co.....	San Francisco, Calif.
October 23.....	Des Hermanos ¹⁵	A. Valdez.....	Panama Bay, R. P.	October 24.....	Talamanca.....	International Petroleum Co.....	Talara, Peru.
October 25.....	Buru ¹⁵	Hans Elliot.....	Panama Bay, R. P.	October 24.....	Locoma ¹		Panama Bay, R. P.
October 25.....				October 25.....	Buru ¹⁵	Hans Elliot.....	Panama Bay, R. P.

¹ Tanker. ¹⁰ Motor ship. ¹¹ Tug. ¹² Motor schooner. ¹³ Air mail carrier. ¹⁴ Motor boat. ¹⁵ Motor schooner. ¹⁶ Towing barge. ¹⁷ Towed by *Sciola*. ¹⁸ Towing house boats.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending October 29, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Palstria	East Asiatic Co.	October 23	October 23	286	
Santa Teresa	Panama Mail S. S. Co.	October 23	October 23	144	22
Cathwood	Union Oil Co.	October 11		9,600	
Deroche	Union Oil Co.	October 23	October 28		9,600
Talamanca	United Fruit Co.	October 23	October 23	513	91
U. S. Grant	U. S. Government.	October 24	October 25	113	15
Santa Clara	Grace Line	October 24	October 25	72	45
Nueva Panama	Hans Elliot	October 26	October 26	58	
Santa Barbara	Grace Line	October 27	October 28	60	47
Santa Ana	Panama Mail S. S. Co.	October 27	October 27	59	50
Toronto	Barber S. S. Line	October 27	October 27	133	
Potter	Roosevelt S. S. Co.	October 28	October 29	81	

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective November 2, 1932.

Commodities.	Unit.	Price.
Brass, bar, average	Lb.	\$0.14
Brass, sheet, average	Lb.	.25
Bronze, Tobin, average	Lb.	.20
Gasoline, motor grade	Gal.	.10
Metal, yellow	Lb.	.23
Oakum, Navy, spun	Lb.	.14
Oakum, Navy, unspun	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder	Gal.	.26
Oil, burning, Colza	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250	Gal.	.33
Oil, engine, gas, extra heavy, in drums, No. 2250	Gal.	.24
Oil, kerosene, in drums	Gal.	.07
Oil, marine engine	Gal.	.51
Paint, lead, white, dry	Lb.	.14
Paint, lead, white, in oil	Lb.	.10
Paint, zinc oxide, dry	Lb.	.08
Paint, zinc oxide, in oil	Lb.	.09
Grease, gear, chain and wire rope, lubricating	Lb.	.05
Grease, yellow, cup, No. 3, medium	Lb.	.08
Grease, yellow, cup, No. 5, hard	Lb.	.08
Soda, ash	Lb.	.03
Waste, cotton, colored	Lb.	.10
Waste, cotton, white	Lb.	.10

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

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OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., November 9, 1932. No. 15.

Traffic by Nationality for October, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of October, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for October, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$4,530.24	.....
British.....	64	333,801	236,220	386,698	235,555	266,446.52	99,650
Danish.....	5	25,902	17,390	29,004	18,019	21,737.50	14,063
Danzig.....	1	8,224	7,068	12,175	6,974	5,921.28	.....
Dutch.....	4	22,163	15,455	26,384	15,367	15,518.98	2,013
French.....	3	18,832	12,096	21,196	12,692	15,120.00	2,808
German.....	16	52,918	34,312	59,016	34,812	41,236.66	16,773
Italian.....	2	19,229	13,150	24,620	14,804	16,437.50	1,080
Japanese.....	9	49,869	39,749	61,655	39,416	48,080.30	29,412
Norwegian.....	17	92,776	60,390	101,891	60,803	66,078.68	12,573
Panamanian.....	10	570	577	1,116	600	639.63	603
Russian.....	4	3,987	2,814	5,835	2,713	3,517.50	.....
Swedish.....	4	21,755	15,824	26,658	19,908	15,827.23	5,580
United States.....	67	405,232	302,001	490,897	299,371	358,200.56	185,899
Venezuelan.....	1	1,101	1,050	.....	1,846	1,312.50	2,000
Total, October, 1932.....	208	1,062,651	763,082	1,254,961	768,638	880,605.08	372,459
Total, October, 1931.....	205	1,104,425	794,390	1,328,917	800,663	930,208.34	481,635
Total, October, 1930.....	265	1,354,693	998,506	1,640,251	995,155	1,123,888.16	649,853

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	37	186,147	129,986	219,970	133,197	\$163,659.16	240,584
Danish.....	4	18,909	13,898	22,404	14,027	17,372.50	31,698
Danzig.....	1	8,224	7,068	12,175	6,974	8,835.00	16,771
Dutch.....	6	34,623	23,858	40,538	23,817	29,822.50	55,991
French.....	4	20,758	13,350	24,226	13,682	16,687.50	24,260
German.....	16	49,917	32,251	55,310	32,769	40,313.75	62,330
Italian.....	2	15,358	8,855	17,819	10,523	11,068.75	10,871
Japanese.....	8	45,580	37,560	58,899	36,571	46,712.60	37,749
Norwegian.....	17	89,337	61,631	101,454	61,954	77,038.75	141,490
Panamanian.....	11	619	626	1,185	649	753.50	876
Swedish.....	6	32,817	21,430	36,258	26,781	26,787.50	50,099
United States.....	73	422,592	315,484	515,999	314,809	394,329.75	537,083
Venezuelan.....	1	1,101	1,050	2,046	1,081	792.72	.....
Total, October, 1932.....	186	925,482	667,047	1,108,283	676,834	834,173.98	1,209,802
Total, October, 1931.....	185	977,175	715,719	1,196,665	729,250	893,442.40	1,281,035
Total, October, 1930.....	252	1,229,467	933,658	1,547,249	940,141	1,165,093.92	1,744,557

* Includes naval vessel of 5,065 tons displacement (tolls \$2,532.50) in transits and tolls, but not in tonnage.

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$4,530.24	.....
British.....	* 101	519,948	366,206	606,668	368,752	* 430,105.68	340,234
Danish.....	9	44,811	31,288	51,408	32,046	39,110.00	45,766
Danzig.....	2	16,448	14,136	24,350	13,948	14,756.28	16,771
Dutch.....	10	56,786	39,313	66,922	39,184	45,341.48	58,004
French.....	7	39,590	25,446	45,422	26,374	31,807.50	27,068
German.....	32	102,835	66,563	114,326	67,581	81,550.41	79,103
Italian.....	4	34,587	22,005	42,439	25,327	27,006.25	11,951
Japanese.....	17	95,449	77,309	120,554	75,987	94,792.90	67,161
Norwegian.....	34	182,113	122,021	203,345	122,757	143,117.43	154,063
Panamanian.....	21	1,189	1,203	2,301	1,249	1,393.13	1,479
Russian.....	4	3,987	2,814	5,835	2,713	3,517.50	.....
Swedish.....	10	54,072	37,254	62,916	40,689	42,614.73	55,679
United States.....	140	827,824	617,435	1,006,896	614,180	752,530.31	722,982
Venezuelan.....	2	2,202	2,100	2,046	2,927	2,105.22	2,000
Total, October, 1932.....	394	1,988,133	1,430,129	2,363,244	1,445,472	1,714,779.06	1,582,261
Total, October, 1931.....	390	2,081,600	1,510,109	2,525,582	1,529,913	1,823,650.74	1,762,670
Total, October, 1930.....	517	2,584,160	1,932,164	3,187,500	1,935,296	2,288,982.08	2,394,410

* Includes naval vessel of 5,065 tons displacement (tolls \$2,532.50) in transits and tolls, but not in tonnage.

United Fruit Company Places Larger Vessels in Cristobal-New Orleans Run.

The United Fruit Company has announced that it will place its two passenger steamships *Ulua* and *Tolosa* in service between Cristobal and New Orleans, effective with the sailing from New Orleans of the *Tolosa* on November 12, 1932. The *Tolosa* and *Ulua* were formerly used in the company's service between Cristobal and New York. The vessels, each of 6,494 gross tons, are said to be the largest passenger vessels ever placed in service between Cristobal and New Orleans.

In addition to a weekly service between Cristobal and New Orleans, the company operates two services to New York, one weekly via Cartagena, Puerto Colombia, Santa Marta, and Kingston, and the other, also weekly, via Habana. A fortnightly service is operated between San Francisco and Balboa, via Puerto Armuelles, and weekly service between Cristobal and Port Limon, Costa Rica, featuring cruises from the Isthmus.

Tanker Traffic Through the Panama Canal in October, 1932.

During the month of October, 1932, 54 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 298,521 tons, on which tolls amounting to \$266,198.64 were paid. Cargo amounted to 284,721 tons, comprised of 280,821 tons of mineral oils and 3,900 tons of cottonseed oil.

In point of net tonnage, tanker traffic decreased 9.4 per cent in comparison with the corresponding month a year ago, tolls decreased 8.8 per cent and cargo tonnage 6.5 per cent.

Tank ships comprised 13.7 per cent of the total commercial transits through the Canal during the month; made up 15.0 per cent of the total Panama Canal net tonnage; were the source of 15.5 per cent of the tolls collected; and carried 18.0 per cent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of October, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for October, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British	4	21,982	\$17,519.50	8,251
Danzig	1	8,224	5,921.28	
Dutch	2	12,259	8,826.48	
Norwegian	4	23,768	17,112.96	
Swedish	2	12,109	8,718.48	
United States	14	77,898	60,500.56	12,760
Venezuelan	1	1,101	1,312.50	2,000
Total, October, 1932	28	157,341	119,911.76	23,011
Total, September, 1932	28	168,756	132,490.38	51,289
Total, August, 1932	24	143,074	107,504.55	18,106
Total, October, 1931	29	168,731	127,260.39	15,738
<i>Pacific to Atlantic.</i>				
British	3	15,956	15,305.41	22,303
Danzig	1	8,224	8,835.00	16,771
Dutch	1	5,894	6,097.50	11,450
Norwegian	4	23,517	24,808.75	44,173
Swedish	1	6,507	6,996.25	12,942
United States	15	79,981	83,451.25	154,071
Venezuelan	1	1,101	792.72	
Total, October, 1932	26	141,180	146,286.88	261,710
Total, September, 1932	23	140,618	140,991.30	239,921
Total, August, 1932	25	150,530	156,810.80	290,016
Total, October, 1931	28	160,856	164,488.75	288,682

* Includes 3,760 tons cottonseed oil.

The following tabulation shows the tanker traffic through the Canal in October, 1932, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal	13	69,838	\$54,697.36	12,760
United States to South America	2	13,109	9,438.48	
Canada to South America	1	6,772	4,875.84	
South America to Balboa	1	1,101	1,312.50	2,000
West Indies to United States	1	5,779	4,160.88	
West Indies to South America	1	4,382	4,847.50	8,251
Europe to United States	6	34,966	25,175.52	
Europe to South America	3	21,394	15,403.68	
<i>Pacific to Atlantic.</i>				
United States intercoastal	15	79,981	83,451.25	154,071
United States to Europe	6	35,667	37,397.50	68,157
South America to United States	1	5,049	5,493.75	9,830
South America to Central America	1	4,353	3,134.16	
South America to Europe	2	15,029	16,017.50	29,652
Balboa to South America	1	1,101	792.72	

² Includes 3,760 tons cottonseed oil.

Of the tanker traffic passing through the Canal in October, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for October, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
October, 1932	11	62,560	\$45,043.20	
September, 1932	14	81,564	59,726.08	
August, 1932	13	80,068	57,648.96	
October, 1931	17	99,222	71,439.84	
<i>From Los Angeles.</i>				
October, 1932	16	89,713	93,648.75	174,141
September, 1932	10	61,290	60,127.48	105,384
August, 1932	11	72,149	75,520.00	143,470
October, 1931	17	102,964	103,680.00	180,843

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, November 5, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Portland ²	29	20.15	30	5.55	30	13.00	30	14.19	German...			Hamburg	Vancouver, B. C.	General	1,791	9,139	6,666
Neveadan	29	23.50	30	7.10	30	14.10	30	15.46	Amer.-Hawaiian Line			Boston, Mass.	Portland, Oreg.	General	3,014	6,829	4,627
Waziristan	30	00.45	30	8.20	30	15.37	30	17.11	Common Brothers			Montreal, Canada	Vancouver, B. C.	Ballast	5,612	4,119	
Jacob Luckenbach	30	3.30	30	8.45	30	15.51	30	17.16	Luckenbach Line			Mobile, Ala.	Tacoma, Wash.	General	4,728	7,982	5,913
Savakla ²	30	6.45	30	9.45	30	16.18	30	17.29	Roosevelt S.S. Co., S. B.			New York, N. Y.	Melbourne, Aust'lia	General	1,444	7,097	5,268
Seavial ²	20	2.20	30	10.15	30	17.18	30	18.10	Scand.-So. Pacific Co.			Gothenburg, Swed.	Corral, Chile	General	3,878	5,463	3,985
Sea Thrush	30	10.15	30	10.50	30	18.30	30	19.40	Shepard S. S. Co.			Boston, Mass.	Seattle, Wash.	General	4,618	6,660	4,984
Margartia ²	30	10.15	30	10.50	30	18.30	30	19.40	Manuel Cambra			Cristobal, C. Z.	Balboa, C. Z.	Ballast	336	5	4
Cargo	28	18.10	31	5.52	31	14.42	31	16.00	Panamian			Guayaquil, Ecuador	Guayaquil, Ecuador	General	1,572	1,011	
Ward ²	30	22.45	31	6.15	31	14.39	31	16.00	Hamburg-American Line			Cristobal, C. Z.	Hongkong, China	Steel, oil, gen.	4,002	7,342	5,247
David	30	22.10	31	7.20	31	15.36	31	16.45	Roosevelt S. S. Co., S. B.			Philadelphia, Pa.	Los Angeles, Calif.	Ballast	7,629	5,325	
Trebartha	31	6.15	31	8.30	31	15.43	1	00.52	Tidewater Oil Co.			New York, N. Y.	Los Angeles, Calif.	Ballast	6,005	4,416	
City of Adelaide	31	7.45	31	9.35	31	17.22	31	18.46	Hain S. S. Co.			Cardiff, England	Vancouver, B. C.	Ballast	5,854	8,547	6,646
Helder	31	6.00	31	11.05	31	18.09	31	19.35	Ellerman & Bucknall			New York, N. Y.	Adelaide, Aust'lia	General	1,030	5,117	3,807
Vincowor ²	31	6.05	31	12.20	31	20.10	31	21.30	Royal Neth. S. S. Co.			Hamburg, Germany	Corral, Chile	General	6,099	4,691	
Real	30	00.55	31	12.20	31	20.10	31	21.35	W. Runciman & Co.			Port Royal, Jamaica	Vancouver, B. C.	Ballast	8	46	22
Den Haag	31	00.55	31	12.20	31	20.10	31	21.35	Hans Elliot			Cristobal, C. Z.	Pl. Armuelles, R. P.	General	9,204	6,365	
Vinland ²	31	23.25	1	6.15	1	15.05	1	16.30	American Pet. Co.			Amsterdam, Holland	Talara, Peru	Ballast	5,413	3,975	
Steel Trader	1	00.10	1	7.20	1	15.47	1	16.55	O. A. Knutsen			Rotterdam, Holland	Vancouver, B. C.	Ballast	2,927	7,611	5,385
Charles H.	1	00.10	1	7.20	1	15.47	1	16.55	Isabian S. S. Lines			Baltimore, Md.	Seattle, Wash.	General	1,150	6,755	4,750
Cramp	1	8.35	1	8.45	1	16.38	1	18.20	Argonaut S. S. Co.			Baltimore, Md.	Seattle, Wash.	Tobacco, general	3,023	4,973	3,651
Lundy ²	1	9.05	1	9.15	1	16.10	1	17.45	Canadian Transp. Co.			Liverpool, England	San Francisco, Cal.	Newsprint	6,668	4,836	
Langlecrag	1	9.55	1	11.45	1	18.52	1	20.30	Medonsley S. S. Co.			Brakenhead, Eng.	Vancouver, B. C.	Ballast	6,012	4,097	
Bente	1	11.45	1	13.05	1	19.40	1	21.15	A. P. Moller			Dakar, Africa	La Libertad, Ecua.	Ballast	78	49	
Maesri ²	29	11.45	1	6.20	1	15.04	1	16.00	Hans Elliot			Cristobal, C. Z.	Balboa, C. Z.	Ballast	7,503	5,037	
Theodore	1	17.10	1	18.45	2	10.39	2	12.00	Fred Olsen & Co.			Oslo, Norway	Vancouver, B. C.	Ballast	12,939	9,024	
Roosevelt ²	1	14.15	2	6.07	2	13.48	2	15.30	Federal Steam Nav. Co.			Falmouth, England	New Zealand	Ballast	2,050	6,760	4,450
Huntingdon	1	23.10	2	7.10	2	14.43	2	16.10	Amer.-Hawaiian Line			Boston, Mass.	Seattle, Wash.	General	6,012	4,097	
Columbian	1	23.10	2	7.10	2	14.43	2	16.10	Amer.-Hawaiian Line			Boston, Mass.	Seattle, Wash.	General	6,012	4,097	
Susan V.	1	23.10	2	7.10	2	14.43	2	16.10	Amer.-Hawaiian Line			Boston, Mass.	Seattle, Wash.	General	6,012	4,097	
Lucienbach	2	2.10	2	8.25	2	15.36	2	17.00	Luckenbach Line			Boston, Mass.	Seattle, Wash.	General	2,756	7,947	5,688
Edwin	2	11.25	2	11.35	2	18.27	2	22.00	Sudden & Christenson			Jacksonville, Fla.	Seattle, Wash.	General	1,800	6,603	4,932
Christenson	2	4.15	2	13.15	2	19.42	2	20.50	Holland-America Line			Rotterdam, Holland	Vancouver, B. C.	General	1,306	10,786	7,551
Dimitdyk ²	2	13.22	2	13.45	2	20.30	2	21.45	Transatlantic S. S. Co.			Tyne, England	Los Angeles, Calif.	Ballast	6,922	5,122	
Yngaren ²	2	13.22	2	13.45	2	20.30	2	21.45	Transatlantic S. S. Co.			Tyne, England	Los Angeles, Calif.	Ballast	6,922	5,122	
New Jersey ²	2	13.22	2	13.45	2	20.30	2	21.45	The Texas Co.			Mareus Hook, Pa.	Los Angeles, Calif.	Ballast	6,925	4,982	

Canadian Leader	2	20	05	3	3	6	20	3	13	54	3	15	45	British	Can. Nat. Steamships	400	0	52	0	18	3	Montreal, Canada.	Auckland, N. Z.	1	370	5	891	4	114				
Chas. Nelson...	3	5	25	3	8	25	3	15	14	3	16	50	American	Nelson Line	380	0	53	0	20	6	New York, N. Y.	Seattle, Wash.	3	445	5	689	4	138					
Rapahuan	3	8	35	3	9	00	3	18	10	British	Anglo-Canadian S. S. Co.	425	0	British	Furness, Withly & Co.	435	0	57	0	18	8	Montreal, Canada.	Vancouver, B. C.	6	888	4	961						
Pacific Ranger	3	6	20	3	11	03	3	17	25	3	18	45	British	Furness, Withly & Co.	445	0	57	0	18	8	Glasgow, Scotland.	Vancouver, B. C.	706	9	725	6	942						
Calma	2	23	30	3	12	00	3	18	33	3	20	04	Italian	Ferr. Lib. Trieste	430	0	53	0	16	3	Trieste, Italy.	Vancouver, B. C.	1	554	7	809	6	922					
Skrumstad	2	33	35	3	13	45	3	20	27	3	23	00	Norwegian	Fern Line.	382	0	53	0	16	3	Sharpness, England	Vancouver, B. C.	6	082	4	236							
Tromsø	3	7	00	3	14	40	3	21	41	3	22	30	British	Foster, Hain & Read.	400	0	52	0	17	2	Cardiff, Wales	Vancouver, B. C.	5	774	4	045							
Dallorn	3	17	25	3	20	30	4	10	36	4	11	44	Norwegian	Signal Bergesen	475	0	64	0	19	5	Rotterdam, Holland	Los Angeles, Calif	10	024	6	791							
President	3	14	30	4	6	10	4	12	40	4	21	35	American	Dollar Line	516	0	72	0	28	7	New York, N. Y.	Manila, P. I.	1	628	15	299	10	589					
Lincoln	4	4	35	4	7	00	4	14	15	4	23	30	American	Panama-Pacific Line	587	0	80	0	28	7	New York, N. Y.	San Francisco, Cal	3	210	25	282	18	194					
Pennsylvania	4	3	45	4	8	40	4	15	22	4	23	10	British	N. Z. Shipping Co.	531	0	70	0	26	0	London, England	Wellington, N. Z.	3	540	18	405	13	494					
Regentia	2	13	05	4	15	50	4	20	35	4	21	50	Paranianian	Hans Elliot	108	0	20	0	71	0	Cristobal, C. Z.	Buenaventura, Col	1	774	9	665	6	409					
Nuevo Panama	4	6	15	5	6	05	5	13	24	5	15	35	American	Hamburg-American Line	477	0	62	0	20	0	Hamburg, Germany	Manila, P. I.	1	771	9	665	6	409					
Bitterfeld	5	3	40	5	7	03	5	14	47	5	16	20	American	Lykes Bros. Ripley Co.	419	0	56	0	27	0	New Orleans, La.	Champeron, Guat.	General	5	489	5	686	6	516				
Scotsburg	5	6	15	5	8	40	5	15	47	5	16	35	Norwegian	W. L. Gornyn & Sons	384	0	34	0	12	1	New Orleans, La.	Manila, P. I.	General	5	489	5	686	6	516				
Nordfars	2	22	35	5	8	45	5	15	52	5	16	55	German	Grace Line	216	0	32	0	16	1	Copenhagen, Den.	Vancouver, B. C.	General	78	1	132	7	740					
Manitara	5	9	35	5	9	50	5	16	35	5	17	03	German	Kerr S. S. Co.	450	0	61	0	22	0	Cristobal, C. Z.	Buenaventura, Col	General	5	928	9	369	6	522				
Silvervev	5	9	55	5	10	20	5	17	26	5	19	03	British	Beeching & Hayward	390	0	53	0	15	6	New York, N. Y.	Manila, P. I.	General	5	928	9	369	6	522				
Newbrough	5	9	55	5	10	20	5	17	26	5	19	03	British	Beeching & Hayward	390	0	53	0	15	6	Montreal, Canada	Vancouver, B. C.	General	5	928	9	369	6	522				
La Brea	5	17	05	5	20	30	6	10	49	6	12	48	American	Union Oil Co.	435	0	56	0	22	6	Baltimore, Md	Los Angeles, Calif	Ballast.	7	150	4	895						

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

	29	21	11	30	6	15	30	13	30	13	30	British.	Com'th & Dom. Line.	477.2	63.3	24.0	Wellington, N. Z.	London, England.	Frozen, general.	
Port Huon ^a ...																				
George Washington ^a	29	22	45	30	7	15	30	14	45	30	14	45	Norwegian.	Peter Olsen Co.	425.5	55.3	27.0	San Francisco, Cal.	Antwerp, Belgium.	Lumber, general.
West Fra. ^b	30	6	00	30	8	08	30	15	15	30	15	15	American.	Pac-Arg-Brazil Line.	410.5	54.2	24.5	Powell River, B. C.	Buenos Aires, Arg.	General.
Annie B. ^c		30		30	6	28							American.	S. O. Borden.	31.3	9.4		Balboa, C. Z.	Cristobal, C. Z.	Ballast.
Real ^d	30	8	15	30	8	57	30	15	55	30	15	55	American.	Amer-Hawaiian Line.	404.6	53.9	26.0	Portland, Ore.	Boston, Mass.	General.
Albert Vogler ^e .	30	23	00	31	6	24	30	11	37	30	18	15	Panamanian	Hans Elliot.	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.
Dos Heras ^f	30			31	6	24	31	14	00	31	19	05	Germán.	Hamburg-AmericanLine	409.8	53.8	24.0	Valparaiso, Chile.	Hamburg, Germany	General.
Menos II ^g	30			31				31	15	15			Panamanian	R. Pomare.	27.5	10.2		Panama Bay, R. P.	Cristobal, C. Z.	Ballast.
Willkeno ^h	30	23	14	31	7	24	31	15	15	31	15	15	American.	Williams S. Corp.	415.0	55.7	29.1	Seattle, Wash.	N. London, Conn.	Lumber, general.
Munro ⁱ	31	6	00	31	8	16	31	16	35	31	20	45	Dutch.	Anglo-Saxon Pet. Co.	432.0	62.6	28.0	Los Angeles, Calif.	Lands End, Eng.	Kerosene.
Maaburg ^j .	31	6	00	31	8	57	31	16	45		1	25	Dutch.	Empire Shipping Co.	434.7	60.1	26.0	Vancouver, B. C.	Palmouth, Eng.	Wheat.
Abraham ^k																				
Lincoln ^l	31	6	30	31	9	16	31	17	30	31	23	00	Norwegian.	Fred Olsen & Co.	435.9	56.2	27.0	Vancouver, B. C.	Oalo, Norway	General.
Oakland ^m	31	12	30	31	13	04	31	20	00		1	20	Geroan.	Hamburg-AmericanLine	443.3	58.1	26.0	Vancouver, B. C.	Hamburg, Germany	General.
Liston Maru ⁿ .	31	16	30	31	17	16		12	30		2	20	Japanese.	Nippon Yusen Kaisha.	445.0	59.0	19.0	Iolo, I. I.	New York, N. Y.	General.
Miguel ^o	31	11	36	31	6	27		13	40		14	30	American.	L. L. Whitlie.	15.0	4.0	3.0	Miraflores Lake.	Balboa, C. Z.	Ballast.
California ^p .	31	16	40	31	7	25		14	50		14	30	American.	Pacific-Pacific Line.	574.4	80.3	36.0	San Francisco, Cal.	New York, N. Y.	General.
Cardium ^q	31	16	40	31	7	25		14	50		14	30	British.	Anglo-Saxon Pet. Co.	457.3	62.0	28.0	Curacao, D. W. I.	Coracao, D. W. I.	Stove oil.
Arta ^r	31	23	00	31	8	14		15	55		17	20	Germán.	North German Lloyd.	215.8	46.0	15.3	Champerio, Guat.	Corpus Christi, Tex.	Ballast.
Southern Sun ^s	1	2	00	1	8	40		16	30		16	30	American.	Sun Oil Co.	480.5	66.0	29.5	Los Angeles, Calif.	Chester, Pa.	Gasoline.
Albion Star ^t	1	6	30	1	9	41		17	15		17	15	British.	Blue Star Line.	450.0	58.5	24.1	N. Wesum er, B. C.	Newcastle, England	Frozen, general.
Equator ^u	1	9	10	1	10	09		18	45		1	22	Norwegian.	Inter. Freighting Co.	280.2	53.2	24.2	Liquique, Chile,	Jacksonville, Fla.	Nitrate.
Eling ^v	1	11	19	1	12	17		12	05		1	25	Danish.	Isbrandtsen Moller Co.	375.6	42.2	18.3	Yavaros, Mexico	Barcelona, Spain	General.

Chick peas and fustic.

For orders.

Motor schooner.

Launch.

Motor ship.

Tanker,

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Net.
F. J. Luckenbach.	2	2 20	2	6 38	2	13 50	2	13 50	American.	Luckenbach Line.	446 0	56 1	29 0	Seattle, Wash.	Boston, Mass.	General.	7 054	8 508	6 179
Point Palmas.	2	3 32	2	7 37	2	15 00	2	15 00	American.	Furness & Hoyt.	386 8	52 2	23 0	Portland, Oreg.	Mobile, Ala.	General.	6 017	5 708	4 138
Pacific Shipper.	2	10 00	2	10 35	2	17 45	2	20 30	British.	Furness & Hoyt & Co.	420 0	58 0	24 3	Vancouver, B. C.	Glasgow, Scotland.	General.	6 731	7 892	5 858
Cal.	2	13 00	2	14 09	2	21 05	6	6 00	German.	North German Lloyd.	216 5	32 9	14 2	Guayaquil, Ecuador	Cristobal, C. Z.	General.	684	1 105	698
Manuales.	2	15 20	2	16 01	2	22 35	5	8 54	German.	Grace Line.	216 5	32 9	16 0	Manta, Ecuador	Cristobal, C. Z.	General.	1 066	1 132	741
Gerrude.	3	3 00	3	6 13	3	13 00	3	13 00	Danish.	A. P. Moller.	418 9	54 7	23 0	Cebu, P. I.	New York, N. Y.	General.	4 965	7 385	5 500
Maerka.	2	13 50	3	6 21	3	13 05	4	14 50	Panamanian.	Hans Elliot.	108 5	20 6	10 0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	52	226	101
Nuevo Panama.	3	4 00	3	8 26	3	15 05	3	17 00	American.	Standard Oil Co.	513 5	68 2	29 5	Los Angeles, Calif.	United Kingdom.	Gasoline.	15 340	11 751	8 619
California.	3	7 45	3	8 59	3	16 50	3	16 50	British.	Blue Star Line.	450 0	58 5	25 0	N. Westminster, B. C.	Newcastle, England.	Frozen, general.	4 678	8 561	5 815
Royal Star.	3	8 00	4	6 12	4	14 15	5	17 30	American.	Amer-Hawaiian Line.	404 0	53 9	26 4	Seattle, Wash.	Boston, Mass.	General.	6 587	6 756	4 775
Montanan.	4	6 12	4	14 15	4	14 15	5	17 30	American.	U. S. Navy.	231 0	20 0		Balboa, C. Z.	Cristobal, C. Z.				
S-11.	4	6 12	4	14 15	4	14 15	5	17 30	American.	U. S. Navy.	231 0	20 0		Balboa, C. Z.	Cristobal, C. Z.				
S-13.	4	6 10	4	14 15	4	14 15	5	17 30	American.	U. S. Navy.	231 0	20 0		Balboa, C. Z.	Cristobal, C. Z.				
S-40.	4	6 28	4	14 15	4	14 15	5	17 30	American.	U. S. Navy.	187 0	38 0		Balboa, C. Z.	Cristobal, C. Z.				
Mallard.	4	6 59	4	15 10	4	15 10	5	17 30	American.	W. L. Comyn & Sons.	390 8	54 7	25 4	Balboa, C. Z.	Cristobal, C. Z.				
Lauch.	4	4 00	4	6 59	4	15 10	4	15 10	Norwegian.	W. L. Comyn & Sons.	390 8	54 7	25 4	Vancouver, B. C.	Antwerp, Belgium.	General.	7 343	6 822	5 001
Samuel Bakke.	4	8 07	4	16 15	4	16 15	5	17 30	American.	U. S. Navy.	240 0	21 0		Balboa, C. Z.	Cristobal, C. Z.				
S-48.	4	14 05	4	14 47	4	21 40	4	21 40	Japanese.	Mitsui Bussan Kaisha.	417 2	54 5	26 0	Iloilo, P. I.	New York, N. Y.	Silk, sugar, gen.	7 808		
Yahiko Maru.	4	14 05	4	14 47	4	21 40	4	21 40	Japanese.	Mitsui Bussan Kaisha.	417 2	54 5	26 0	Iloilo, P. I.	New York, N. Y.	Silk, sugar, gen.	7 808		
Charles.	4	16 30	4	15 02	5	11 25	5	11 25	American.	Arrow Line.	409 7	54 2	24 0	Grays Harb., Wash.	New York, N. Y.	Lumber, general.	7 254	6 663	4 903
Christenson.	4	17 40	5	6 25	5	13 15	5	13 15	British.	Pacific Steam Nav. Co.	215 7	33 6	13 1	Champerico, Guat.	Cristobal, C. Z.	General.	87	1 273	706
Acajutla.	5	00 50	5	7 04	5	15 00	5	16 42	British.	Pacific Steam Nav. Co.	385 1	52 2	26 4	Talcahuano, Chile	Hull, England.	General.	6 856	5 656	3 823
Lagarto.	5	9 10	5	9 46	5	17 30	5	17 30	British.	Blue Star Line.	415 6	56 3	24 0	Seattle, Wash.	Buenos Aires, Arg.	Fresh fruit.	3 005	7 521	5 423
Norman Star.	5	11 00	5	11 25	5	19 10	6	00 10	Danish.	East Asiatic Co.	465 4	62 0	29 0	Vancouver, B. C.	Copenhagen, Den.	General.	9 123	11 226	8 275
Europa.	5	16 00	5	17 24	6	11 35	6	11 35	Norwegian.	Anglo-Saxon Pet. Co.	412 4	53 3	26 0	San Francisco, Cal.	Lands End, Eng.	Kerosene.	6 984	6 194	4 494
Gundine.	5	16 00	5	17 24	6	11 35	6	11 35	Norwegian.	Anglo-Saxon Pet. Co.	412 4	53 3	26 0	San Francisco, Cal.	Lands End, Eng.	Kerosene.	6 984	6 194	4 494

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.		Line.		Vessel.		Line.		For—	
	Day.	Hour.	Day.	Hour.	Date.	Hour.	Date.	Hour.	* DEPARTURES.	
October 30.	Antiochia									
October 30.	No. 9685		Hamburg-American Line		October 30.		Sixola		United Fruit Co.	New York via wayports.
October 30.	No. 144-M		Pan American Airways		October 30.		Dayronian		Leyland S. S. Line.	Juaro.
October 30.			Pan American-Grace Airways		October 31.		Baraca		Colombian S. S. Line.	New York via Kingston.

* ARRIVALS.

* DEPARTURES.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 30.....	Dean Emery	Standard Shipping Co.	Aruba, D. W. I.	October 31.....	No. 669-M ¹¹	Pan American Airways.	Baranquilla, Colombia.
October 30.....	Baracoa	Colombian S. S. Line	New York via waypoints.	October 31.....	Quirigua	United Fruit Co.	New York via waypoints.
October 31.....	Anachucuna ¹²	A. Tagaropulos	Colon, Rep. of Panama.	October 31.....	Dean Emery	Standard Shipping Co.	Aruba, D. W. I.
October 31.....	Inapaquina ¹²	United Fruit Co.	Colon, Rep. of Panama.	November 1.....	No. 945-M ¹²	Pan American Airways	Talara via waypoints.
October 31.....	Quirigua	United Fruit Co.	Medellin, Colombia.	November 1.....	No. 9685 ¹¹	Pan American Airways	San Salvador via waypoints.
October 31.....	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	Baranquilla, Colombia.	November 1.....	Autocchia	Hamburg-American Line	Europe via waypoints.
October 31.....	No. 669-M ¹¹	Pan American Airways	Amsterdam via waypoints.	November 2.....	Simon Bolivar	Royal Netherlands S. S. Co	Port Limon, Costa Rica.
November 1.....	Ancon	Royal Netherlands S. S. Co.	New York via waypoints.	November 2.....	Pearl Marie	G. I. Bryan	Bluefields, Nicaragua.
November 2.....	Pearl Marie ¹³	Panama R. R. S. S. Line	New York via Haiti.	November 3.....	No. 669-M ¹¹	Pan American Airways	Miami via waypoints.
November 2.....	No. 9673 ¹¹	Pan American Airways	Colon, Rep. of Panama.	November 3.....	No. 144-M ¹¹	Uraba, Medellin & Cent. Airways	Medellin via waypoints.
November 2.....	No. 300-N ¹¹	Pan American Airways	San Salvador via waypoints.	November 4.....	Eupatoria	Hamburg-American Line	Chiclayo via waypoints.
November 3.....	Tela	United Fruit Co.	Buenaventura, Colombia.	November 4.....	Tela	Hamburg-American Line	Port Limon, Costa Rica.
November 4.....	Eupatoria	United Fruit Co.	New Orleans, La.	November 4.....	Calamares	United Fruit Co.	New Orleans via waypoints.
November 4.....	Anapala	Standard Fruit & S. S. Co	Hamburg via waypoints.	November 4.....	Inapaquina ¹²	A. Tagaropulos	Colon, Rep. of Panama.
November 4.....	Calamares	Standard Fruit & S. S. Co	New Orleans via waypoints.	November 4.....	Anapala	Standard Fruit & S. S. Co	Colon, Rep. of Panama.
November 4.....	Arguam	Elders & Fyffes, Ltd.	Avonmouth via waypoints.	November 5.....	Arguam	Elders & Fyffes, Ltd.	New Orleans via Kingston.
November 4.....	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	Medellin via waypoints.	November 5.....	No. 9673 ¹¹	Pan American Airways	Avonmouth via Kingston.
November 5.....	Simon Bolivar	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	November 5.....	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	San Salvador via waypoints.
November 5.....	Metapan	United Fruit Co.	New York via Kingston.	November 5.....	Annetta I. ¹²	P. W. Hamilton	Medellin via waypoints.
November 5.....	Annetta I. ¹²	P. W. Hamilton	Colon, Rep. of Panama.	November 5.....			Colon, Rep. of Panama.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
October 11.....	Cathwood ¹	Union Oil Co. of Calif.	Los Angeles, Calif.	November 2.....	Charcas	Grace Line	Valparaiso, Chile.
October 30.....	Charcas	Grace Line	Gray's Harbor, Wash.	November 4.....	Cathwood ¹	Union Oil Co. of Calif.	Los Angeles, Calif.
October 31.....	San Nicolas ¹³	Francisco Martan	Buenaventura, Colombia.	November 4.....	San Nicolas ¹³	Francisco Martan	Buenaventura, Colombia.
October 31.....	Recedero ¹³	Payan & Co.	Tumaco, Colombia.	November 4.....	Santa Catalina ⁷	Panama Mail S. S. Co.	San Francisco, Calif.
November 3.....	Santa Catalina ⁷	Panama Mail S. S. Co.	San Francisco, Calif.				

¹ Tanker.⁷ Motor ship.⁸ Submarine.⁹ Tug.¹⁰ For orders.¹¹ Air mail carrier.¹² Motor boat.¹³ Motor schooner.

* Other than ships passing through the Canal.

Deliveries of Bunker Coal After 4 P. M.

PANAMA RAILROAD COMPANY,
BALBOA HEIGHTS, C. Z., November 1, 1932.

To all steamship agents:

1. Due to the continued decline in the coaling business, and a very reduced personnel, your attention is called to the fact that, effective with the 10th instant, whenever delivery of coal is to be made after 4 p. m., it will be necessary for the order to be placed at least 12 hours in advance.

2. In this connection please see Rules and Regulations Governing Navigation of The Panama Canal, page 63, Regulation 171.1, and page 72, paragraph 14.

3. Failure to comply with these regulations may result in coal delivery being delayed until the following day.

R. B. WALKER,
General Manager.

APPROVED:

J. L. SCHLEY,
2d Vice President.

Regulation 171.1, referred to above, refers to radio advice from vessels in advance of arrival, relative to their requirements. Paragraph 14 on page 72 refers to the fact that bunkers and other supplies can be obtained in any quantity necessary for ships' use, and states that orders sent in advance can be delivered on arrival, and orders filed on arrival will be delivered promptly.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending November 5, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Cerigo.....	Hamburg-American Line.....		October 31		335
Daytonian.....	Leyland S. S. Line.....		October 30		(²)
Portland.....	Hamburg-American Line.....		October 30		165
Baracoa.....	United Fruit Co.....	October 30	October 30	320	505
Helder.....	Royal Netherlands S. S. Co.....	October 31	October 31	(¹)	144
Albert Voegler.....	Hamburg-American Line.....	October 31	October 31	44	(²)
Oakland.....	Hamburg-American Line.....	October 31	November 1	79	152
Quirigua.....	United Fruit Co.....	October 31	October 31	25	705
Abraham Lincoln.....	Fred Olsen & Co.....	October 31	October 31	(¹)	35
Antiochia.....	Hamburg-American Line.....	October 31	November 1	(¹)	319
Simon Bolivar.....	Royal Netherlands S. S. Co.....	November 1	November 2	267	19
Lisbon Maru.....	Nippon Yusen Kaisha.....	November 1	November 1	210	(²)
Ancon.....	Panama R. R. S. S. Line.....	November 2		1,878	
Cellina.....	Navigazione Libera-Triestina.....	November 2	November 3	82	(²)
Dinteldyk.....	Holland-America Line.....	November 2	November 2	242	123
Cali.....	North German Lloyd.....	November 2		694	
Manizales.....	Grace Line.....	November 2	November 5	1,165	76
Pearl Marie.....	R. Feuillebois.....	November 2	November 2	(¹)	13
Nuevo Panama.....	Hans Elliot.....	November 3	November 3	60	36
Tela.....	United Fruit Co.....	November 3	November 4	1,131	169
President Lincoln.....	Dollar Line.....	November 3	November 4	(¹)	1
Calamares.....	United Fruit Co.....	November 4	November 4	231	161
Eupatoria.....	Hamburg-American Line.....	November 4	November 4	96	18
Bitterfeld.....	Hamburg-American Line.....	November 4	November 5	71	147
Amapala.....	Standard Fruit & S. S. Co.....	November 4	November 5	305	113
Ariguani.....	Elders & Fyffes, Ltd.....	November 4	November 4	1	(²)
Acajutla.....	Pacific Steam Navigation Co.....	November 5		87	
Europa.....	East Asiatic Co.....	November 5	November 5	(¹)	45
Simon Bolivar.....	Royal Netherlands S. S. Co.....	November 5		28	
Metapan.....	United Fruit Co.....	November 5	November 5	444	304

¹ No cargo discharged.

² No cargo laded.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., November 16, 1932. No. 16.

Commercial Traffic Through the Panama Canal in October, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of October, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for October, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some case includes cargo having other destinations:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States	51	298,779	223,457	361,607	222,728	\$262,546.11	144,182
Europe to Canada:							
Belgian	1	6,292	4,986	7,816	5,758	4,530.24	6,323
British	31	157,482	108,898	176,386	108,860	116,230.34	6,951
Danish	3	15,635	11,556	19,418	12,104	14,445.00	1,684
French	2	15,060	9,009	16,085	9,622	11,261.25	6,732
German	4	25,931	17,051	29,130	17,343	20,415.36	839
Italian	1	9,856	7,927	12,951	8,025	9,908.75	2,095
Norwegian	9	46,607	28,078	47,584	28,552	33,546.97	1,702
Swedish	1	5,661	3,406	5,642	4,320	4,257.50	
Total	52	282,524	190,911	315,012	194,584	214,595.41	26,326
United States to Far East:							
British	5	23,559	15,665	26,351	15,702	19,568.75	16,324
Japanese	8	42,238	34,308	52,029	33,568	41,279.05	25,200
Norwegian	2	11,613	6,160	11,200	6,357	7,700.00	7,234
United States	1	5,247	3,825	6,197	3,822	4,781.25	4,002
Total	16	82,657	59,958	95,777	59,449	73,329.05	52,760
Europe to South America:							
British	4	22,338	16,383	28,231	17,136	19,931.88	3,883
Danzig	1	8,224	7,068	12,175	6,974	5,921.28	
Dutch	3	16,269	10,577	18,132	10,585	11,275.30	2,013
German	3	12,372	8,145	13,710	8,163	10,181.25	7,434
Italian	1	9,373	5,223	11,669	6,779	6,528.75	241
Norwegian	1	6,805	5,746	9,231	5,625	4,899.60	
Swedish	1	3,985	2,281	3,858	2,859	2,851.25	3,878
Total	14	79,366	55,423	97,006	58,121	61,589.31	17,449
Europe to United States:							
Dutch	1	5,894	4,878	8,252	4,782	4,243.68	
German	1	5,799	3,752	6,053	3,785	4,175.28	
Norwegian	4	23,028	17,678	29,252	17,504	16,522.11	
Swedish	2	12,109	10,137	17,158	12,729	8,718.43	
Total	8	46,830	36,445	60,715	38,800	33,659.55	
Europe to Australasia:							
British	4	37,689	25,499	44,566	26,988	31,873.75	17,322
French	1	3,772	3,087	5,111	3,070	3,858.75	1,124
Total	5	41,461	28,586	49,677	30,058	35,732.50	18,446
United States to South America:							
British	1	5,049	4,395	7,203	4,382	3,635.28	
United States	3	21,373	14,550	25,792	13,810	15,661.95	4,452
Total	4	26,422	18,945	32,995	18,192	19,297.23	4,452

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Around the world:							
United States.....	2	18,954	14,620	24,658	14,588	\$18,275.00	5,582
United States to Philippines:							
British.....	3	18,384	10,899	18,385	10,907	13,531.51	9,463
Danish.....	1	5,523	3,091	5,086	3,168	3,863.75	4,122
United States.....	4	32,420	24,855	39,782	23,845	31,068.75	13,476
Total.....	8	56,327	38,845	63,253	37,920	48,464.01	27,061
United States to Australasia:							
British.....	6	35,016	26,346	37,793	23,589	32,932.50	32,199
United States.....	1	5,268	3,748	5,879	3,689	4,685.00	1,444
Total.....	7	40,284	30,094	43,672	27,278	37,617.50	33,643
United States to Canada:							
British.....	1	5,142	3,532	5,601	3,533	3,702.24	.....
United States.....	3	12,722	9,895	15,704	9,876	12,368.75	7,525
Total.....	4	17,864	13,427	21,305	13,409	16,070.99	7,525
South America to Far East:							
Japanese.....	1	7,631	5,441	9,626	5,848	6,801.25	4,212
Canadian intercoastal:							
British.....	1	4,119	3,200	5,135	3,191	2,965.68	.....
West Indies to South America:							
British.....	2	4,728	4,193	6,899	4,291	5,096.62	8,251
West Indies to United States:							
British.....	1	5,779	4,882	8,236	4,828	4,160.88	.....
United States to Hawaii:							
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	3,845
Cristobal to South America:							
German.....	7	6,284	3,902	7,671	4,052	4,637.27	1,330
Panamanian.....	4	404	412	812	404	484.80	517
Total.....	11	6,688	4,314	8,483	4,456	5,122.07	1,847
Canada to South America:							
British.....	1	6,772	5,975	11,309	5,781	4,875.84	.....
South America to United States:							
United States.....	1	5,019	3,586	5,591	3,563	4,482.50	1,391
South America to Canada:							
Norwegian.....	1	4,723	2,728	4,624	2,765	3,410.00	3,244
Canada to Australasia:							
British.....	1	5,568	4,419	7,178	4,413	5,525.75	4,083
Europe to Central America:							
Danish.....	1	4,744	2,743	4,500	2,747	3,428.75	2,995
German.....	1	2,532	1,462	2,452	1,469	1,827.50	1,277
Total.....	2	7,276	4,205	6,952	4,216	5,256.25	4,272
Europe to Far East:							
Russian.....	4	3,987	2,814	5,835	2,713	3,517.50	.....
Cristobal to Central America:							
British.....	3	2,176	1,934	3,425	1,954	2,417.50	1,802
Panamanian.....	2	44	48	90	58	52.80	39
Total.....	5	2,220	1,982	3,515	2,012	2,470.30	1,841
South America to Balboa:							
Venezuelan.....	1	1,101	1,050	.....	1,846	1,312.50	2,000
Cristobal to Balboa:							
Panamanian.....	4	122	117	214	138	102.03	47
Grand total, Oct., 1932	208	1,062,651	763,082	1,254,961	768,638	880,605.08	372,459
Grand total, Oct., 1931	205	1,104,425	794,390	1,328,917	800,663	930,208.34	481,635
Grand total, Oct., 1930	265	1,354,693	998,506	1,640,251	995,155	1,123,888.16	649,853

PACIFIC TO ATLANTIC.

United States intercoastal:							
United States.....	59	325,499	246,862	400,282	246,360	\$308,578.25	461,677
Canada to Europe:							
British.....	17	89,946	61,875	101,126	61,903	77,343.75	136,187
Danish.....	3	17,208	12,574	20,152	12,672	15,717.50	28,208
Dutch.....	3	19,051	13,559	23,056	13,408	16,948.75	31,157
French.....	2	12,127	7,038	13,719	7,387	8,797.50	14,133
German.....	3	19,387	12,394	21,424	12,946	15,492.50	24,370
Italian.....	1	6,029	3,679	6,101	3,773	4,598.75	8,951
Norwegian.....	9	47,674	28,556	46,586	29,025	35,695.00	69,424
Swedish.....	3	15,469	9,921	17,035	12,384	12,401.25	21,837
United States.....	3	15,678	11,541	18,539	11,468	14,426.25	23,505
Total.....	44	242,569	161,137	267,778	164,966	201,421.25	357,772

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
South America to Europe:							
British.....	4	25,292	17,973	35,692	20,666	\$22,466.25	16,316
Danzig.....	1	8,224	7,068	12,175	6,974	8,835.00	16,771
Dutch.....	2	9,678	5,421	9,230	5,627	6,776.25	13,384
French.....	1	4,834	3,223	5,390	3,219	4,028.75	6,474
German.....	4	19,598	13,123	21,410	12,981	16,403.75	27,731
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	1,920
Norwegian.....	2	10,643	8,440	13,493	8,293	10,550.00	19,381
Swedish.....	1	5,193	3,147	5,293	4,032	3,933.75	8,498
Total.....	16	92,791	63,571	114,401	68,542	79,463.75	110,475
Philippines to United States:							
Japanese.....	4	22,852	18,110	28,798	17,547	22,637.50	24,558
Norwegian.....	1	3,614	2,799	5,018	2,883	3,498.75	2,469
United States.....	4	46,410	33,666	56,447	33,645	42,082.50	25,872
Total.....	9	72,876	54,575	90,263	54,075	68,218.75	52,899
United States to Europe:							
British.....	2	13,831	9,640	15,940	9,583	12,050.00	19,419
Dutch.....	1	5,894	4,878	8,252	4,782	6,097.50	11,450
Norwegian.....	4	22,385	17,550	29,154	17,470	21,937.50	40,652
Swedish.....	2	11,655	8,362	13,930	10,365	10,452.50	19,764
Total.....	9	53,765	40,430	67,276	42,200	50,537.50	91,285
South America to United States:							
British.....	1	5,049	4,395	7,203	4,382	5,493.75	9,830
Danish.....	1	1,701	1,324	2,252	1,355	1,655.00	3,490
United States.....	2	14,075	9,140	17,797	9,140	11,425.00	5,182
Total.....	4	20,825	14,859	27,252	14,877	18,573.75	18,502
Australasia to Canada:							
British.....	4	19,888	13,912	22,842	13,977	17,390.00	24,606
Far East to United States:							
Japanese.....	3	17,655	14,390	23,316	14,130	17,987.50	6,511
Australasia to Europe:							
British.....	2	12,304	7,596	12,413	7,606	9,495.00	14,272
French.....	1	3,797	3,089	5,117	3,076	3,861.25	3,653
Total.....	3	16,101	10,685	17,530	10,682	13,356.25	17,925
Far East to Europe:							
British.....	1	4,624	3,300	5,994	3,645	4,125.00	6,225
Japanese.....	1	5,073	5,060	6,785	4,894	6,087.60	6,680
Norwegian.....	1	5,021	4,286	7,203	4,283	5,357.50	9,564
Total.....	3	14,718	12,646	19,982	12,822	15,570.10	23,169
Hawaii to United States:							
United States.....	2	10,900	6,930	11,374	6,900	8,662.50	9,425
Canadian intercoastal:							
British.....	2	9,419	6,417	10,571	6,518	8,021.25	12,743
South America to Cristobal:							
German.....	7	6,284	3,902	7,671	4,052	4,877.50	5,837
Panamanian.....	4	404	412	812	404	486.00	598
Total.....	11	6,688	4,314	8,483	4,456	5,363.50	6,435
Canada to South America:							
United States.....	1	5,011	3,623	5,702	3,580	4,528.75	6,153
United States to South America:							
United States.....	1	4,967	3,670	5,785	3,664	4,587.50	5,269
Central America to Europe:							
German.....	2	4,648	2,832	4,805	2,790	3,540.00	4,392
South America to Central America:							
British.....	1	4,353	3,592	5,891	3,613	3,134.16	.....
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	286
Balboa to South America:							
Venezuelan.....	1	1,101	1,050	2,046	1,081	792.72	.....
Balboa to Cristobal:							
Panamanian.....	7	215	214	373	245	267.50	278
United States.....	1	52	52	73	52	39.00	.....
Total.....	8	267	266	446	297	306.50	278
United States to West Indies:							
British.....	1	.....	.....	.....	.....	2,532.50	.....
Grand total, Oct., 1932	186	925,482	667,047	1,108,283	676,834	834,173.98	1,209,802
Grand total, Oct., 1931	185	977,175	715,719	1,196,665	729,250	893,442.40	1,281,035
Grand total, Oct., 1930	252	1,229,467	933,658	1,547,249	940,141	1,165,093.92	1,744,557

* Naval vessel of 5,065 tons displacement.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, November 12, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.	From—	For—	Cargo.		Panama Canal tonnage.		
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.							Nature.	Tons.	Gross.	Net.	
Calif.	2	21.05	6	6.00	6	13.38	6	15.45	German	North German Lloyd	216.5	32.9	13.1	Cristobal, C. Z.	Guayaquil, Ecuador	General	338	1,105	698
Rolling Stone ¹	6	7	6	6	6	13.48	6	13.48	Panamanian	Robert Wilcox	48.0	11.6	22.8	Colon, R. P.	Gatun, C. Z.	Ballast	6,334	8,365	20
Kinai Maru ²	7	1.10	7	6.15	7	15.28	7	16.35	Japanese	Osaka Shosen Kaisha	446.0	60.0	24.8	Boston, Mass.	Shanghai, China	Phosphate, etc.	2,509	3,797	4,188
Santa Cecilia.	7	5.30	7	11.35	7	17.57	8	5.56	American	Panama Mail S. S. Co.	360.2	51.6	22.8	New York, N. Y.	San Francisco, Cal.	Coffee, general	2,200	7,903	5,837
Laurits Swenson ²	7	12.35	7	13.00	7	19.35	7	22.00	Norwegian	Fred Olsen Line	435.9	56.0	19.0	Oslo, Norway	Vancouver, B. C.	General	5,350	5,705	4,167
Point Salinas.	7	14.00	7	14.25	7	21.47	7	23.27	American	Swayze & Hoyt	386.8	52.2	19.0	Houston, Tex.	Seattle, Wash.	General	555	980	579
Sollund	1	17.05	8	6.00	8	13.34	8	15.00	Norwegian	Panama Mail S. S. Co.	221.6	32.2	12.0	Tyne, England	Champerio, Guat.	General	12,207	12,207	8,543
York City	8	6.05	8	7.15	8	14.53	8	16.30	British	Reardon Smith Line	411.0	55.0	15.0	Cardiff, Wales	Vancouver, B. C.	Ballast	2,860	11,443	8,469
Saranac ¹	8	8.05	8	8.40	8	15.39	8	17.15	British	International Co.	530.0	66.6	20.0	London, England	Talara, Peru	General	11,646	11,646	7,653
Rubine	8	9.20	8	9.40	8	16.42	8	23.30	British	N. Z. Shipping Co.	480.0	60.0	23.4	London, England	Nelson, N. Z.	General	3,584	3,584	6,967
Harry G.	8	11.15	8	11.25	8	18.52	8	20.17	Danzig	W. Tankschiff Rhederi	513.9	68.0	18.0	Hull, England	Los Angeles, Calif.	Ballast	2,343	7,049	4,941
Seidel ²	8	8.55	8	12.20	8	19.50	8	21.00	Panamanian	Barber S. S. Line	461.0	60.8	21.1	Norfolk, Va.	Manila, P. I.	Tobacco, general	12,171	12,171	8,592
Tai Shan ²	8	12.05	8	12.35	8	20.30	8	21.50	American	Amer-Hawaiian Line	414.5	53.7	19.0	Boston, Mass.	Portland, Oreg.	General	59	9,345	6,983
Kentuckien.	8	10.15	8	13.35	8	21.13	8	23.00	Japanese	United Ocean Transport	417.0	56.0	15.0	Stettin, Germany	Vancouver, B. C.	Ballast	5,835	5,835	4,100
Kohwa Maru ²	8	13.50	8	14.05	8	22.20	8	23.30	Danzig	Anglo-American Oil Co.	525.0	63.0	20.0	Bremen, Germany	Lobitos, Peru	Ballast	6,000	6,040	4,357
Wilhelm A.	8	14.20	8	14.45	8	23.07	9	00.12	Norwegian	Interocean S. S. Corp.	464.0	61.0	21.1	Rotterdam, Holland	Vancouver, B. C.	Ballast	5,873	5,873	4,292
Riedemann ²	8	18.55	9	6.20	9	13.08	9	14.40	British	Hain S. S. Co.	400.0	52.3	17.0	Cardiff, Wales	Pacific coast	Ballast	6,312	6,312	5,676
Berganger ²	8	23.50	9	7.20	9	14.12	9	16.00	British	Sir R. Ropner & Co.	408.0	53.6	15.6	Barrif, England	Vancouver, B. C.	Ballast	1,092	1,092	5,338
Treverbyn	9	6.40	9	8.25	9	16.43	9	18.00	British	Moore Line, Ltd.	440.0	52.0	25.6	Cardiff, Wales	Moji, Japan	Patent fuel	1,802	1,802	5,916
Thirby	9	8.45	9	8.55	9	16.02	9	17.20	Japanese	Nippon Yusen Kaisha	400.0	55.0	14.7	New York, N. Y.	Amidagasta, Chile	Cotton, general	2,114	2,114	5,603
Pearlmoor	9	7.10	9	9.50	9	16.50	9	18.10	Danish	East Asiatic Co.	410.0	58.0	16.0	Copenhagen, Den.	Vancouver, B. C.	Coke, general	3,000	3,000	6,865
Atago Maru ²	9	9.35	9	10.00	9	17.22	9	18.30	Japanese	Mitsui Bussan & Co.	437.0	54.0	18.7	New York, N. Y.	Seattle, Wash.	General	2,672	2,672	7,079
Australien ²	9	11.40	9	11.50	9	18.26	9	19.35	American	Matson Navigation Co.	402.0	60.0	20.0	Baltimore, Md.	Tacoma, Wash.	General	5,761	5,761	4,129
Shohji Maru ²	9	12.20	9	12.35	9	19.29	9	20.30	American	Lukenbach Line	449.0	53.7	19.0	Boston, Mass.	Seattle, Wash.	General	4,506	4,506	7,611
Makiki	9	19.35	10	6.40	10	13.49	10	14.55	American	Amer-Hawaiian Line	407.7	60.0	20.0	Boston, Mass.	Balboa, C. Z.	Ballast	1,800	1,800	5,879
Lillian Lukenbach.	9	22.40	10	6.25	10	13.38	10	16.50	American	U. S. Navy	310.0	31.0	High seas	Habana, Cuba	Vancouver, B. C.	Cement	10,405	10,405	7,401
Iowan	10	00.10	10	7.25	10	15.40	10	16.50	British	R. Chapman & Son	409.6	54.0	18.0	Habana, Cuba	Singapore, St. Sett.	General	5,879	5,879	4,121
Sturtevant	10	1.50	10	8.30	10	16.01	10	22.50	American	Isthmian S. S. Lines	424.0	56.0	21.0	New York, N. Y.	Vancouver, B. C.	Ballast	7,611	7,611	5,450
Chattanooga	10	4.00	10	8.40	10	16.47	10	18.15	British	Can. Nat. Steamships	400.0	52.0	18.0	Montreal, Canada	Vancouver, B. C.	General	1,800	1,800	5,879
City	10	4.45	10	10.00	10	17.28	10	19.05	British	Blue Star Line	473.8	60.0	23.6	Tyne, England	Vancouver, B. C.	Ballast	10,405	10,405	7,401

Canadian Highlander.	10	7	20	10	10	05	10	17	49	11	1	49	British	Can. Nat. Steamships	400	0	52	0	16	0	Montreal, Canada	Melbourne, Australia	Paper, auto., etc.	1,559	6,192	4,400
Dalarn.	10	11	55	10	12	25	10	18	45	10	20	15	British	Canadian Transp. Co.	413	3	53	1	17	0	Cardiff, Wales	Vancouver, B. C.	Ballast	6,134	4,608	
Santa Clara.	10	6	00	10	20	05	11	10	43	11	17	09	American	Grace Line.	488	3	64	0	24	1	New York, N. Y.	San Antonio, Chile.	General.	2,042	11,680	7,474
Lackenby.	10	17	35	10	18	45	11	11	59	11	13	18	British	Beeching & Hayward	412	0	54	0	15	0	Tyne, England	Vancouver, B. C.	Ballast.	6,151	4,459	
Real	9	23	10	10	16	00	11	10	55				Panamaman	Hans Elliot.	532	0	62	0			Cristobal, C. Z.	Batboa, C. Z.	Ballast.	46	22	
President Monroe.	11	6	05	11	6	40	11	12	56	11	21	45	American.	Dollar Line.	529	2	17	0	25	6	New York, N. Y.	San Francisco, Cal.	General.	3,072	12,023	8,495
Boren.	10	22	15	11	8	50	11	15	30	11	17	34	Swedish	Transatlantic S. S. Co.	393	7	54	0	13	6	Baltimore, Md.	Buenaventura, Col.	Ballast.	6,186	4,408	
Langtebrook.	10	23	15	11	9	10	11	16	11	11	17	34	British.	F. Carrick & Co.	396	0	54	7	15	0	Liverpool, England	Vancouver, B. C.	Ballast.	5,881	4,247	
Talisman.	11	9	00	11	9	55	11	16	31	11	18	25	Norwegian.	A. B. Graham.	400	6	54	2	17	0	Rotterdam, Holland	Vancouver, B. C.	Ballast.	6,538	4,580	
Weirbank.	11	11	00	11	10	25	11	17	09	11	18	25	British.	Andrew Weir & Co.	420	0	54	0	20	6	Corpus Christi, Tex.	Osaka, Japan.	(?)	4,787	7,091	5,062
Ferbrook.	11	11	50	11	13	20	11	19	44	11	23	15	British.	Canadian Transp. Co.	420	0	53	0	18	0	Montreal, Canada	Vancouver, B. C.	(?)	3,100	7,097	5,062
Ferbrook.	11	11	25	11	14	10	11	20	42	11	22	30	Norwegian.	Pearlney & Eger.	391	4	55	2	21	1	New Orleans, La.	Mojji, Japan.	General, cotton.	5,050	6,930	5,048
San Simon.	11	6	00	11	15	05	11	22	15	11	23	39	American.	Quaker S. S. Line.	410	5	54	2	17	11	Newport News, Va.	Tacoma, Wash.	General.	1,608	6,930	4,916
El Alero.	11	16	15	11	19	10	12	13	45	12	15	00	British.	Anglo-Panad. Oilfields.	431	0	59	2	21	0	Philadelphia, Pa.	La Libertad, Enca.	Ballast.	7,555	5,049	
Tulsgas.	11	16	30	12	6	10	12	13	18	12	15	45	American.	Associated Oil Co.	430	0	59	2	21	0	Bayonne, N. J.	San Francisco, Cal.	Ballast.	7,819	5,112	
Pont Sur.	12	1	00	12	6	35	12	13	15	12	15	00	Japanese.	Swayne & Hoyt.	394	0	56	2	16	6	Corpus Christi, Tex.	Seattle, Wash.	Lumber, general	1,809	9,984	6,012
Sedgell Maru.	12	5	05	12	7	15	12	15	00	12	16	19	British.	Kawasaki Dockyard Co.	405	0	53	0	15	11	New York, N. Y.	Yokohama, Japan.	Ballast.	7,043	5,077	
Botolph.	12	6	35	12	7	30	12	15	18	12	17	19	British.	Sir R. Roper & Co.	415	0	53	0	21	9	Newcastle, Eng.	Vancouver, B. C.	Ballast.	6,641	4,340	
Sangstad.	12	6	50	12	8	20	12	16	21	12	17	45	Norwegian.	Pearlley & Eger.	381	6	55	3	19	6	New Orleans, La.	Kobe, Japan.	Cotton	6,100	4,342	
Turicum.	12	7	00	12	8	35	12	16	21	12	18	16	American.	Anglo-Saxon Pet. Co.	451	8	59	2	18	0	Memel, Lithuania.	Los Angeles, Calif.	Ballast.	8,279	5,442	
Ulysses.	11	23	10	12	9	40	12	17	20	12	18	16	British.	Royal Mail Line, Ltd.	514	0	66	2	20	6	Philadelphia, Pa.	San Francisco, Cal.	Ballast.	7,366	7,808	
Murillo.	12	6	25	12	9	50	12	16	25	12	18	55	Danish.	Canadian Transp. Co.	449	5	63	0	16	0	Copenhagen, Den.	Vancouver, B. C.	Ballast.	7,486	4,645	
Nordval.	12	7	05	12	10	55	12	18	35	12	19	25	Danish.	The Texas Co.	380	0	54	0	16	0	Pt. Arthur, Tex.	Vancouver, B. C.	Ballast.	1,766	4,605	
Dirigo.	12	8	20	12	11	20	12	18	58	12	20	10	American.	Canadian Transp. Co.	432	0	56	0	24	1	Los Angeles, Calif.	Portland, Oreg.	Petroleum prod.	7,082	6,931	4,971
Los Angeles.	12	8	35	12	12	15	12	19	58	12	21	20	German.	Hamburg-American Line	482	0	59	0	22	7	Hambrg, Germany	Champeno, Guat.	General.	3,793	4,854	6,344
Acaulita.	5	13	15	12	14	12	15	30	12	22	10	12	British.	Pacific Steam Nav. Co.	215	7	33	6	13	4	Cristobal, C. Z.	Talcahuano, Chile	General.	180	1,273	706
Askania.	12	30	30	12	15	30	12	22	10	12	23	45	German.	North German Lloyd.	289	0	47	0	20	9	Hamburg, Germany		General.	2,345	3,491	2,310

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Sunol ¹ 2	5	19 25	6	6 25	6	13 30	6	13 30	American...	Shell Oil Co.	480.6	66.0	28.6	Los Angeles, Calif.	Sewaren, N. J.	Gasoline.	13,295	9,619	6,457
Canadian	5	22 35	6	8 05	6	15 35	6	18 40	British.	Can. Nat. Steamships	400.0	52.4	22.0	Vancouver, B. C.	Montreal, Canada.	Timber, general	5,437	5,871	4,094
Spinner	6	3 00	6	10 16	6	17 15	6	17 15	Norwegian.	Johnson Line	418.0	54.5	37.6	Vancouver, B. C.	Stockholm, Sweden	Grain, general.	7,532	7,268	4,701
Tigre	6	7 00	6	19 45	6	19 45	6	19 45	Danish.	W. L. Comyn & Sons	385.6	64.2	24.6	Vancouver, B. C.	Antwerp, Belgium.	Gasoline. (*)	7,712	6,736	5,064
Guldberg	6	7 00	6	19 45	6	19 45	6	19 45	Danish.	W. L. Comyn & Sons	385.6	64.2	24.6	Vancouver, B. C.	Antwerp, Belgium.	Gasoline. (*)	7,712	6,736	5,064
Hokuroku	6	9 05	6	11 20	6	18 45	7	10 00	Japanese.	Osaka Shosen Kaisha.	446.0	50.5	21.5	Penang, Malay Pen.	Baltimore, Md.	General.	3,111	8,942	6,251
Maru	6	15 17	6	16 25	7	11 55	7	11 55	American.	Islamian S. S. Lines	424.2	56.2	19.0	Kahului, T. H.	Baltimore, Md.	General. (*)	2,054	7,811	5,208
Steel Engineer.	6	15 17	6	16 25	7	11 55	7	11 55	American.	Islamian S. S. Lines	424.2	56.2	19.0	Kahului, T. H.	Baltimore, Md.	General. (*)	2,054	7,811	5,208
Tanager	6	17 30	6	18 05	7	11 50	7	11 50	Norwegian.	Westfal, Larsen & Co.	398.1	54.7	26.3	Vancouver, B. C.	Portland, Me.	Wheat, general	7,478	6,885	5,450
Belgrave	7	1 00	7	7 39	7	14 55	7	14 55	Norwegian.	Canadian Transp. Co.	414.4	67.1	26.0	Vancouver, B. C.	Hull, England	Wheat, lumber	9,572	5,927	5,027
Tamabua	7	5 40	7	8 15	7	17 05	7	17 05	American.	Premcor Product Co.	503.0	71.2	29.1	Los Angeles, Calif.	New York, N. Y.	Gasoline.	13,813	1,687	8,543
Covina	4	20 40	7	8 25	7	18 05	8	6 00	American.	Harmond Lumber Co.	258.4	43.2	23.0	Los Angeles, Calif.	Winnington, N. Y.	Gasoline.	13,813	1,687	8,543
Jefferson Myers	7	5 55	7	9 28	7	18 40	7	18 40	American.	Calmar S. S. Corp.	440.0	56.2	28.0	Portland, Oreg.	Pittsburgh, Pa.	Lumber, general.	10,854	3,806	6,020
Alamar	7	7 37	7	10 42	7	20 00	8	00 15	American.	States S. S. Corp.	399.7	56.2	26.0	Seattle, Wash.	Baltimore, Md.	Lumber	7,567	7,351	5,593
Bronxville	7	7 13	7	10 25	7	20 55	7	20 55	Norwegian.	Fern Line	386.3	54.2	26.5	Darien, Manchuria	Hamburg, Germany	Soya beans	7,700	6,715	5,018
Demetion	7	11 00	7	12 34	7	22 15	7	22 15	British.	Dale & Co.	397.2	54.0	25.0	Vancouver, B. C.	London, England.	Cereals, general.	8,182	5,707	4,212
	7	11 00	7	12 34	7	22 15	7	22 15	British.	Dale & Co.	397.2	54.0	25.0	Vancouver, B. C.	London, England.	Cereals, general.	8,182	5,707	4,212

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
J. A. Moffett, jr. 10.	7	13 15	7	14 16	8	12 45	8	12 45	American	Standard Shipping Co.	499.0	68.1	29.0	Cabo Blanco, Peru	Southampton, Eng.	Crude oil	14,300	11,016	8,060
Gregalia 10.	7	17 26	7	18 36	8	11 20	8	11 20	British	Donaldson Bros., Ltd.	425.0	56.0	23.3	Vancouver, B. C.	Glasgow, Scotland.	General	7,671	7,827	5,442
Lt. Col. H. C. Schumm 11.	7	10 05	7	10 05	7	18 30	8	17 00	American	U. S. Army	466.0	64.0	24.9	Balboa, C. Z.	Cristobal, C. Z.	General	2,989	10,026	6,680
Santa Maria 10.	7	18 00	8	6 31	8	13 45	8	17 00	American	Grace Line	446.0	56.1	26.6	San Antonio, Chile	New York, N. Y.	General	6,235	8,508	6,179
Katrina Luck- enbach 10.	7	18 00	8	7 24	8	17 50	8	17 50	American	Luckenbach Gulf Line.	446.0	56.1	26.6	Portland, Ore.	Mobile, Ala.	General	8,877	8,443	6,402
Julia Lucken- bach 10.	8	3 00	8	8 24	8	19 30	8	19 30	American	Luckenbach Line	436.6	57.3	30.6	Seattle, Wash.	Boston, Mass.	(11)	589	6,911	4,990
Ryoyo Maru 10.	8	6 00	8	9 25	8	21 25	8	21 25	Japanese	Kawasaki Kisen Kaisha	418.6	56.0	15.0	Kobe, Japan	New York, N. Y.	Silk, general	5,450	5,367	2,900
H. W. D. Whiton 10.	8	11 45	8	12 43	8	22 55	9	5 05	American	Dutton Lumber Corp.	356.0	51.6	25.5	Longview, Wash.	Poughkeepsie, N. Y.	Lumber	9,113	7,817	6,012
Surtevant, No. 240 11.	8	15 08	8	21 57	9	4 30	9	4 30	American	U. S. Navy	310.0	30.0		Balboa, C. Z.	Cristobal, C. Z.	General	7,450	7,150	5,024
Rialto 10.	8	17 00	9	6 30	9	13 45	9	19 05	Italian	Nav. Libera-Triestina	436.6	53.4	27.0	Vancouver, B. C.	Trieste, Italy	General	8,142	10,793	7,619
Minnesota 10.	9	2 30	9	7 08	9	14 40	9	14 40	American	Amer.-Hawaiian Line	407.7	53.7	27.0	Portland, Ore.	Boston, Mass.	General	13,966	9,455	6,736
Drehtidrik 10.	9	10 50	9	11 31	9	18 40	9	23 45	Dutch	N. Pacific Coast Line	485.5	62.3	28.0	Victoria, B. C.	Rotterdam, Holland	Crude oil	2,970	5,957	4,325
Daghid 10.	9	10 55	9	12 05	9	20 15	9	20 15	Norwegian	John P. Pedersen & Son.	471.8	64.2	28.0	Estero Bay, Calif.	Pt. de Boue, Fr ee.	General	7,811	6,134	4,355
Real 11.	9	10 55	9	15 25	9	23 10	10	16 00	Panamanian	Hans Elliot.	422.2	17.1	5.1	Darien, K. P.	Cristobal, C. Z.	Bananas	8,475	7,369	5,592
Kota Inten 10.	10	4 00	10	7 25	10	14 00	10	14 45	Dutch	Pac. Java Bengal Line	439.5	60.8	28.0	Portland, Ore.	Capetown, Africa	General	8,188	6,864	5,131
Santa Elisa 10.	10	6 00	10	13 15	10	19 40	11	10 05	American	Pacific Mail S. Co.	360.3	51.7	23.0	San Francisco, Cal.	Philadelphia, Pa.	General	4,372	3,333	2,207
Janeta 10.	10	19 25	11	6 27	11	13 35	11	15 25	British	MacLay & McIntyre.	401.9	59.0	25.0	Vancouver, B. C.	Liverpool, England	Lumber, general	8,145	10,459	7,110
King Jaros 10.	10	21 00	11	7 15	11	15 20	11	16 45	British	Canadian Transp. Co.	380.5	54.7	26.0	Vancouver, B. C.	London, England	Lumber, general	703	1,032	1,041
Brand 10.	10	21 10	11	8 11	11	17 00	11	17 00	Norwegian	Comyn & Fox	330.5	44.2	23.3	Pto. Chicama, Peru	Greenock, Scotland	Sugar	6,987	6,755	4,895
Lycia 10.	11	1 25	11	9 09	11	18 20	11	21 15	British	Duncan Fox & Co.	300.5	54.7	26.0	Guayaquil, Ecuador	Antwerp, Belgium	General	9,087	7,060	5,025
Wisconsin 10.	11	4 10	11	9 37	11	19 35	12	00 40	French	French Line	470.3	61.2	20.0	Asiatic, C. Z.	Cristobal, C. Z.	General	7,404	10,267	7,252
Durazon 10.	11	10 55	11	13 11	11	20 45	12	14 15	German	Hamburg-American Line	227.5	34.4	14.3	Portland, Ore.	Philadelphia, Pa.	Lumber, general	8,411	5,843	4,208
San Marcos 10.	11	15 00	11	16 46	11	23 15	11	23 15	American	Quaker Line	401.5	54.2	26.0	San Francisco, Cal.	New York, N. Y.	Gasoline, lub. oil	8,003	6,193	4,465
Solana 10.	11	18 12	12	6 11	12	14 35	12	14 35	American	Hartol Product Corp.	419.5	56.5	27.0	Vancouver, B. C.	Hamberg, Germany	General	7,832	6,894	4,936
Holstoyner 10.	12	3 00	12	7 19	12	15 50	12	21 15	German	Hamberg-American Line	397.5	63.1	27.0	Vancouver, B. C.	London, England	Grain, flour	3,824	8,556	6,562
Holystone 10.	12	22 00	12	8 25	12	16 55	12	16 55	British	Common Brothers	407.0	54.0	20.0	Vancouver, B. C.	United Kingdom	Wheat	104	226	101
Treallan 10.	12	7 00	12	9 04	12	18 15	12	18 15	British	Kerr Gifford Co.	400.0	53.0	17.0	Vancouver, B. C.	N. London, Conn.	Lumber, general			
Bushnell 10.	12	7 15	12	9 35	12	19 35	13	6 05	American	U. S. Navy	300.0	48.5	17.0	San Diego, Calif.	San Francisco, Cal.	General			
Tradentes 10.	12	8 15	12	10 08	12	20 35	12	20 35	Norwegian	Canadian Transp. Co.	401.2	54.2	28.0	Pt. Garbale, Wash.	Southampton, Eng.	Lumber, general			
Canonesa 10.	12	11 10	12	11 47	12	21 53	13	7 00	British	Furness, Withy & Co.	450.2	58.3	22.0	N. Westminster, B. C.	Glasgow, Scotland.	Fruit, lumber			
Nuevo Panama 10.	12	11 45	12	12 26	12	19 30	13	11 05	Panamanian	Hans Elliot.	108.5	20.6	9.3	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general			

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

Traffic by Commodities for October, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of October, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts			17	138
Agricultural implements	243	175	664	175
Alfalfa meal		769		769
Ammonium compounds	36		3,126	
Animal foods	495	666	501	1,366
Apparel, wearing (hats, shoes, clothing, etc.)	156		156	44
Asbestos	188		311	
Asphalt and tar	54	33	10,232	526
Automobiles (and auto trucks)	686	9	2,929	12
Automobile parts and accessories	487	25	3,125	25
Bananas				237
Bags and bagging, textile	216	759	317	759
Barks, miscellaneous		14	40	332
Barley		10	50	25,825
Beans, edible, dry	59	8,175	241	10,737
Beer			7	
Beverages, nonalcoholic	157	88	166	88
Blood and tankage	240		240	30
Bones and bone meal			3,074	
Books and printed matter	149		150	
Borax		571		5,451
Bran and pollards			13	1,379
Bricks and tile	330		439	
Canned and preserved goods:				
Fish	369	15,063	674	34,932
Fruit	385	36,727	396	79,913
Meat	60	246	384	419
Milk	24	1,040	224	1,096
Soup	2,843	344	2,854	362
Vegetables	2,051	10,125	2,105	10,161
Miscellaneous and unclassified	2,707	13,054	2,845	15,324
Carbon black	80	23	230	23
Celite		689		716
Cement	253		8,508	
Chalk			315	
Charcoal	61		61	
Chemicals	2,429	875	4,215	979
Clay, china and fire	164	39	1,931	57
Clorox		1,642		1,642
Coal	692		1,799	28
Cocoa and cacao beans	168	5	486	630
Cocounuts and products	54	301	299	612
Coffee	411	264	3,818	7,726
Coke	809		4,074	
Cold storage and refrigerated products:				
Dairy products	77	47	305	3,078
Eggs		204		269
Fish	2		73	310
Lard	245	250	283	250
Meats	1		19	2,142
Poultry		6		6
Vegetables				30
Other and unclassified	459		463	
Confectionery	1,166		1,257	3
Copra		18		3,191
Corn	11,727		11,755	
Cotton, raw	267	591	34,243	6,202
Dextrine			7	
Drugs and medicines	1,192	50	1,344	79
Dyes			476	220
Earthenware	5		62	28

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Eggs, dried.....		7		68
Electrical apparatus and appliances.....	566	55	668	82
Explosives.....	57		158	
Extract, quebracho.....			255	
Fertilizers.....	156	10	1,237	10
Fish, salted or dry cured.....		5	57	5
Fish meal.....				1,565
Floor coverings.....	824	173	828	173
Flour.....	289	10,110	1,126	12,521
Fruit dried.....	40	32,084	293	65,996
Fruit, fresh.....	675	4,033	678	22,272
Furniture and household goods.....	403	97	403	142
Gall nuts.....				14
General.....	23,490	7,247	42,745	14,646
Glass and glassware.....	2,284	143	3,386	426
Glue.....	14	130	19	130
Groceries.....	799	425	841	527
Guano.....				14,830
Gums.....		31		131
Hair, all kinds.....	48	37	52	44
Hay.....		1,375		1,724
Hemp, unmanufactured.....		93		883
Honey.....		326		580
Hops.....		672		672
Horns and hoofs.....				73
Infusorial earth.....		160		359
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	23,035	2,486	42,947	2,491
Ivory nuts.....				1,066
Jute, unmanufactured.....			737	26
Lard substitute.....	335		530	
Lime.....	50		203	
Liquors.....	25	18	928	498
Lumber (including manufactured mill products).....	1,333	86,925	1,937	130,428
Machinery (other than electrical).....	1,953	140	4,708	196
Malt.....	18		18	
Manufactured goods.....	2,149	433	3,393	1,772
Marble and granite.....	26		165	7
Matches.....	207		248	32
Metals:				
Antimony.....		27		39
Copper.....	158	3,641	191	25,655
Gold and silver.....	2		59	10
Iron.....	76		161	
Lead.....		780	115	9,590
Scrap.....	60	223	493	508
Tin.....		173	1,027	1,284
Zinc.....	130	41	588	5,057
Other and unclassified.....	166	12	166	620
Milk, powdered.....	24	330	46	719
Molasses and syrups.....	190		193	
Newsprint (included with "paper").....				
Nitrates.....	5,086	150	8,542	1,770
Nuts, edible (including meats).....	76	2,174	105	2,324
Oats.....	1,165		1,246	4,690
Oils, mineral:				
Crude.....			137	26,601
Gas and fuel.....		41,523	42	41,973
Gasoline, benzine, and naphtha.....	7,674	93,428	16,338	163,260
Kerosene.....	14	19,120	4,744	31,146
Lubricating and greases.....	5,856	26	13,300	233
Other and unclassified.....	14		14	
Oils, vegetable:				
Coconut.....		500		721
Cottonseed.....	3,900		3,905	20
Linseed.....	49		167	
Olive.....	51	2	175	2
Rapeseed.....		75	15	370
Wood.....	85	30	105	381
Other and unclassified.....	169	80	600	2,124
Oil, fish.....			13	112
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		103		750
Oilseed cake and meal.....	1,471		1,472	4,075
Ores:				
Antimony.....				344
Copper.....		124		328
Gold and silver.....				32
Iron.....			100	
Lead.....				508
Magnetite.....		63		63

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Ores—Continued:				
Tin.....				1,315
Zinc.....	100		102	2,129
Other and unclassified.....	27		27	277
Paints and varnishes.....	461	34	977	35
Paper and paper products ¹	7,938	4,272	17,941	9,130
Paper scrap.....	12	268	1,504	268
Peanuts.....	457	95	457	95
Pean, dry.....		272	46	4,567
Peatmoss.....			910	
Phosphates.....	91		239	9
Porcelain ware.....	23	289	118	2,095
Potash.....		2,833	25	2,833
Pyrethrum flowers.....	88	417	88	662
Rags and waste.....	48	172	141	211
Railroad material.....	368		863	
Rice.....	590	180	791	4,185
Rope and twine.....	293	63	303	123
Rosin.....	436	3	3,989	3
Rubber:				
Manufactured.....	1,105	28	1,491	33
Raw.....			14	184
Scrap.....		111	1	111
Salt.....	271		3,750	
Sand.....	1,572		3,672	
Seeds (except oilseeds).....	34	1,024	562	1,231
Shells, oyster.....	775	53	775	223
Silk, raw.....		404	10	1,326
Skins and hides.....	60	3,444	90	6,601
Slag.....	142		170	
Slate.....	666		666	
Soaps and products.....	2,494	239	2,824	386
Soda and sodium compounds.....	1,458		3,029	
Soy beans.....			111	5,758
Sugar.....	37	36,006	45	127,028
Sulphur.....	11,346	22	25,458	207
Talc.....		105	8	126
Tallow.....		166		534
Tea.....	1	57	146	2,835
Textiles ²	3,307	108	5,333	1,200
Tinplate.....	787		3,707	
Tobacco and manufactures.....	1,160	26	13,060	232
Toilet preparations.....	312	12	322	12
Turpentine.....	30		269	
Vegetables, dry ²	50	287	63	774
Wall board.....		600	250	780
Wax, paraffin.....	81	30	1,858	63
Wheat.....	119	368	150	194,269
Wines.....		333	372	1,091
Wood pulp.....	180	9,920	1,808	10,715
Wool.....		4,287	2	8,127
Total, October, 1932.....	154,308	469,165	372,459	1,209,802
Total, October, 1931.....	171,238	543,897	481,635	1,281,035
Total, October, 1930.....	201,296	615,872	649,853	1,744,557

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending November 12, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Sollund.....	Christean Haaland.....	.....	November 8	.....	555
Ancon.....	Panama R. R. S. S. Line.....	.....	November 6	.....	676
Cali.....	North German Lloyd.....	.....	November 6	.....	339
Acajutla.....	Pacific Steam Navigation Co.....	.....	November 12	.....	268
Simon Bolivar.....	Royal Netherlands S. S. Co.....	.....	November 6	.....	222
Hokuroku Maru.....	Osaka Shosen Kaisha.....	November 6	November 6	403	29
Flandre.....	French Line.....	November 7	November 9	14	444
Santa Cecilia.....	Panama Mail S. S. Co.....	November 7	November 7	236	281
Bogota.....	Colombian S. S. Line.....	November 7	November 7	16	110
Calamares.....	United Fruit Co.....	November 7	November 7	192	740
Santa Maria.....	Panama Mail S. S. Co.....	November 8	November 8	194	5
Berganger.....	Westfal, Larsen & Co.....	November 8	November 8	(¹)	49
Tai Shan.....	Trans-Pacific Corporation.....	November 8	November 8	(¹)	18
Drechtidijk.....	Holland-America Line.....	November 9	November 9	5	73
Australien.....	East Asiatic Co.....	November 9	November 9	300	24
Santa Elisa.....	Panama Mail S. S. Co.....	November 10	November 11	343	64
Santa Clara.....	Panama Mail S. S. Co.....	November 10	November 10	143	509
Metapan.....	United Fruit Co.....	November 10	November 10	(¹)	476
Wisconsin.....	French Line.....	November 11	November 11	196	(²)
Durazzo.....	Hamburg-American Line.....	November 11	.....	763	.....
Contessa.....	Standard Fruit & S. S. Co.....	November 11	November 12	97	179
Iriona.....	United Fruit Co.....	November 11	November 11	743	218
San Simeon.....	Quaker Line.....	November 11	November 11	75	(¹)
Velma Lykes.....	Lykes Brothers.....	November 11	.....	642	.....
Guayaquil.....	Panama R. R. S. S. Line.....	November 11	November 11	780	150
Veragua.....	United Fruit Co.....	November 11	November 11	218	197
Vancouver.....	Hamburg-American Line.....	November 12	November 12	72	162
Los Angeles.....	Hamburg-American Line.....	November 12	November 12	98	263
D. Askania.....	Hamburg-American Line.....	November 12	November 12	38	307
Nuevo Panama.....	Hans Elliot.....	November 12	.....	183	.....
Juan S. Elcano.....	Spanish S. S. Line.....	November 12	.....	135	.....
Genevieve Lykes.....	Lykes Brothers.....	November 12	November 12	450	(¹)
Santa Marta.....	United Fruit Co.....	November 12	.....	236	.....

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending November 12, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
President Pierce.....	Dollar Line.....	October 28	October 28	.....	26
Charcas.....	Grace Line.....	October 30	November 2	1,714	.....
Nuevo Panama.....	Hans Elliot.....	November 2	November 3	181	.....
Santa Catalina.....	Panama Mail S. S. Co.....	November 3	November 4	138	400
Antigua.....	United Fruit Co.....	November 6	November 6	913	35
Santa Cecilia.....	Panama Mail S. S. Co.....	November 7	November 8	525	50
Santa Maria.....	Grace Line.....	November 7	November 8	89	106
Laurits Swenson.....	Fred Olsen Line.....	November 7	November 7	5	.....
Santa Elisa.....	Panama Mail S. S. Co.....	November 10	November 10	64	.....
Canadian Highlander.....	Canadian National Steamships.....	November 10	November 10	9	.....

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

East Asiatic Company Offers Caribbean Cruises from Pacific Coast.

The East Asiatic Company, operating a fleet of motor vessels in the trade between the north of Europe and the Pacific coast of North America, is offering a series of special cruises to the Panama Canal and Caribbean ports from Pacific coast ports, aboard the motor ships, *Europa* and *Amerika*. According to the plan the *Europa* and *Amerika* will take cruise passengers to the Panama Canal or to St. Thomas in the Virgin Islands where connections will be made with ships of several other lines affording return accommodations to the west coast. On these cruises the passengers debark at Cristobal (or St. Thomas), stay as long as desired, and have the choice of several lines on their homeward voyage. From Cristobal they may sail by any of eight lines with which agreements have been made.

The first of these special cruise vessels, the *Europa*, left the west coast the latter part of October and made transit of the Canal on November 5; two passengers disembarked at the Canal and nine continued beyond. Four cruises in all are scheduled.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective November 15, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.31
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1932 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
Cristobal.....	November 8..	November 13..	November 16..	November 20..	November 23..	November 28..
Ancon.....	November 22..	November 27..	November 30..	December 4... December 19..	December 7... December 22..	December 12.. December 27..
Cristobal.....	December 6... December 20..	December 11... December 25..	December 14... December 28..	December 19... January 1....	December 22... January 4....	December 27... January 9....

Steamers sail at 4 p. m. standard time from Pier 65, North River, foot of West 25th St., New York.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

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Volume XXVI. Balboa Heights, C. Z., November 23, 1932. No. 17.

Cargo Through the Canal During October, 1932.

On pages 224 and 225 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in October, 1932. This cargo, segregated according to direction as compared with October, 1931, and the differences, are shown in the following tabulation:

	October, 1931.	October, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	481,635	372,459	—109,176
Pacific to Atlantic.....	1,281,035	1,209,802	—71,233
Total.....	1,762,670	1,582,261	—180,409

Cargo tonnage through the Canal declined 180,409 tons (10.2 per cent) in October, 1932, compared with October, 1931. The movement in both directions showed a loss; the decline in the Atlantic to Pacific movement was 22.7 per cent and that in the Pacific to Atlantic movement, 5.6 per cent. In comparison with the preceding month (September, 1932), total cargo tonnage registered a gain of 235,117 tons, or 17.5 per cent. The movement in both directions contributed to this gain, the Atlantic to Pacific movement showing an increase of 10.9 per cent and the Pacific to Atlantic movement, 19.6 per cent.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the cargo originating in the Atlantic area of North America, that coming from the United States amounted to 270,304 tons, or 72.6 per cent of the total moving from the Atlantic to the Pacific. This was a decrease of 104,646 tons, or 27.9 per cent, in comparison with the amount coming from the east coast of the United States in October, 1931. Cargo from Europe, which amounted to 62,326 tons, or 16.7 per cent of the total Pacific-bound tonnage in October, 1932, registered a loss of 17,680 tons, or 22.1 per cent, compared with the same month in the previous year. Cargo from the United States and Europe made up 89.3 per cent of the total cargo moving from the Atlantic to the Pacific in October, 1932. The proportion of the total traffic originating in the United States was 77.8 per cent in October, 1931, and 72.6 per cent in October, 1932. Europe's proportion to the total in October, 1932, was 16.7 per cent, a gain of 0.1 per cent in comparison with the same period in the previous year.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in October, 1932, was reported routed as follows: 179,047 tons, or 48.1 per cent, to the United States; 82,211 tons, or 22.1 per cent, to Asia; 56,168 tons, or 15.1 per cent, to Australasia; and 34,034 tons, or 9.1 per cent, to South America. The amounts destined to two of these areas gained, and two declined, in comparison

with October, 1931, as follows: To South America, an increase of 5,102 tons, or 17.6 per cent; to Australasia, a gain of 526 tons, or 0.9 per cent; to the United States, a loss of 28,984 tons, or 13.9 per cent; and to Asia, a loss of 81,121 tons, or 50.0 per cent. The proportion of the total traffic destined to the United States increased from 43.0 per cent in October, 1931, to 48.1 per cent in October, 1932. South America's proportion increased from 6.0 per cent to 9.1 per cent in the same comparison, while Asia's proportion declined from 34.0 per cent to 22.1 per cent.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in October, 1932, 701,357 tons, or 58.0 per cent of the total, originated in the United States; 249,116 tons, or 20.6 per cent, in Canada; 135,412 tons, or 11.2 per cent, in South America; 62,681 tons, or 5.2 per cent, in Asia; and 42,531 tons, or 3.5 per cent, in Australasia. In comparison with October, 1931, cargo from Canada and Asia increased 130,429 tons (109.9 per cent) and 18,393 tons (41.5 per cent), respectively. That from all other areas mentioned above declined as follows: From the United States, 37,485 tons, or 5.1 per cent; from South America, 164,244 tons, or 54.8 per cent; and from Australasia, 11,989 tons, or 22.0 per cent. The proportions of the total cargo originating in the United States and Asia were slightly higher than in October, 1931. Canada's proportion made a pronounced increase from 9.3 per cent in October, 1931 to 20.6 per cent in October, 1932. South America's proportion declined to 11.2 per cent, about half of its proportion in the previous year.

Destination.—Segregated according to destination, 545,103 tons, or 45.0 per cent of the cargo moving from the Pacific to the Atlantic was destined to ports on the east coast of the United States, and 598,291 tons, or 49.5 per cent, to Europe. These two areas absorbed 94.5 per cent of the total cargo moving in this direction. Cargo destined to the United States declined 220,754 tons, or 28.8 per cent, in comparison with October, 1931, while cargo to Europe increased 143,116 tons, or 31.4 per cent. The proportion of the total destined to the United States was less than in October, 1931, while that destined to Europe increased from 35.6 per cent in October, 1931, to 49.5 per cent in 1932.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify about 89 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of October, 1932. The remaining 11 per cent consisted, for the most part, of manufactured goods in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for October, 1931, or October, 1932, are listed in the following tabulation:

Commodity.	October, 1931.	October, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Asphalt and tar.....	7,709	10,232	+2,523
Coal and coke.....	10,397	5,873	-4,524
Corn.....	3,186	11,755	+8,569
Cotton.....	70,360	34,243	-36,117
Iron and steel.....	66,006	42,947	-23,059
Oils, mineral.....	43,472	34,575	-8,897
Paper.....	15,766	17,941	+2,175
Phosphates.....	11,152	239	-10,913
Sulphur.....	13,686	25,458	+6,772
Tobacco.....	7,053	13,060	+5,941

The above 10 commodity groups for October, 1932, comprise about 53 per cent of the total cargo moving from the Atlantic to the Pacific. Five of the items show increases and 5 decreases. The largest increase was in corn, which, in the past few months, has been shipped in considerable quantities from Gulf ports to the western United States. Important declines occurred in cotton, mineral oils, and phosphates.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 per cent of the cargo moving from the Pacific to the Atlantic during October, 1932. Commodities which aggregated more than 10,000 tons either during the past month or the corresponding month in 1931, are listed below:

Commodity.	October, 1931.	October, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	10,603	25,825	+15,222
Beans, edible.....	11,821	10,737	-1,084
Canned goods (fish, fruit, vegetables, etc.).....	93,179	142,207	+49,028
Cold storage (food products).....	17,749	6,085	-11,664
Four.....	14,207	12,521	-1,686
Fruit, dried.....	73,804	65,996	-7,808
Fruit, fresh.....	13,681	22,272	+8,591
Guano.....		14,830	+14,830
Lumber.....	259,513	130,428	-129,085
Metals (principally copper).....	50,769	42,255	-8,514
Nitrates.....	92,039	1,770	-90,269
Oils (mineral).....	274,776	263,213	-11,563
Ores.....	82,816	4,996	-77,820
Sugar.....	82,663	127,028	+44,365
Wheat.....	68,961	194,269	+125,308
Wood pulp.....	16,466	10,715	-5,751

* Does not include fresh fruit.

The above 16 commodity groups for October, 1932, comprise almost 89 per cent of the cargo moving from the Pacific to the Atlantic. Six of the items increased and 10 decreased. The principal increases were in wheat, sugar, and canned goods. Lumber, nitrates, and ores registered heavy declines.

(Continued on next page.)

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective November 21, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.33
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, October, 1932.—Continued from page 223.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.						AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.		
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. †	Total, Australasia. †	Philippine Islands.	China.	Japan.	Far East. †			Total, Asia.	
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports.....	101,026	1,859	364	380	3,289	106,918	1,382	531	324	1,276	29	3,542	7,729	1,582	734	10,045	11,022	18,054	7,989	1,322	38,387	158,892	42.7	
South Atlantic ports.....	5,162				446	5,608							364									4,266	10,241	2.7
Gulf ports.....	48,120				25	48,145							7,950	6,084		14,034	833	1,746	31,896	4,517	38,992	101,171	27.2	
Total, United States.....	154,308	1,859	364	380	3,760	160,671	1,382	531	324	1,276	29	3,542	16,043	7,666	734	10,443	12,000	20,958	42,851	5,839	81,648	270,304	72.6	
East coast of Canada.....				4		4							2,669	1,410		4,079						4,083	1.1	
East coast of Central America.....	1,069	50	3,601	47		4,767	1,007	1,192	949	605	15	3,768	4,000	700	4,500	9,200						9,200	2.5	
Cristobal, C. Z. *	200	1,118				1,318	8,276					8,276										8,535	2.3	
West Indies.....																				14		14	0.004	
Total, North America.....	155,377	3,027	3,965	431	3,760	166,760	1,665	1,723	1,273	1,881	44	15,586	22,712	9,776	5,234	37,722	12,000	20,958	42,865	5,839	81,662	301,730	81.0	
EUROPE:																								
British Isles.....	3,171	3,356				6,527	1,583	335	248	1,486		3,652		15,506	1,816	17,322						27,501	7.4	
Belgium.....	5,655	384	441	67		6,548	982	183	100	515		1,780										8,328	2.2	
Denmark.....	10	842	285			1,107		2,153				2,153										3,260	0.9	
France.....	739	172	55	67		1,033	110		44			154			1,124	1,124						2,311	0.6	
Germany.....	4,250	388	278	3		4,919	604	126	330	1,888		2,948										7,867	2.1	
Holland.....	1,258	60				1,318	417	189	246	159	125	1,136										2,454	0.7	
Italy.....	627	93				720	90		79	169												889	0.2	
Norway.....	520	20		170		710		425	1,388	64	240	2,117										2,827	0.8	
Spain and Portugal.....							75		4			79										79	0.02	
Sweden.....	1,143	21	538			1,702	1,120		9	3	629	1,761										3,463	0.9	
Europe †.....	346	28	216	258		848	129	1		35	2,334	2,499										3,347	0.9	
Total, Europe.....	17,720	4,522	3,370	820		25,432	5,110	3,412	3,321	4,277	3,328	18,448		15,506	2,940	18,446						62,326	16.7	
East coast of South America.....	5,721	91	132,000			7,825																8,374	2.3	
Far East.....			29			29														549		549	0.15	
Grand total.....	179,047	7,646	3,483	251	3,760	200,046	15,775	5,135	5,594	6,158	3,372	34,034	22,712	25,282	8,174	56,168	12,000	20,958	43,414	5,839	82,211	372,459	100.0	
Per cent of total cargo:																								
October, 1932.....	48.1	2.0	1.7	0.9	1.0	53.7	4.2	1.4	1.0	1.6	0.9	9.1	6.1	6.8	2.2	15.1	3.2	5.6	11.7	1.6	22.1	100.0	.....	
October, 1931.....	43.0	1.6	1.5	0.4	2.0	48.5	2.4	0.4	0.6	2.5	0.1	6.0	4.3	6.5	0.7	11.5	2.0	11.0	19.0	2.0	34.0	100.0	.....	
October, 1930.....	39.1	5.7	1.4	0.2	1.7	48.1	7.2	0.5	0.4	1.7	6.4	16.2	3.3	7.7	1.6	12.6	2.1	7.2	10.1	3.7	23.1	100.0	.....	

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, October, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.										EUROPE.										Grand total.	Per cent of total cargo.
	UNITED STATES.					Total, North America.					EUROPE.											
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Central America.	Cristobal, C. Z.*	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Sweden.	Spain and Portugal.	Europe, †		
NORTH AMERICA:																						
West coast United States	425,187	11,145	32,833	469,165			744	9,364	479,273	145,897	5,844	1,137	14,877	15,369	4,963	3,720	1,537	17,099	80	7,018	217,544	4,540
West coast of Canada	1,428	75	685	2,188	12,743		1	2,626	17,558	161,005	1,166	5,530	9,492	12,897	7,117	900	600	31,794	230,501	2,057	249,116	20.6
West coast Cen. America.							683	521	1,254				202						4,042		4,253	5,507
Balboa, C. Z.	50			50			278		278					350							350	628
Hawaiian Islands	8,291		3,279	11,570					11,570													11,570
Total, North America	434,956	11,220	36,797	482,973	12,743		1,706	12,511	509,933	306,902	7,010	6,667	24,571	28,625	12,083	4,620	1,537	17,099	4,122	38,512	452,045	6,597
SOUTH AMERICA:																						
Chile				722			350	1,527	2,599	6,740	2,743		712	6,580	1,400	1,424			378	3,743	23,720	60
Colombia	1,033			1,033			4,002	5,095	5,095	7				23							30	100
Ecuador	10,062			10,062			3,008	13,070	13,070				596		53						649	
Peru	2,529	3,490		6,019			67	23	6,109	52,649	537	2,536	6,516	2,371	13,255	515	533		9	15	83,472	
W. coast of S. America †										58										450	508	
Total, South America	14,346	3,490		17,836			7,487	1,550	26,873	59,454	3,280	2,536	7,924	8,974	14,708	1,475	5,533		387	4,208	108,379	160
AUSTRALASIA:																						
Australia	100			100	21,510		10		21,620													21,620
New Zealand	2,225			2,225	703		58		2,986	6,615											6,615	
Australasia †										7,657			3,653								11,310	
Total, Australasia	2,325			2,325	22,213		68		24,006	14,272			3,653								17,925	
ASIA:																						
Philippine Islands	29,797			29,797				5	29,802													29,802
China	2,841			2,841			308	40	3,189													3,189
Japan	8,621			8,621			789	203	9,613												28	
Far East †	710			710					710	13,605			5,734								19,339	
Total, Asia	41,969			41,969			1,097	248	43,314	13,605			5,734								19,339	28
Grand total	493,596	14,710	36,797	545,103	34,956		10,358	14,309	604,726	394,233	10,290	9,203	36,148	43,333	28,791	6,095	7,070	17,699	4,509	43,020	598,291	6,785
Per cent of total cargo:																						
October, 1932	40.8	1.2	3.0	45.0	2.9		0.9	1.2	50.0	32.6	0.8	0.8	3.0	3.6	2.2	0.5	0.6	1.5	0.4	3.5	49.5	0.5
October, 1931	53.7	3.0	3.1	59.8	2.6	0.1	0.7	0.6	63.8	18.4	1.7	0.4	1.4	2.3	1.7	0.8	1.1	0.7	0.8	7.8	35.6	0.6
October, 1930	48.8	1.9	3.2	53.9	2.9	0.1	0.6	1.4	58.9	20.0	1.1	0.5	1.5	2.3	1.7	0.2	0.9	0.3	11.8	40.3	0.8	

¹ General cargo not routed so as to allow segregation between definite ports.² Includes both local and transit cargo.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, November 19, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From—	To—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Ludington 1...	11	7.55	13	5.55	13	14.20	17	00.42	American.	U. S. Army	439 0	60 0	18 8	Brooklyn, N. Y.	Manila, P. I.	Army supplies.	2,549		2
Suecia 4,	10	1.00	13	6.00	13	15.10			Swedish.	Otto Brautigan	22 0	8 0	3 0	Cartagena, Colom.	Pearl Islands, R. P.	Ballast.			
Robert																			
Lukenbach.	13	5.15	13	7.35	13	15.11	13	16.16	American.	Lukenbach Line	445 0	58 0	27 0	Mobile, Ala.	Seattle, Wash.	General, grain.	7,738	8,695	6,375
Arizona 1...	12	19.15	13	10.20	13	17.55	13	19.20	American.	The Texas Co.	391 8	51 3	25 0	Pt. Arthur, Tex.	Los Angeles, Calif.	Oil, grease.	6,590	5,552	3,757
Nuevo Panama 2	12	19.30	13	11.05	13	17.37	14	13.11	Panamanian	Hans Elliot.	108 0	20 0	8 6	Cristobal, C. Z.	Buenaventura, Col.	General.	144	226	101
Tibetron	13	19.35	14	6.20	14	15.53	14	15.00	British.	R. Chapman & Son	400 0	52 3	17 0	Quebec, Canada.	Vancouver, B. C.	Ballast.			
West Cape.	14	4.50	14	8.00	14	15.12	14	16.25	American.	McCormick S. S. Co.	409 0	54 0	14 3	Albany, N. Y.	Tacoma, Wash.	General.	1,435	6,566	4,060
Hardanger	14	5.05	14	9.00	14	16.02	15	17.36	Norwegian.	Westfal Larsen & Co.	375 3	52 3	15 0	Buenos Aires, Arg.	Vancouver, B. C.	General.	1,155	5,977	4,375
California 2	14	6.10	14	9.10	14	16.15	14	17.36	American.	Amer.-Hawaiian Line	445 0	50 8	20 0	Boston, Mass.	Portland, Oreg.	General.	2,832	8,567	6,050
Tweedbank 2	14	6.50	14	10.25	14	17.43	14	18.43	British.	Amer.-Oriental Line	426 0	37 4	21 6	Baltimore, Md.	Shanghai, China.	General.	3,408	7,623	5,412
Drazzo	11	20.45	14	14.15	14	21.43	14	23.12	German.	Hamburg-American Line	226 0	34 0	14 0	Cristobal, C. Z.	Guayquil, Ecuador	General.	182	1,633	1,041
Willboro.	14	15.10	14	19.35	15	11.07	15	12.45	American.	Amer.-Hawaiian Line	415 0	56 0	19 0	Baltimore, Md.	Seattle, Wash.	General.	2,990	7,717	5,763
Tura 5	13	17.35	14	12.10	14	21.30			Panamanian	A. Valdez	64 2	20 3		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
San Lorenzo 5	14	8.30	14	13.05	14	21.30			Panamanian	Hans Elliot.	62 0	17 0		Cristobal, C. Z.	Balboa, C. Z.	General.	20	46	22
Real 5	14	15.45	14	17.55	15	11.09			Panamanian	Johnson Line	332 0	52 6	17 6	Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Axel Johnson 2	14	12.20	15	6.05	15	14.27	15	15.20	Swedish.	U. S. Navy	266 0	21 6		Stockholm, Sweden	Vancouver, B. C.	Ballast.	1,131	6,642	4,860
S-48 6	14	21.00	15	7.20	15	15.13	15	16.30	British.	Melville.	420 0	54 0	16 0	Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Rushpool.	14	21.00	15	7.20	15	15.13	15	16.30	British.	U. S. Navy	231 0	21 1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-10 6			15	8.20	15	16.24			American.	U. S. Navy	231 0	21 1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-11 6			15	8.20	15	16.05			American.	U. S. Navy	231 0	21 1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-13 6			15	8.20	15	16.05			American.	U. S. Navy	231 0	21 1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Malard 7			15	8.20	15	16.00			American.	U. S. Navy	180 0	35 0		Baltimore, Md.	Seattle, Wash.	General.	2,530	7,330	5,239
Enslay City...	14	22.03	15	9.35	15	16.50			American.	Isthmian S. S. Lines	395 0	55 0	17 7	Baltimore, Md.	Seattle, Wash.	General.			
President Her-																			
renscheidt 2	15	7.30	15	10.00	15	17.50			Norwegian.	Pechelbronn Strassburg	477 0	63 0	19 0	Teneriffe Can. Is.	Estero Bay, Calif.	Ballast.			
Mercury Sun 2	15	8.00	15	11.20	15	19.13			Norwegian.	Shell Oil Co.	480 0	68 0	23 6	Chester, Pa.	Los Angeles, Calif.	Ballast.	9,444	6,483	
U. S. Grant 3	15	6.55	15	13.30	15	20.00			American.	U. S. Army	490 5	55 0	26 0	New York, N. Y.	San Francisco, Cal.	General.	321	9,713	6,536
Northern Sun 2	16	1.55	16	6.10	16	13.56			American.	Sun Oil Co.	480 6	68 0	25 0	Houston, Tex.	Seattle, Wash.	Gasoline.	9,700	6,664	6,552
Port Hunter	16	5.35	16	7.10	16	14.57			British.	Com'th & Dom. Line.	481 0	62 3		London, England.	Durand, N. Z.	General, sulphur.	4,656	11,170	8,208
City of Glasgow	16	5.45	16	8.40	16	16.40			British.	Ellerman Lines, Ltd.	391 3	54 3	26 0	Pt. Arthur, Tex.	Melbourne, Australia.	General.	4,934	7,123	5,407
Corrientes.	16	11.45	16	12.00	16	19.09			British.	Donaldson S. A. Line.	419 0	54 8	19 6	Glasgow, Scotland	Vancouver, B. C.	General.	624	7,355	5,248
Lewis Lucken-																			
bach	16	14.35	16	14.50	16	21.28			American.	Leukentach Line.	496 0	68 0	17 1	New York, N. Y.	Seattle, Wash.	General.	2,362	11,487	8,762
Deroche 1	16	16.00	16	16.10	17	10.58			American.	Union Oil Co.	435 0	56 0	19 0	Baltimore, Md.	Los Angeles, Calif.	Ballast.			
Wyoming.	16	15.16	17	6.30	17	15.22			French.	French Line	470 0	61 0	22 0	Hayre, France	Vancouver, B. C.	General.	7,452	5,199	
Nebraska.	16	20.25	17	7.35	17	16.08			American.	Amer.-Hawaiian Line	471 0	60 0	19 2	Boston, Mass.	Seattle, Wash.	General.	1,234	10,440	7,027
																	1,543	9,047	6,432

	17	4 35	17	8 00	17	16 33	17	18 05	American	Arrow Line	410.5	54.3	17.7	New York, N. Y.	Seattle, Wash.	General	1,795	6,572	4,788
Eleanor	17	7 15	17	8 40	17	17 00	17	18 30	British	Hain S. S. Co.	400.4	53.1	15.0	Cardiff, Wales.	Pacific coast	Ballast	625	6,146	4,460
Christenson	14	22 40	17	8 55	17	19 00	17	21 15	Colombian	A. Tagaropoulos	150.0	27.0	13.4	Rio Hacha, Colon.	Tunaco, Colombia	Salt	1,218	5,821	4,927
Trevotias	17	6 00	17	10 00	17	17 37	17	18 40	American	Pacific Atlantic S. S. Co.	409.0	54.0	15.0	Philadelphia, Pa.	Seattle, Wash.	General	450	1,886	1,130
Florencia	15	7 33	17	11 20	17	19 20	18	8 00	British	Atlas S. S. Co.	225.0	38.0	17.3	Antwerp, Belgium	Shanghai, China	Whisky	1,573	10,802	7,595
San Felipe	17	7 25	17	11 30	17	20 00	17	21 15	British	Royal Mail Line, Ltd.	485.0	62.0	18.11	Rotterdam, Holland	Portland, Oreg.	Ballast	6,580	4,828	
Brompton	17	9 30	17	13 53	17	20 48	17	22 28	Norwegian	Canadian Transp. Co.	387.8	54.2	14.8	Cardiff, Wales.	Vancouver, B. C.	General	1,789	27,813	20,118
Manor	17	7 25	17	11 20	17	19 20	18	8 00	British	Dollar Line	615.0	81.0	28.0	New York, N. Y.	Manila, P. I.	General	2,633	24,506	17,565
Lockhartine	17	21 40	18	6 30	18	15 23	18	16 20	American	Empire Shipping Co.	421.0	54.0	14.6	S. Shields, Eng.	Vancouver, B. C.	Ballast	341	9,633	6,998
Stanford	18	5 10	18	7 15	18	14 32	19	00 37	American	Panama-Pacific Line	574.4	80.3	27.0	New York, N. Y.	San Francisco, Calif.	General			
President	17	22 35	18	7 25	18	15 29	18	16 20	British	Furness, Withy & Co.	435.0	60.6	17.0	Manchester, Eng.	Vancouver, B. C.	General			
Cooldige	17	21 40	18	6 30	18	15 23	18	16 20	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Somerby	17	21 40	18	6 30	18	15 23	18	16 20	British	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
California	18	5 10	18	7 15	18	14 32	19	00 37	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Pacific Ex-	17	22 35	18	7 25	18	15 29	18	16 20	British	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
porter	17	22 35	18	7 25	18	15 29	18	16 20	British	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Breckenridge	15		18	8 45	18	17 28	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
No. 148	15		18	8 45	18	17 28	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Biddle, No. 151	15		18	8 45	18	17 28	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Barney, No. 149	15		18	8 50	18	17 38	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Blakely	15		18	8 50	18	17 38	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
No. 150	15		18	8 50	18	17 38	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Dalgreen	15		18	8 50	18	16 21	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
No. 157	15		18	8 50	18	16 21	19	16 25	American	U. S. Navy	310.0	31.0		Norfolk, Va.	Los Angeles, Calif.	Ballast			
Doric Star	18	10 45	18	10 55	18	17 58	18	19 00	British	Blue Star Line	500.0	64.0	18.0	N. Shields, Eng.	Vancouver, B. C.	Ballast	11,673	8,143	
Taketoyo Maru	18	12 35	18	12 45	18	19 50	18	21 10	Japanese	Nippon Yusen Kaisha	445.0	58.0	23.8	Baltimore, Md.	Kobe, Japan	Cotton, general	7,049	7,972	5,687
Floar	18	12 45	18	12 55	18	20 38	19	1 17	American	Calmar Line	410.5	54.2	18.0	Baltimore, Md.	Seattle, Wash.	Steel, general	3,841	6,804	4,655
Chateau	18	8 15	18	14 18	18	21 12	19	3 40	American	U. S. Army	437.0	55.0	22.6	New York, N. Y.	Balboa, C. Z.	General	212	6,823	4,797
Thierry	18	13 55	18	14 05	18	22 15	19	3 40	British	R. Dale & Co.	412.6	55.5	16.4	S. Shields, Eng.	Vancouver, B. C.	General	2,623	7,216	4,912
Maibritton	17	14 05	18	14 37	18	23 50	19	4 55	British	Pacific Steam Nav. Co.	406.0	54.0	18.3	Hull, England	Valparaiso, Chile	General			
La Paz	18		18		18	8 31			American	U. S. Army	64.0	17.3		Cristobal, C. Z.	Gatun, C. Z.	Ballast			
Lieut. Wilson	18		18		18	8 31			American	U. S. Army	64.0	17.3		Cristobal, C. Z.	Gatun, C. Z.	Ballast			
B. Gailther	18		18		18	8 31			American	U. S. Army	64.0	17.3		Cristobal, C. Z.	Gatun, C. Z.	Ballast			
Bonington	18	15 40	18	18 35	19	11 57	19	12 50	British	Canadian Transp. Co.	405.0	55.5	14.6	Hull, England	Vancouver, B. C.	Coal	500	7,042	5,208
Court	19	5 50	19	6 15	19	13 08	19	18 12	American	U. S. Navy	550.0	53.0		Boston, Mass.	Los Angeles, Calif.	Ballast			
Trenton	18	23 45	19	7 20	19	13 15	19	16 25	British	Sir R. Roper & Co.	435.0	55.6	14.0	S. Shields, Eng.	Vancouver, B. C.	Ballast	6,884	5,130	
Yearby	18	23 45	19	7 20	19	13 15	19	16 25	American	U. S. Navy	180.0	33.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Chevyuk	19	2 15	19	8 35	19	15 55	19	17 05	British	Common Brothers	420.0	54.0	18.3	Newcastle, Eng.	Vancouver, B. C.	Ballast	6,298	4,576	
Kurdistan	19	2 15	19	8 35	19	15 55	19	17 05	British	Common Brothers	420.0	54.0	18.3	Newcastle, Eng.	Vancouver, B. C.	Ballast			
Gingale	19	2 15	19	8 35	19	15 55	19	17 05	British	Common Brothers	420.0	54.0	18.3	Newcastle, Eng.	Vancouver, B. C.	Ballast			
Prince	19	6 15	19	8 40	19	16 47	19	18 20	British	Prince Line	458.0	60.0	27.0	New York, N. Y.	Singapore, Str. Set.	General, cotton	6,117	9,283	6,401
Tokai Maru	19	3 05	19	9 30	19	17 36	19	19 00	Japanese	Osaka Shosen Kaisha	446.0	60.0	24.3	Boston, Mass.	Shanghai, China	General	5,191	8,982	6,274
Mantanzas	17	19 12	19	12 10	19	18 51	20	1 09	German	Grace Line	216.5	32.9	13.2	Cristobal, C. Z.	Guayaquil, Ecuador	General	453	1,132	741
Tuscaloosa City	19	13 40	19	13 50	19	20 58	19	22 20	American	Ishihara S. S. Lines	424.0	56.0	16.6	Baltimore, Md.	Honolulu, T. H.	General	3,212	7,611	5,450
Panama	19	14 35	19	14 50	19	21 50	19	23 00	American	Amer-Hawaiian Line	407.7	53.7	19.7	Boston, Mass.	Portland, Oreg.	General	1,513	7,093	5,065
Launch	19		19		19	9 30			American	U. S. Navy				Cristobal, C. Z.	Gatun, C. Z.	Ballast			

* Tanker. * Motor ship. * Transport. * Launch. * Submarine. * Destroyer. * Cruiser.

* Paper, coffee, and general. * Coke, coffee, and general.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Nietheroy President	12	23 00	13	6 14	13	6 14	British	Royal Mail Line, Ltd.	450 2	58 0	24 1	N. Westm'er, B. C.	Hamburg, Germany	General.	5,857	8,874	6,558
Wilson	13	6 21	13	7 30	13	7 30	American	Dollar Line.	516 5	72 2	30 0	Manila, P. I.	New York, N. Y.	General.	6,444	15,286	10,568
Baron Blyths- wood	12	20 15	13	8 28	13	16 31	British	H. Hogarth & Sons	350 7	50 2	21 0	Chincho Is., Peru	Jacksonville, Fla.	Gum.	5,000	4,206	3,101
Felix Tassig.	13	9 20	13	10 11	13	17 30	American	McCormick & Sons	395 0	55 1	29 0	Portland, Ore.	New York, N. Y.	General.	7,425	7,086	4,904
Barneveld	13	12 30	13	13 19	13	20 53	Dutch	Royal Neth. S. S. Co.	400 0	58 0	26 0	Valparaiso, Chile	Hamburg, Germany	General.	8,227	7,520	5,980
Alaskan	13	14 15	13	15 00	13	21 55	American	Amer-Hawaiian Line.	415 0	53 7	20 0	Portland, Ore.	Boston, Mass.	General.	6,811	7,380	5,339
Tuira	13	13	13	8 53	13	14 19	Panama	A. Valdez	64 2	20 1	5 0	Panama Bay, R. P.	Cristobal, C. Z.	Bananas.	67	78	49
Real	13	13	13	18 26	14	18 20	Panama	Hans Elliot	62 2	17 1	5 0	Panama Bay, R. P.	Cristobal, C. Z.	Bananas.	35	45	22
American Star.	12	21 15	14	6 27	14	16 40	American	Nelson S. S. Co.	386 8	52 2	25 2	Pt. Angeles, Wash.	New York, N. Y.	Lumber, general.	6,777	5,699	4,167
San Lorenzo	14	13 00	14	13 45	14	17 55	Panama	Hans Elliot	63 0	16 3	6 0	Panama Bay, R. P.	Cristobal, C. Z.	Bananas.	25	48	27
Atlanta City	14	13 00	14	13 45	14	20 50	American	Isthmian S. S. Lines	424 2	56 2	27 0	Panama Bay, R. P.	Amvmonth, Eng.	Grain, general.	7,650	7,611	5,450
Orazio	14	13 45	14	16 50	15	11 20	Italian	Italia-America S. S. Co.	482 8	61 8	24 1	Valparaiso, Chile	Genoa, Italy	General.	2,410	12,977	9,373
Virginia	14	13 20	15	6 27	15	13 40	American	Panama-Pacific Line.	586 4	80 3	29 0	San Francisco, Cal.	New York, N. Y.	General.	8,183	25,254	18,170
Canada	14	19 40	15	7 18	15	15 35	Swedish	Johnson Line.	440 0	56 0	25 4	Honolulu, T. H.	Gothenburg, Swed.	Wheat, fruit.	7,972	7,476	5,485
Walter A.	15	6 49	15	8 15	15	16 30	American	Luckenbach Line.	446 5	56 1	31 0	Seattle, Wash.	Boston, Mass.	General.	8,013	8,785	6,567
Trondanger	15	8 20	15	9 06	15	16 50	Norwegian.	Interocean S. S. Co.	404 4	61 2	28 0	Vancouver, B. C.	Rotterdam, Holland	Grain, general.	8,586	9,345	6,968
Pont Caleta	15	12 40	15	13 17	15	20 00	American	Gulf-Pacific Line.	386 8	52 2	22 0	Portland, Ore.	Tampa, Fla.	General.	5,149	5,708	4,131
Pacific	15	14 50	15	15 29	15	22 05	British	Furness, Withy & Co.	435 9	60 2	27 0	Vancouver, B. C.	Glasgow, Scotland	General.	7,990	9,644	6,967
Conet	15	15 20	15	16 00	15	21 30	American	Standard Vacuum Corp.	480 5	66 0	29 0	Los Angeles, Calif.	New York, N. Y.	Fuel distillate.	13,750	9,820	6,750
Retawing	15	19 40	15	6 08	16	14 20	British	Gray & Wickens	33 5	9 3		Minchoes Lake	Bahoa, C. Z.	Ballast.	11	7	7
Canadollie	15	19 40	16	6 08	16	14 20	British	Imperial Oil Co.	528 0	68 2	31 0	Talara, Peru	Halifax, N. S.	Crude oil.	15,900	11,556	6,772
Witell	16	5 30	16	7 16	16	15 40	German	North German Lloyd	449 6	58 3	25 0	Vancouver, B. C.	Breuen, Germany.	General.	7,044	7,816	5,755
Canadian	16	12 30	16	13 12	16	21 05	British	Can. Nat. Steamships	400 0	52 4	15 0	Malbourne, Aus'lia.	Halifax, N. S.	General.	1,233	5,956	4,172
Mexican	16	13 45	16	14 16	16	21 55	American	Amer-Hawaiian Line.	472 3	57 2	28 0	Tacoma, Wash.	Boston, Mass.	Lumber, general.	9,882	9,258	6,944
Corro	16	14 55	16	15 36	16	23 15	German	Hamburg-American Line.	427 2	34 4	12 0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	632	1,372	1,011
Ranura	16	19 00	17	6 24	17	13 25	British	N. Z. Shipping Co.	485 0	62 3	27 0	Auckland, N. Z.	London, England	Frozen, general.	6,310	11,911	8,994
Hondolach	16	20 20	17	7 15	17	15 15	British	Wm. Thomson & Co.	410 6	54 0	25 0	Vancouver, B. C.	Hull, England	General.	8,137	6,221	4,257
Willmoro	17	00 35	17	8 11	17	16 25	American	Williams S. S. Corp.	390 0	54 2	27 0	Seattle, Wash.	Albany, N. Y.	Lumber, general.	7,505	6,162	4,433
Wilhelm A. Re-	17	00 35	17	9 04	17	17 35	Danish	Anglo-American Oil Co.	525 6	66 4	29 3	Lobitos, Peru	Fawley, England	Crude oil.	15,585	12,171	8,592
Kurama Maru	17	6 25	17	9 48	17	18 05	Japanese	Kokusai Kisen Kaisha.	438 0	58 0	22 0	Manila, P. I.	Boston, Mass.	General.	7,061	8,252	5,969
Manizales	17	7 40	17	10 56	17	19 12	German	Grace Line	216 5	39 9	16 0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	1,125	1,132	741
Saratoga	17	8 45	17	10 58	17	20 25	British	International Co.	544 0	66 6	31 0	Talara, Peru	Hull, England	Gasoline.	14,966	12,207	8,543
Winipeg	17	11 05	17	12 57	17	21 55	French	French Line	473 4	59 8	26 3	Vancouver, B. C.	Corbeaux, France.	General.	6,856	10,619	7,592
Pollux	17	12 55	17	13 41	17	23 00	Swedish	Anglo Saxon Pet. Co.	482 6	61 8	28 0	Los Angeles, Calif.	St. Louis, Mo.	Store oil.	12,218	8,991	6,325
Liberator	14	12 15	18	6 06	18	13 55	American	Ripley S. S. Co.	410 0	56 0	23 0	Cebu, P. I.	New Orleans, La.	General.	6,598	8,204	6,219

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	To—
San Vicente.....	18 2 30 18	7 04	18 17 45	American	Quaker Line.	410 5	54 3 25 3
Lighthouse.....	18 11 00 18	11 47	18 19 00	American	The Texas Co.	416 8	56 1 27 0
Toba Maru.....	18 11 00 18	12 26	18 20 05	Japanese	Nippon Yusen Kaisha.	445 0	58 0 21 0
Granville.....	18 14 30 18	15 17	18 22 55	19 1 10	Fred Olsen Line.	426 4	58 5 36 0
Viking Star.....	18 20 05 19	6 26	19 13 50	19 13 50	Blue Star Line.	400 0	52 5 13 5
Salvador.....	18 20 05 19	6 49	19 14 50	19 13 50	Pacific Steam Nav. Co.	215 0	53 5 13 5
Edna.....	18 18 55 19	7 50	19 15 00	19 15 00	Bernardini Arnaldo.	418 9	53 9 20 0
John Bakke.....	18 21 35 19	8 51	19 17 00	19 17 00	W. L. Conyn & Sons.	300 8	54 9 25 3
Empire Arrow.....	19 1 00 19	9 13	19 18 25	19 18 25	Stand. Vac. Transp. Co.	485 0	52 9 27 0
San Anselmo.....	19 4 30 19	10 05	19 19 25	19 19 25	Quaker Line.	410 5	54 3 25 3
Salma.....	19 5 45 19	10 44	19 20 50	19 22 40	Anglo Saxon Pet. Co.	404 5	58 0 21 0
Sun.....	19 7 05 19	11 15	19 21 05	19 23 05	Sun Oil Co.	480 6	60 0 25 0
Min.....	19 8 10 19	12 18	19 23 05	19 23 05	Sandy & Coy.	400 4	53 1 29 0
Point Ancha.....	17 8 00 19	15 25	20 11 30	21 1 15	Swayne & Hoyt.	379 9	53 0 19 0
Cortona.....	19 15 35 19	18 35	20 12 10	21 12 10	Donaldson Line.	414 4	55 7 26 0

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CHRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	To—
November 13.....	Palatia.....	Hamburg-American Line.	Port Limon, Costa Rica.	November 13.....	Santa Marta.	United Fruit Co.	New York via waypts.
November 13.....	No. 9688 ¹⁷	Pan American Airways.	San Salvador via waypts.	November 13.....	Genevieve Lykes.	Lykes Brothers S. S. Co.	Gibara, Cuba.
November 13.....	No. 945-M ¹⁷	Pan American Airways.	Talara via waypts.	November 13.....	Overton.....	U. S. Navy.	Tete, Honduras.
November 14.....	Veragua.....	Port Limon, Costa Rica.	Liverpool via waypts.	November 14.....	No. 669-M ¹⁷	Pan American Airways.	Barraquilla, Colombia.
November 14.....	Wanderer.....	T. & J. Harrison	Medellin, Colombia.	November 14.....	Palatia.....	Hamburg-American Line.	Europe via West Indies.
November 14.....	Wanderer.....	Uraba, Medellin & Cent. Airways	Barraquilla, Colombia.	November 14.....	Veragua.....	United Fruit Co.	New York via Habana.
November 14.....	No. 669-M ¹⁷	Pan American Airways.	New York, N. Y.	November 14.....	Wanderer.....	T. & J. Harrison	New Orleans, La.
November 14.....	Marinique.....	Colombian S. S. Line.	Colon, Rep. of Panama.	November 14.....	Anacuena ¹⁸	A. Tagaropolos.	Colon, Rep. of Panama.
November 14.....	Anacuena ¹⁸	Royal Netherlands S. S. Co.	Amsterdam via waypts.	November 15.....	Marinique.....	Colombian S. S. Line.	New York via waypts.
November 15.....	Cynussea.....	Hamburg-American Line.	Amsterdam via waypts.	November 15.....	Juan S. Eleano.	Spanish S. S. Line.	Barcelona via waypts.
November 15.....	Orinoco.....	New York via waypts.	New York via waypts.	November 15.....	No. 144-M ¹⁷	Pan American Airways.	Talara via waypts.
November 16.....	No. 9685 ¹⁷	Pan American Airways.	San Salvador via waypts.	November 15.....	No. 9688 ¹⁷	Pan American Airways.	San Salvador via waypts.
November 16.....	No. 300-N ¹⁷	Pan American Airways.	Chialayo via waypts.	November 16.....	Cynussea.....	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
November 16.....	Cristobal.....	Panama R. R. S. S. Line.	New York via Haiti.	November 16.....	Orinoco.....	Hamburg-American Line.	Port Limon, Costa Rica.
November 17.....	No. 639-M ¹⁷	Pan American Airways.	Miami via waypts.	November 17.....	Columbus.....	North German Lloyd	New York via waypts.
November 17.....	Atlantida.....	Standard Fruit & S. S. Co.	Liverpool via waypts.	November 17.....	Vetma Lykes.	Lykes Bros. S. S. Co.	San Domingo via waypts.
November 18.....	Tolosa.....	United Fruit Co.	New Orleans, La.	November 17.....	No. 669-M ¹⁷	Pan American Airways.	Miami via waypts.
November 18.....	Carate ¹⁹	U. S. Government.	Avonmouth via waypts.	November 17.....	No. 145-M ¹⁷	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
November 18.....	Quirigua.....	U. S. Government.	San Juan, Puerto Rico.	November 18.....	Dakarlan.....	Leyland S. S. Line.	Kingston, Jamaica.
November 18.....	Uraba, Medellin & Cent. Airways	Uraba, Medellin & Cent. Airways	New York via waypts.	November 18.....	No. 945-M ¹⁷	Pan American Airways.	Chialayo via waypts.
November 18.....	A. Tagaropolos.	Colon, Rep. of Panama.	Colon, Rep. of Panama.	November 18.....	Carate.....	Elders & Pyfies, Ltd.	Avonmouth via waypts.
November 19.....	Anacuena I. ¹⁸	P. W. Hamilton.	Colon, Rep. of Panama.	November 18.....	Tolosa.....	United Fruit Co.	Port Limon, Costa Rica.
November 19.....	Laucha.....	15 Launch.	15 Launch.	November 18.....	No. 9685 ¹⁷	A. Tagaropolos.	New Orleans and waypts.
November 19.....	13 Motor schooner.	13 Motor schooner.	13 Motor schooner.	November 19.....	No. 9685 ¹⁷	Pan American Airways.	Colon, Rep. of Panama.
November 19.....	14 Motor ship.	14 Motor ship.	14 Motor ship.	November 19.....	No. 9685 ¹⁷	Pan American Airways.	San Salvador via waypts.

* Other than ships passing through the Canal.

MOVEMENTS OF OCEAN VESSELS.—Continued.

PORT OF CRISTOBAL.—Continued.					* DEPARTURES.		
* ARRIVALS.		PORT OF BALBOA.					
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
November 19.	Crynssen.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	November 19.	No. 145-M	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
November 19.	Skada.	United Fruit Co.	New York via Kingston.	November 19.	Atlantida.	Standard Fruit & S. S. Co.	New Orleans via waypts.
.....	.....	.....	.....	November 19.	Crynssen.	Royal Netherlands S. S. Co.	Amsterdam via waypts.
.....	.....	.....	.....	November 19.	Annetta I.	P. W. Hamilton.	Colon, Rep. of Panama.
November 15.	Olympic	John Zuanich.	Los Angeles, Calif.	November 14.	Hermosa	Wm. J. Maggio.	Los Angeles, Calif.
November 18.	Cuzco.	Grace Line.	Seattle, Wash.	November 17.	Olympic	John Zuanich.	Los Angeles, Calif.
.....	.....	.....	.....	November 19.	Cuzco.	Grace Line.	Valparaiso, Chile.
20 Air mail carrier.	21 Motor boat.	22 Motor ship.	23 Fishing boat.	24 Tug.	* Other than ships passing through the Canal.		

Official Circulars.

Acting Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., November 21, 1932.

To all concerned.—Effective November 23, 1932, and during my absence from the Isthmus, Lieut. Col. C. S. Ridley, U. S. A., Engineer of Maintenance, will act as Governor.

J. L. SCHLEY,
Governor.

President and Second Vice President of Panama Railroad Company.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., November 14, 1932.

To all concerned.—Lieut. Col. Julian L. Schley, U. S. A., Governor of The Panama Canal, has been unanimously elected by the Board of Directors of the Panama Railroad Company as President of the Company succeeding Gen. Harry Burgess, U. S. A., resigned.

Lieut. Col. Clarence S. Ridley, U. S. A., has been unanimously elected Second Vice President vice Lieutenant Colonel Schley.

C. A. McILVAINE,
Executive Secretary.

Duties of President of Panama Railroad Company.

PANAMA RAILROAD COMPANY,
PANAMA RAILROAD STEAMSHIP LINE,
BALBOA HEIGHTS, C. Z., November 21, 1932.

To all concerned.—Effective November 23, 1932, and during my absence from the Isthmus, Lieut. Col. C. S. Ridley, U. S. A., 2d Vice President, will perform such duties of the President as relate to the operation of the Company on the Isthmus.

J. L. SCHLEY,
President.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 80 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Comparison of Canal Traffic in October, 1932, with October Traffic in Previous Years.

Commercial traffic through the Panama Canal during the month of October, 1932, with net tonnage (Panama Canal measurement) amounting to 1,988,133, and cargo tonnage of 1,582,261, was the lowest October traffic with respect to net tonnage since 1925, and with respect to cargo tonnage since 1922. Transits showed a slight gain over October of 1931, which had the lowest transits since 1922.

In comparison with October, 1931, traffic for the past month increased by 4 transits, or 1.0 per cent; declined 93,467 net tons, or 4.5 per cent, and 180,409 cargo tons, or 10.2 per cent. In comparison with 1930, there was a decrease of 123 transits, or 23.8 per cent; 596,027 net tons, or 19.4 per cent; and 812,149 cargo tons, or 26.4 per cent.

In the table below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of October each year from 1914 to 1932, inclusive, and for comparison, the monthly averages for the corresponding fiscal year ending on June 30 following:

Calendar year.	Month of October.			Fiscal year.	Average per month for fiscal year.		
	Commercial transits.	Panama Canal net tonnage.	Tons of cargo.		Commercial transits.	Panama Canal net tonnage.	Tons of cargo.
1914.....	^a 83	322,074	425,095	1915.....	^a 102	361,197	465,567
1915.....	(^a)			1916.....	63	199,687	257,843
1916.....	155	482,582	616,848	1917.....	150	483,213	588,213
1917.....	171	522,712	601,392	1918.....	172	547,839	627,669
1918.....	190	552,725	657,597	1919.....	169	510,416	576,385
1919.....	196	670,100	705,881	1920.....	206	712,170	781,208
1920.....	238	935,579	991,066	1921.....	241	951,323	966,601
1921.....	255	1,069,554	985,775	1922.....	228	951,455	907,075
1922.....	294	1,310,392	1,445,863	1923.....	331	1,550,482	1,630,656
1923.....	427	2,139,475	2,127,567	1924.....	436	2,179,073	2,249,559
1924.....	393	1,923,950	2,017,980	1925.....	389	1,904,596	1,996,370
1925.....	410	1,955,485	2,009,171	1926.....	433	2,064,549	2,169,787
1926.....	445	2,124,519	2,374,711	1927.....	456	2,185,651	2,312,351
1927.....	567	2,585,752	2,717,646	1928.....	538	2,454,886	2,469,226
1928.....	557	2,515,380	2,582,477	1929.....	534	2,468,483	2,555,250
1929.....	564	2,749,949	2,845,643	1930.....	515	2,498,385	2,502,519
1930.....	517	2,584,160	2,394,410	1931.....	461	2,316,012	2,090,233
1931.....	390	2,081,600	1,762,670	1932.....	376	1,968,738	1,650,667
1932.....	394	1,988,133	1,582,261	(^a)	355	1,852,025	1,494,685

^a Canal opened August 15, 1914.

^a Average for 10½ months of fiscal year ended June 30, 1915.

^b Canal closed on account of slides.

^c Average first 10 months calendar year 1932.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending November 19, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Santa Clara.....	Grace Line.....	November 11	November 11	196	200
American Star.....	Nelson Line.....	November 12	November 14	667	
Ludington.....	U. S. Army.....	November 13	November 16	538	5
Liberator.....	Lykes Bros.-Ripley S. S. Co.....	November 14	November 18		1,400
U. S. Grant.....	U. S. Army.....	November 15	November 16	35	3
Remuera.....	New Zealand Shipping Co.....	November 16	November 17	21	
Point Ancha.....	Swayne & Hoyt.....	November 17	November 19	1,140	
California.....	Panama-Pacific Line.....	November 18	November 18	6	
Cuzco.....	Grace Line.....	November 18	November 19	419	
La Paz.....	Pacific Steam Navigation Co.....	November 18	November 19		30
Manizales.....	Grace Line.....	November 19	November 20		108
Nuevo Panama.....	Hans Elliot.....	November 19	November 20	85	

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending November 19, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Durazzo.....	Hamburg-American Line.....	.....	November 14.....	.....	115
Velma Lykes.....	Lykes Brothers.....	.....	November 16.....	.....	83
Nuevo Panama.....	Hans Elliot.....	.....	November 13.....	.....	116
Juan S. Elcano.....	Spanish S. S. Line.....	.....	November 14.....	.....	329
Santa Marta.....	United Fruit Co.....	.....	November 13.....	.....	404
Genevieve Lykes.....	Lykes Brothers.....	November 12.....	November 12.....	458	(²)
President Wilson.....	Dollar Line.....	November 13.....	November 13.....	660	(²)
Barneveld.....	Royal Netherlands S. S. Co.....	November 13.....	November 13.....	150	4
Palatia.....	Hamburg-American Line.....	November 13.....	November 14.....	65	213
Wanderer.....	T. & J. Harrison.....	November 14.....	November 14.....	194	(²)
Real.....	Hans Elliot.....	November 14.....	November 14.....	(¹)	22
Axel Johnson.....	Johnson Line.....	November 14.....	November 15.....	160	135
Martinique.....	Colombian S. S. Line.....	November 14.....	November 14.....	199	465
American Star.....	Nelson S. S. Line.....	November 14.....	November 14.....	18	(²)
Veragua.....	United Fruit Co.....	November 14.....	November 14.....	3	514
Crijnsen.....	Royal Netherlands S. S. Co.....	November 15.....	November 16.....	179	29
Canada.....	Johnson Line.....	November 15.....	November 15.....	(¹)	52
Canadian Victor.....	Canadian National Steamships.....	November 16.....	November 16.....	77	365
Cerigo.....	Hamburg-American Line.....	November 16.....	.....	632	.....
Orazio.....	Italian Line.....	November 16.....	November 15.....	3	375
Witell.....	North German Lloyd.....	November 16.....	November 16.....	90	(²)
Orinoco.....	Hamburg-American Line.....	November 16.....	November 16.....	169	32
Wyoming.....	French Line.....	November 16.....	November 17.....	150	68
Cristobal.....	Panama R. R. S. S. Line.....	November 17.....	.....	1,369	.....
President Coolidge.....	Dollar Line.....	November 17.....	November 18.....	(¹)	185
San Felipe.....	Quaker Line.....	November 17.....	November 17.....	72	(²)
Winnipeg.....	French Line.....	November 17.....	November 18.....	63	78
Manizales.....	Grace Line.....	November 17.....	November 19.....	1,262	455
Kurama Maru.....	Kohusai Kisen Kaishi.....	November 17.....	November 17.....	111	(²)
El Paz.....	Pacific Steam Navigation Co.....	November 17.....	November 18.....	38	364
Pacific Exporter.....	Furness, Withy & Co.....	November 17.....	November 17.....	346	100
Lochkatrine.....	Royal Mail Line, Ltd.....	November 17.....	November 17.....	152	45
Atlantida.....	Standard Fruit & S. S. Co.....	November 18.....	November 19.....	210	201
Toba Maru.....	Nippon Yusen Kaisha.....	November 18.....	November 18.....	41	(²)
Quirigua.....	United Fruit Co.....	November 18.....	November 18.....	188	216
Tolca.....	United Fruit Co.....	November 18.....	November 18.....	667	240
Sixola.....	United Fruit Co.....	November 19.....	November 19.....	332	123
Hollywood.....	McCormick S. S. Co.....	November 19.....	.....	100	.....
Crijnsen.....	Royal Netherlands S. S. Co.....	November 19.....	November 19.....	20	124
Tokai Maru.....	O. S. K. Line.....	November 19.....	November 19.....	(²)	56
Salvador.....	Pacific Steam Navigation Co.....	November 19.....	.....	201	.....

¹ No cargo discharged.² No cargo laded.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Density of Water in Balboa and Cristobal Harbors.

Place.	Weight of sea water in ounces per cubic ft.			Rainy season. Average temperature. Degrees F.
	Average.	Maximum.	Minimum.	
Cristobal (between docks 8 and 9).....	1018	1020	1013	84.0
Balboa (dock 18).....	1011	1021	1005	83.0

(NOTE.—The above is based on two months' observations at Cristobal and Balboa. Average taken at 12-foot depth. Minimum occurred after heavy rain at 3-foot depth at Cristobal and 12-foot depth at Balboa. The weight of a cubic foot of fresh water at 85° F. is 995 ounces.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.
PUBLISHED WEEKLY.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., November 30, 1932. No. 18.

Flood Conditions Cause Short Suspension of Traffic.

Heavy rains over the Chagres Valley and Gatun Lake area, which began about 1 p. m. November 27, caused the suspension of Canal traffic at 11.15 a. m. on November 28. Suspension was due both to the current at Gamboa and the use of the lock culverts at Gatun and Pedro Miguel for discharging excess water, in addition to that going over the spillway of Gatun Dam. Partial traffic was resumed in the evening of November 28, and on the following day all waiting vessels were transited. Lock culverts were used again for lake-lowering during the night of November 29–30, but without interference with navigation.

The rise of the Chagres at Alhajuela flooded the pit excavated inside the cofferdam for the laying of concrete for Madden Dam, and it is estimated that the work on the dam will be delayed a few weeks. In order to reduce the damage occasioned by the flood the contractors flooded the pit when it became practically certain the water would rise high enough to flow over the top of the cofferdam, at elevation 117 feet above sea level. Their plant for the reclamation of gravel, situated downstream from the dam site, was damaged considerably.

The flood came in 3 rises or crests, the first on November 27, the second and highest on November 28, and the third on November 29. At its maximum height the Chagres River reached an elevation at the gauging station at Alhajuela of 116.80 feet, at from 3.05 to 3.40 p. m. on November 28; this was 25.8 feet above the low water level of 91 feet. The flow of water at Alhajuela at the time of this crest was estimated as 112,200 cubic feet per second. The height of water at the dam site probably reached 121 feet, or about 4 feet over the top of the cofferdam. The passage which had been left between the cofferdam and the right bank of the river was calculated to handle 60,000 cubic feet per second.

The maximum momentary inflow into Gatun Lake from its entire watershed is estimated to have been approximately 250,000 cubic feet per second. With the use of 13 gates of the spillway and the lock culverts, water was discharged at the rate of about 200,000 c. f. s. The maximum elevation reached by the surface of the lake at Gatun was 86.77 feet, at 9 p. m. on November 27. By beginning the spilling in advance of the arrival of the flood waters, and continuing it between crests, it was possible to prevent excessive rise of the lake although at times the rate of inflow was considerably in excess of the rate of discharge. Use of 13 of the 14 gates of the spillway for simultaneous discharge established a new maximum rate of operation; the greatest number of gates used heretofore was 12, in the flood of November 7 and 8, 1931.

The flood of November, 1931, came in two crests, with a maximum discharge at Alhajuela of about 80,000 c. f. s. The flood of October,

1923, also in two crests, reached an elevation of 117.40 feet at the Alhajuela gauging station, with approximately the same rate of discharge as in the flood of November, 1932. It is believed that the 3-crest movement of November, 1932, involved a greater total run-off than either of the earlier floods.

No important additional slide movements in the banks of the Canal developed as the result of the rains and there was no interference with traffic on the Panama Railroad.

CANAL WORK IN OCTOBER, 1932.

The following is the report of the Acting Governor to the Secretary of War, of Canal work in the month of October, 1932.

BALBOA HEIGHTS, C. Z., November 23, 1932.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of October, 1932:

TRANSITS AND TOLLS.

During the month, 394 commercial vessels and 9 small nonseagoing launches under 20 tons transited the Canal. In addition to these, there were 40 vessels belonging to the United States Army and Navy, on which no tolls were collected, making a total of 443 transits for the month, or a daily average on all traffic of 14.29.

Tolls on the 394 commercial vessels amounted to \$1,714,779.06, and on the launches to \$38.55, a total of \$1,714,817.61, or a daily average on all traffic of \$55,316.70. The increase in transits during September, after four successive months of declining traffic, was continued in October with a gain of 41 transits over the previous month, an increase of 11.6 per cent, and represents a gain of 25.5 per cent over this year's low point in traffic, which occurred in August with 314 transits. The increased traffic of the last two months is ascribed principally to the seasonal movement of grains and fruits from the Pacific northwest.

Commercial traffic passing through in the past month in comparison with that in October, 1931, showed an increase of 4 transits, or 1.0 per cent, and a decrease of \$108,871.68 in tolls, or 6.0 per cent.

In comparison with the first 10 months of the calendar year 1931, commercial traffic this year shows a decrease of 15.7 per cent in transits; 14.0 per cent in net tonnage (Panama Canal measurement); 20.6 per cent in cargo carried; and 15.1 per cent in tolls collected; in comparison with the first 10 months of the calendar year 1930, there was a decline of 27.8 per cent in transits; 24.1 per cent in net tonnage (Panama Canal measurement); 36.2 per cent in cargo tonnage; and 26.1 per cent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of October in the two preceding years and in 1932 are shown in the following tabulation:

	October, 1930.	October, 1931.	October, 1932.
Commercial vessels	517	390	394
Launches (under 20 tons)	7	9	9
Noncommercial vessels:			
United States Government	39	26	40
Panamanian Government	2		
Vessels for repairs	1	4	
Total	566	429	443

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun	2	2	4
Pedro Miguel	23	23	46
Miraflores	24	25	49
Total	49	50	99

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, for the commercial traffic transiting the Canal each month from the beginning of the calendar year 1932, to the end of October, 1932, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January...	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February...	431	358	2,134,866	1,878,177	1,930,219	1,645,393	1,915,902.78	1,647,797.06
March.....	439	363	2,211,934	1,864,896	1,915,507	1,643,952	1,964,434.22	1,645,366.81
April.....	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,634.67
May.....	428	357	2,184,959	1,956,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June.....	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,848,638.45	1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September..	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October.....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
Total.....	4,209	3,548	21,525,349	18,520,276	18,821,770	14,946,848	19,010,915.11	16,146,865.94

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for October in the years 1930, 1931, and 1932, and comparison with the monthly averages for the fiscal year 1932:

	October, 1930.	October, 1931.	October, 1932.	Average per month for fiscal year 1932.
Number of vessels.....	517	390	394	376
Panama Canal net tonnage.....	2,584,160	2,081,600	1,988,133	1,968,785
United States net tonnage.....	1,932,164	1,510,109	1,430,129	1,433,982
Registered gross tonnage.....	3,187,500	2,525,582	2,363,244	2,397,578
Registered net tonnage.....	1,935,296	1,529,913	1,445,472	1,448,846
Tolls.....	\$2,288,982.08	\$1,823,650.74	\$1,714,779.06	\$1,725,614.75
Tons of cargo carried.....	2,394,410	1,762,670	1,582,261	1,650,667

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per month for fiscal year 1932.
	October, 1930.	October, 1931.	October, 1932.	
Number of transits.....	16.68	12.58	12.71	12.31
Panama Canal net tonnage.....	83,360	67,148	64,133	64,550
Tolls.....	\$73,838.13	\$58,827.44	\$55,315.45	\$56,577.53
Tons of cargo.....	77,239	56,860	51,041	54,120

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of October in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for fiscal year 1932.
	October, 1930.	October, 1931.	October, 1932.	
Panama Canal net tonnage.....	5,028	5,337	5,059	5,254
United States net tonnage.....	3,759	3,872	3,639	3,827
Registered gross tonnage.....	6,201	6,476	6,013	6,398
Registered net tonnage.....	6,163	3,923	3,678	3,866
Tolls.....	\$4,427.43	\$4,676.03	\$4,352.23	\$4,595.51
Tons of cargo (including vessels in ballast).....	4,658	4,520	4,026	4,405
Tons of cargo (laden vessels only).....	5,742	5,200	5,023	5,154

NOTE—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fifteen nationalities were represented in the commercial traffic through the Canal in October, 1932, in comparison with 12 in the previous month, and 16 for October, 1931. Vessels of the United States registry, with 140, led in the number of transits in the past month, while those flying the British flag, with 101, were second. Vessels of these two nationalities made up 61.2 per cent of the total transits for the month. Vessels of Norwegian and German registry were next in numerical importance, with 34 and 32, respectively.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of October, 1932, was 1,582,261 tons, a decrease of 180,409 tons, or 10.2 per cent, in comparison with October, 1931. Cargo from the Atlantic to the Pacific aggregated 372,459 tons in October, 1932, compared with 335,984 tons in the previous month, and 481,635 in October, 1931. From the Pacific to the Atlantic, cargo amounted to 1,209,802 tons, as compared with 1,011,160 tons in the previous month, and 1,281,035 in October, 1931. The combined cargo movement in October, 1932, surpassed the previous month's total by 235,117 tons, or 17.5 per cent.

From the Atlantic to the Pacific, manufactures of iron and steel formed the leading commodity, with shipments totaling 42,947 tons, followed by mineral oils with 34,575 tons, cotton with 34,243 tons, sulphur with 25,458 tons, and paper with 17,941 tons. Compared with the previous year, increases occurred in shipments of five leading commodities, the most important of which were corn, sulphur, and tobacco. Decreases occurred in shipments of cotton, manufactures of iron and steel, phosphates, and mineral oils.

From the Pacific to the Atlantic, mineral oils formed the leading commodity, with shipments of 263,213 tons. This was followed by wheat, with 194,269 tons, canned goods with 142,207 tons, lumber with 130,428 tons, sugar with 127,028 tons, and dried fruits with 65,996 tons. Compared with October, 1931, substantial increases were made in shipments of wheat, canned goods, sugar, barley, and guano. However, these gains were offset by heavy losses in shipments of lumber, nitrates, and ores. Nitrate shipments, which were totally discontinued during September, were resumed in October with 1,770 tons, a loss of over 90,000 tons compared with the previous year. Shipments of ores, principally iron, from South America, were also close to the vanishing point, aggregating only 4,996, compared with 82,816 in October, 1931.

There was an increase of 36,475 tons, or 10.9 per cent, in the Atlantic to Pacific movement in October, 1932, compared with the previous month, and an increase of 198,642 tons, or 19.6 per cent in the Pacific to Atlantic movement.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden vessels and \$0.72 per ton for vessels in ballast, computed on the basis of the Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both the Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.891 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.710 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of October, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of the Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian.....	\$4,530.24	\$3,775.20		\$755.04		\$0.720
British.....	430,105.63	453,061.30	\$27,955.62		\$0.870	.715
Danish.....	39,110.00	44,811.00	5,701.00		.873	
Danzig.....	14,756.28	13,158.40		1,597.88	1.074	.720
Dutch.....	45,341.48	51,882.40	6,540.92		.820	.720
French.....	31,807.50	39,590.00	7,782.50		.803	
German.....	81,550.41	97,943.80	16,393.39		.803	.720
Italian.....	27,506.25	34,587.00	7,080.75		.795	
Japanese.....	94,792.90	93,427.00		1,365.90	1.008	.720
Norwegian.....	143,117.43	158,971.40	15,853.97		.818	.717
Panamanian.....	1,393.13	1,149.00		244.13	1.210	.756
Russian.....	3,517.50	3,917.40	399.90		.906	.366
Swedish.....	42,614.73	49,228.40	6,613.67		.808	.720
United States.....	752,530.31	801,897.20	49,366.89		.925	.720
Venezuelan.....	2,105.22	1,761.60		343.62	1.192	.720
Total.....	1,714,779.06	1,854,161.10	143,688.61	4,306.57	.891	.710
Net increase for all traffic.....			139,382.04			

* Includes \$2,532.50 collected on naval vessel at 50 cents per ton displacement.

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$30,471.64
United States-foreign trade.....	18,895.25
Total.....	49,366.89

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in October, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
British.....	.56	1.32	.95
Danish.....	.54	1.68	1.02
Danzig.....		2.03	2.03
Dutch.....	.20	1.62	1.30
French.....	.15	1.17	.68
German.....	.41	1.25	.87
Italian.....	.06	.71	.35
Japanese.....	.66	.83	.74
Norwegian.....	.36	1.58	1.24
Panamanian.....	1.28	1.42	1.36
Swedish.....	.58	1.55	1.33
United States.....	.55	1.27	.95
Venezuelan.....	1.82		1.82
Averages, October, 1932.....	.51	1.32	.96
Averages, October, 1931.....	.55	1.32	.96
Averages, October, 1930.....	.73	1.45	1.14

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of October, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	23	138,683	\$99,851.76	2	5,454	\$3,926.88
Laden.....	5	18,658	20,060.00	24	135,726	142,360.00
All others—						
Ballast.....	46	196,831	140,768.62			
Laden.....	129	704,467	616,388.45	157	784,208	685,284.85

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Noncargo-carrying ships:						
Yachts.....	1	25	\$18.75	2	94	\$69.75
Naval.....				1		2,532.50
Tugs.....	3	174	63.75			
Others.....	1	3,813	3,453.75			
Total.....	208	1,062,651	880,605.08	186	925,482	834,173.98
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	125	649,201	561,962.32	111	558,898	511,275.73
Motor.....	72	409,272	314,951.68	66	366,304	320,053.50
Motor schooner.....	6	166	154.83	6	186	242.50
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	5	4,012	3,536.25	3	94	2,602.25
Total.....	208	1,062,651	880,605.08	186	925,482	834,173.98

Of the 236 steam driven vessels, 154 were oil burning, 71 coal burning, and 11 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of October, 1932. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Auxiliary, miscellaneous.....				1	32,809	\$3,511.25
Cargo ships.....				1	33,454	4,317.50
Destroyers.....				5	15,770	2,885.00
Drag boats.....				2	20	15.00
House boats.....				1	200	150.00
Launches.....	2	20	\$15.00			
Mine sweepers.....	1	950	475.00	3	2,850	1,425.00
Submarines.....	5	4,517	2,258.50	8	7,125	3,562.50
Tankers.....				1	6,210	7,452.00
Tugs.....				1	1,000	500.00
U. S. Army vessels:						
Launches.....	3	30	22.50			
Mine planters.....	2	2,416	1,208.00			
Transports.....	2	9,235	11,543.75	2	11,932	14,915.00
Total.....	15		15,522.75	25		38,733.25

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of October, 1932, carried cargo as follows: Atlantic to Pacific, 870 tons; Pacific to Atlantic, 2,066 tons; total, 2,936 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net) transiting the Canal during the month of October, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	5	31	\$26.85
Pacific to Atlantic.....	4	15	11.70
Total.....	9	46	38.55

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of October, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons	54,155	10,405	64,560
Local cargo shipped..... tons	5,045	291	5,336
Transit cargo arriving..... tons	1,591,799	1,609,143	3,200,942
Transit cargo clearing..... tons	1,571,021	1,606,939	3,177,960
Cargo received for transshipment..... tons	21,488	2,197	23,685
Cargo transshipped..... tons	21,262	1,367	22,629
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	132	34	166
Number of releases issued.....	765	258	1,023
Tons received.....	745	69	814
Tons withdrawn.....	780	111	891
Packages received.....	6,878	685	7,563
Packages withdrawn.....	5,722	770	6,492
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	14		14
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons	2,746		2,746
Coal issued, miscellaneous:			
Panama Canal departments..... tons	51	3	54
U. S. Army, including vessels..... tons	21		21
Individuals and companies..... tons	34	10	44
Transferred to Navy..... tons	13		13
Total sales and issues..... tons	2,865	13	2,878
Coal on hand, October 1, 1932..... tons	34,963		34,963
Coal on hand, November 1, 1932..... tons	32,098		32,098
Coal received from Navy..... tons		13	13
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls	3,125.58	10,580.21	13,705.79
Panama Railroad Company..... bbls	14,577.89	475.91	15,053.80
U. S. Army and Navy..... bbls	542.30	135.77	678.07
Individuals and companies..... bbls		200.64	200.64
Total sales and issues..... bbls	18,245.77	11,392.53	29,638.30
Fuel oil received during October, 1932..... bbls	71,611.96		71,611.96
Fuel oil on hand, November 1, 1932..... bbls	91,921.45	68,132.75	160,054.20
Diesel oil issued during October, 1932..... bbls	203.66	3,116.65	3,320.31
Diesel oil on hand, November 1, 1932..... bbls	2,914.35	21,765.16	24,679.51
Miscellaneous transfers..... bbls	388.80	663.00	1,051.80
Gasoline and kerosene pumped for The Panama Canal..... bbls	2,388.86	5,374.05	7,762.91
Gasoline pumped for individuals and companies..... bbls	1,996.70	44,311.10	46,307.80
Oil pumped for individuals and companies:			
Receipts..... bbls	147,179.79	7,931.00	155,110.79
Issues..... bbls	112,464.93	162,084.33	274,549.26
Oil pumped for U. S. Navy..... bbls	5,043.00	8,413.60	13,456.60
Total fuel oil, gasoline, and kerosene handled..... bbls	359,523.47	243,286.26	602,809.73
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	20	5	25
Measured for Panama Canal net tonnage.....	2	4	6
Re-measured for Panama Canal net tonnage.....	25	2	27
Panama Canal net tonnage corrected.....	2	5	7
U. S. equivalent tonnage corrected.....	8	10	18
Services of harbor equipment:			
Tugs, total operating hours.....	199½	148½	347½
Launches, total operating hours.....	949½	1,120	2,069½
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$6,842.50	\$4,226.25	\$11,068.75
Pilotage.....	13,552.00	5,174.00	18,726.00
Seamen.....	9,428.00	8,224.00	17,652.00
Launch service.....	1,601.50	1,849.50	3,451.00
Wharfage.....	11,103.78	3,400.21	14,503.99
Ships measured.....	10.00	70.00	80.00
Miscellaneous.....	381.50	95.03	476.53
Clearances issued.....	223	209	432
Bills of health issued.....	230	212	442

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal.	437	2,728,502	1,662,271	411	2,495,072	1,525,577
Vessels entering port but not transiting Canal.	54	299,891	169,887	13	51,871	28,332
Vessels transiting Canal and handling passengers and cargo at terminal ports.	102	744,012	448,060	87	619,200	369,047
<i>Ships clearing.</i>						
All vessels, including those transiting Canal.	435	2,717,196	1,655,576	413	2,482,759	1,525,077
Vessels clearing port but not transiting Canal.	55	305,106	172,782	11	44,155	23,570
Vessels transiting Canal and handling passengers and cargo at terminal ports.	102	738,383	444,683	88	606,735	363,969

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First class.	Others.	Total.	First class.	Others.	Total.	First class.	Others.	Total.
Disembarking:									
From Atlantic ports.	868	448	1,316	115	64	179	983	512	1,495
From Pacific ports.	58	54	112	136	315	451	194	369	563
Total disembarking.	926	502	1,428	251	379	630	1,177	881	2,058
Embarking:									
For Atlantic ports.	569	657	1,226	44	264	308	613	921	1,534
For Pacific ports.	87	99	186	166	149	315	253	248	501
Total embarking.	656	756	1,412	210	413	623	866	1,169	2,035
Remaining on board:									
From Atlantic to Pacific ports.	1,244	2,489	3,733				1,244	2,489	3,733
From Pacific to Atlantic ports.				687	1,203	1,890	687	1,203	1,890
From Atlantic to Atlantic ports.	710	201	911				710	201	911
From Pacific to Pacific ports.				21		21	21		21
Total remaining on board.	1,954	2,690	4,644	708	1,203	1,911	2,662	3,893	6,555
Total arriving on Canal Zone.	2,880	3,192	6,072	959	1,582	2,541	3,839	4,774	8,613
Total departing from Canal Zone.	2,610	3,446	6,056	918	1,616	2,534	3,528	5,062	8,590

NOTE—In passengers "remaining on board," those from the Atlantic to Pacific and Pacific to Atlantic are reported only at port on arrival from sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.	186	64	34.4	4,098
Pacific to Atlantic.	208	63	30.3	2,310
Total.	394	127	32.2	6,408

In addition to the foregoing, 48 passenger-carrying vessels called at the port of Cristobal and 6 at Balboa without transiting the Canal, making a total of 181 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of October, 1932, 42 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of October, 1932, together with the total sales in the corresponding month in 1931 and 1930:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$662.77	\$4,313.83	\$7,764.09	\$66.03	\$3,330.64	\$16,137.36
Government vessels.....	182.25	1,733.23	5,751.52	105.02	476.51	8,248.53
P. R. R. vessels.....		266.32	101.04	554.81	19.38	941.55
Total sales, October, 1932...	845.02	6,313.38	13,616.65	725.86	3,826.53	25,327.44
Total sales, October, 1931...	1,021.33	6,741.43	19,077.72	1,097.23	5,075.41	33,013.12
Total sales, October, 1930...	2,579.78	13,869.48	33,901.70	1,090.82	9,776.74	61,218.52
Sales at Balboa to:						
Commercial vessels.....	501.78	3,800.86	6,897.21	181.10	2,652.01	14,032.96
Government vessels.....	349.95	1,616.29	7,162.67	212.20	1,514.76	10,855.87
Total sales, October, 1932...	851.73	5,417.15	14,059.88	393.30	4,166.77	24,888.83
Total sales, October, 1931...	700.50	5,462.29	15,708.55	1,322.52	4,017.76	27,211.73
Total sales, October, 1930...	1,499.36	2,855.67	27,039.05	741.68	13,205.60	45,341.36

The aggregate sales to commercial vessels during the month was \$30,170.32; to Government vessels, \$19,104.40; and to Panama Railroad vessels, \$941.55, making the total sales to all vessels, \$50,216.27. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of October, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial.*			Oct., 1930.	Oct., 1931.	Oct. 1932.
	North.	South.	Total.	North.	South.	Total.			
Gatun.....	180	193	373	12	4	16	521	397	389
Pedro Miguel.....	181	194	375	15	10	25	534	415	400
Miraflores.....	180	192	372	15	9	24	531	410	396
Number of vessels put through locks.									
Gatun.....	186	208	394	47	28	75	583	448	469
Pedro Miguel.....	187	208	395	57	34	91	592	466	486
Miraflores.....	186	208	394	58	37	95	585	461	489

* Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	60	41	41
Panama Canal equipment.....	4	46	49
Launches (under 20 tons measurement).....	11	4	5

The total consumption of water for lockages, maintenance, and loss in leakage was as follows in October, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
Lockages.....	Cubic feet. 1,577,900,000	Cubic feet. 1,297,770,000	Cubic feet. 1,239,310,000
Leakage.....	30,000,000	75,000,000	40,000,000
Maintenance.....			94,200,000
Total, October, 1932.....	1,607,900,000	1,372,770,000	1,373,510,000
Total, September, 1932.....	1,505,790,000	1,235,310,000	1,232,630,000
Total, October, 1931.....	1,698,800,000	1,379,160,000	1,301,010,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of October, 1932, are shown in comparative form in the following tabulation:

	October.		October—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
Discharge of Chagres River at Alhajuela.....	<i>C. f. s.</i> 3,155	<i>C. f. s.</i> 4,082	<i>C. f. s.</i> 9,546	<i>C. f. s.</i> 2,031	<i>C. f. s.</i> 3,639
Maximum momentary discharge for the month.....	13,120	32,400	112,000	1,290	.....
Gatun Lake watershed, total yield.....	8,353	12,999	27,260	8,336	12,281
Gatun Lake watershed, net yield.....	7,747	12,416	26,805	7,719	11,714
Drift on Gatun Lake for lockages and power.....	2,699	2,786	.....	.....	2,698

¹ October 22, 1923.² 10-year average.

The monthly mean discharge of the Chagres River at Alhajuela for October, 1932, was 4,082 c. f. s., which is 12 per cent above the 31-year average of 3,639 c. f. s. The maximum mean discharge on record for October is 9,546 c. f. s. in 1923, and the minimum 2,031 c. f. s. in 1904. The maximum momentary discharge for the month was 32,400 c. f. s. at elevation 103.96 feet on the 26th and the minimum was 2,160 c. f. s. at elevation 92.68 feet on the 2d. The maximum momentary discharge on record for October (1879–1932, inclusive) is 112,000 c. f. s. at elevation 117.42 feet, on October 22, 1923, the minimum (1907–1932, inclusive) is 1,290 c. f. s. at elevation 92.60 feet, on October 17, 1911. There were 3 rises of 5 feet or more at Alhajuela during the month, on the 4th, 22d, and 26th.

Gatun Lake varied in elevation during October from a minimum of 85.43 feet on the 21st to a maximum of 86.17 feet on the 1st, averaged 85.65 feet, and ended the month at elevation 85.72 feet. The total yield of the Gatun Lake watershed was 12,999 c. f. s., which is 6 per cent above the 19-year average of 12,281 c. f. s. The maximum total yield on record for October is 27,260 c. f. s. in 1923 and the minimum is 8,336 c. f. s. in 1930.

Miraflores Lake varied between elevations 55.36 feet on the 21st to 53.06 feet on the 31st, averaged 53.81 feet, and ended the month at elevation 53.10 feet.

SEISMOLOGY.

Two seismic tremors were recorded during the month, on the 2d and 29th, both being of rather close origin.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 6,028,100 kilowatt hours, and the computed water consumption was 4,585,460,080 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 17,300 kilowatt hours, and the fuel oil consumption was 50.91 barrels. Diesel engines were in service five times during the month, four for peak load conditions caused by operation of dry dock pumps, and once for demonstration purposes.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 17 vessels during the month. There were 392 work orders issued during the month, as compared with 382 issued during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of October, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	3	33	31
U. S. Army and Navy.....	6	10	5
Panama Canal equipment.....	1	2	2
At Balboa:			
Commercial.....		7	6
U. S. Army and Navy.....	2	4	3
Panama Canal equipment.....	6	2	6
Total.....	18	58	53
Vessels in dry dock.			
At Cristobal:			
Commercial.....		11	9
U. S. Army and Navy.....	1	7	8
At Balboa:			
Commercial.....		3	2
Panama Canal equipment.....	2	2	4
Total.....	3	23	23

Preliminary work was started on the annual overhaul of the *Gen. Morgan Lewis* and U. S. submarine *S-12*. Work is being carried forward on the *S-15*, U. S. S. *Memphis* and *Overton*.

MUNICIPAL ENGINEERING DIVISION.

In connection with the installation of oil lines to the coaling dock at Cristobal, there were installed 1,500 feet of 16-inch W. I. screw pipe, 4,211 feet of 16-inch victaulic pipe valves, 341 feet of 10-inch screw pipe, 5,891 feet of 6-inch G. I. pipe, 232 feet of 6-inch victaulic pipe size 16-inch valves, 255 pipe hangers, two 10-inch valves, 2 tees, and one 90-degree ell. Work is 85 per cent completed. In connections with 6-inch water line to Palo Seco, a trestle was built at Farfan Beach and pipe unloaded from barge. Work is 26 per cent completed.

Work on a number of improvement projects in the Canal Zone and in the cities of Colon and Panama was carried on. The usual work was performed on streets, roads, and walks, and the water and sewer systems. The amount of water pumped during the month totaled 707,084,250 gallons.

DREDGING DIVISION.

The movement of East Culebra slide extension was more or less continuous during the month, but at a diminishing rate, the full channel depth and width being maintained practically throughout the month. Dredging operations at this slide since October 10 have been confined largely to excavation of the basin, extending 75 feet east of the east prism line, and the removal of the material as it encroached upon this basin area. Some additional material was precipitated into the sliding area by new breaks occurring in back of the previous break line, and also by material washed into the area from sluicing operations of grader No. 3. A total of 186,300 cubic yards of material was removed from this slide, 56,000 yards of which was earth and 130,300 yards rock.

The movement of West Culebra slide on the 450-foot base line showed an average of 1.8 feet toward the Canal between stations 1774 plus 00 and 1794 plus 00. No north or south movement was recorded along this base line.

Heavy rains during the month caused slight surface movement on the following slides: Cucaracha, South Cucaracha, Cucaracha Signal Station, West Lirio, West Barge Repair, Southwest La Pita, Division Office, and East Powderhouse.

The total excavation during October, 1932, was 403,450 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
East and West Culebra slides (excluding extension).....	7,000	10,800	17,800
East Culebra slide extension.....	56,000	120,300	186,300
Project No. 5.....	4,000	37,400	41,400
Project No. 9.....	8,550	18,100	24,650
Maintenance.....	3,500	3,600	7,100
Canal prism, Miraflores Lake—			
Project No. 6.....	75,700	6,000	81,700
Maintenance.....	44,500	.....	44,500
Total.....	197,250	206,200	403,450

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 31 days during the month. A total of 1,508 single trips were made, and 1,040 Panama Canal, 55 U. S. Army, and 10,654 other vehicles, a total of 11,749 were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and the contractors for October was 272 gold and 798 silver employees.

A board of consulting engineers arrived on the Isthmus and inspected the various phases of the work. Their opinions and recommendations were submitted in a preliminary report before they departed for the United States.

Intensive excavation operations were started on blocks 11 and 12; the area within the cofferdam was unwatered on the 3d, and on the 21st the first pour was made in block 11 to elevation 65. Five 3-inch pipes were installed in block 11 and are being progressively extended, for the purpose of measuring uplift pressures. A standard cross-section of the Rio Chagres was taken at the gaging station below the dam for new data in measuring the river flow. A still well for W. S. register was installed in the pool of K-1 for the purpose of tracing the leakage from saddles 10 and 11.

On the 26th, the largest flood of the year occurred, passing 32,500 c. f. s. at the damsite. The crest occurred at noon, reaching the top of the earth levee with a safety margin of about 5 feet for overtopping.

Concrete was poured in blocks 11, 12, 16, 17, 18, and 19, and counterforted wall, upstream apron opposite block 12, and upstream apron opposite blocks 16 to 19, which is 85 per cent completed. The upstream apron opposite block 12 included a base for the timber crib. The concrete poured during the month totaled 12,853.55 cubic yards. Excavation was confined principally to the area inside the levee. Blocks 11 and 12, and the upstream apron opposite block 12, were completed. Excavation on the spillway apron area and cutoff trench below blocks 11 and 12 was nearly completed. There are 7 pumps installed for unwatering purposes, 3 inside the cofferdam sump and 4 outside.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on October 31, 1932, was 24,311, composed of 8,205 Americans, 2,815 of whom were men, 2,583 women, and 2,807 children; 180 Europeans, 72 of whom were men, 27 women, and 81 children; and 15,926 West Indians and other nationalities, 4,216 of whom were men, 2,855 women, and 8,855 children. The total number of persons in quarters on October 31, 1931, was 24,056.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of October 19, 1932, with a comparison of the working force for the preceding month and for October, 1931.

	Total employees.		As of October 19, 1932.		
	October, 1931.	September, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	97	96	56	42	98
Electrical.....	443	341	152	177	329
Municipal Engineering.....	809	638	76	659	735
Lock Operation.....	923	910	231	677	908
Dredging.....	1,148	973	169	837	1,006
Madden Dam.....	297	178	49	134	183
Mechanical.....	1,266	1,197	430	734	1,164
Marine.....	726	637	180	511	691
Fortifications.....	114	86	13	66	79
Total.....	5,823	5,056	1,356	3,837	5,193
Supply Department:					
Quartermaster.....	1,772	1,581	194	1,499	1,693
Commissary.....	1,530	1,460	228	1,236	1,464
Cattle Industry—Plantations.....	97	100	2	98	100
Hotel Tivoli.....	112	99	8	92	100
Hotel Washington.....	96	87	7	79	86
Transportation.....	297	296	74	224	298
Total.....	3,904	3,623	513	3,228	3,741
Accounting Department.....	209	195	190	5	195
Health Department.....	1,103	1,093	275	836	1,111
Executive Department.....	931	926	565	360	925
Total.....	2,243	2,214	1,030	1,201	2,231
Panama Railroad Company:					
General Manager.....	104	99	23	57	80
Transportation.....	333	296	67	230	297
Receiving & Forwarding Agency.....	1,082	592	91	523	614
Coaling Stations.....	108	98			
Total.....	1,627	1,085	181	810	991
Grand total, October, 1931.....	13,597				
Grand total, September, 1932.....		11,978			
Grand total, October, 1932.....			3,080	9,076	12,156

Additions to the gold force on the Isthmus in October, 1932, were as follows: Employed in the United States, 1; employed on the Isthmus, 3; reemployed on the Isthmus, 5; total, 9. Separations from the gold force totaled 7, as follows: Resigned, 2; discharged, 3; retired, 1; died, 1. At the end of the month there were on file 840 applications from residents of the Isthmus for employment on the gold roll.

In the silver force, the employments during the month totaled 363 and separations from the service 182; the number seeking employment was estimated at approximately 3,000.

VITAL STATISTICS.

A total of 153 deaths occurred during the month of October, 1932, among the population of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon (30,000), total population 149,570, which is equivalent to an annual death rate of 12.28 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 23; pneumonia (broncho and lobar), 18; cancer, 12; syphilis, 9; organic diseases of the heart, 7; and nephritis (acute and chronic), 5. There were four deaths from diarrhea and enteritis, two from measles, and one each from leprosy and influenza. There were 28 deaths among nonresidents, which are not included in the above statistics.

There were 332 live births and 14 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 27.76. Deaths among children under one year of age numbered 33, giving an infant mortality rate, based on the number of live births reported, of 99.40.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 126, of whom 18 were employees (10 white and 8 colored), 6 (white) were Madden Dam contractor's employees, 26 were members of employees' families (2 white and 24 colored), 7 were Canal Zone agriculturists, 37 were other civilian nonemployees, and 32 were Army and Navy personnel. Of the 44 employees and members of employees' families, 28 were probably infected outside our sanitated areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There was one death from malaria among residents, a colored child residing in Panama City, who had been visiting several days in Pacora, where the infection was acquired.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$209,436.31, of which \$195,129.83 was for the Department of Operation and Maintenance, and \$14,306.48 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$19,435.82.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenue and expenditures for the month of September, 1932, as compared with September, 1931, with the figures for the first three months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of October at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	September, 1931.	September, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,820,772.60	\$1,598,282.48	\$5,439,661.01	\$4,507,931.75
Other receipts.....	262,557.51	231,697.07	769,429.90	704,821.92
Total transit revenues.....	2,083,330.11	1,829,979.55	6,209,090.91	5,212,753.67
Total transit expenses.....	1,945,525.27	891,012.82	3,159,540.02	2,657,705.27
Net transit revenues.....	1,037,804.84	938,966.73	3,049,550.89	2,555,048.40
Three per cent fixed capital charge.	1,266,569.55	1,272,937.32	3,886,600.60	3,895,937.89
Surplus or (deficit).....	(228,764.71)	(333,970.59)	(837,049.71)	(1,250,889.49)
Business revenues.....	1,348,871.69	1,212,938.60	4,189,810.67	3,679,514.82
Business expenses.....	1,299,073.54	1,160,711.27	3,987,436.82	3,515,448.21
Net business revenues.....	55,798.15	52,227.33	202,373.85	164,066.61
Three per cent fixed capital charge...	59,628.66	59,827.70	191,994.03	192,357.17
Surplus or (deficit).....	(3,830.51)	(7,600.37)	10,379.82	(28,290.56)
Combined revenues.....	3,432,201.80	3,042,918.15	10,398,901.58	8,892,268.49
Combined expenses.....	2,338,598.81	2,051,724.09	7,146,976.84	6,173,153.48
Net revenues.....	1,093,602.99	991,194.06	3,251,924.74	2,719,115.01
Three per cent fixed capital charge...	1,326,198.21	1,332,765.02	4,078,594.63	3,998,295.06
Surplus or (deficit).....	(232,595.22)	(341,570.96)	(826,669.89)	(1,279,180.05)

() Indicates deficit.

Brig. Gen. Harry Burgess, United States Army, resigned as Governor, effective October 20, 1932, and Lieut. Col. J. L. Schley, Corps of Engineers, United States Army, who had filled the position of Engineer of Maintenance for the past four years, was appointed Governor, effective October 21, 1932. The position of Engineer of Maintenance, thus vacated, was filled by appointment of Lieut. Col. C. S. Ridley, Corps of Engineers, United States Army, who had been assigned to duty with the Canal on September 7, 1932, as Assistant to the Engineer of Maintenance.

Respectfully,

C. S. RIDLEY,
Acting Governor.

New Panama Mail Liner "Santa Rosa" on Maiden Voyage.

The turbo-electric passenger and freight vessel *Santa Rosa*, of the Panama Mail Steamship Line (a subsidiary of W. R. Grace & Company) sailed from New York on her maiden voyage on November 26, 1932, and is due to arrive at Cristobal on December 2, en route to California and Canada via Habana, the Panama Canal, west coast of Central America and Mexico. The *Santa Rosa* is the first of four sister ships built for this service and is to be followed by the *Santa Paula* in January, the *Santa Lucia* in February, and the *Santa Elena* in April. Each of the vessels is 508 feet long by 72 feet beam, of 17,000 tons displacement, and has accommodations for 222 first-class, 28 third-class, and 36 steerage passengers.

The new vessels will supplement the company's present fleet engaged in the coast-to-coast service—the *Santa Cecilia*, *Santa Elisa*, *Santa Teresa*, and *Santa Ana*, but the itinerary of the new steamers will be somewhat different. Leaving New York, the new ships will call at Habana, Cristobal, Balboa, Puntarenas, La Libertad, San Jose de Guatemala, Champerico, Mazatlan, Los Angeles, and San Francisco, and continue north, making calls at Victoria and Seattle. The vessels on the present run make calls at Puerto Colombia, Cartagena, Cristobal, Balboa, Puntarenas, Corinto, La Libertad, Acajutla, San Jose de Guatemala, Mazatlan, Los Angeles, and San Francisco, turning around at the latter port; on the eastbound voyage the ports of call are the same except that Habana is included also.

It is understood that the company proposes to convert the four steamers of the older service into cabin, or one-class vessels, effective with the sailing from New York on December 1, 1932, of the *Santa Elisa*.

Luckenbach Steamship Line to Carry Passengers.

The Luckenbach Steamship Company, operator of a fleet of freight vessels in the United States intercoastal trade, via the Panama Canal, has announced that accommodations for a limited number of passengers are now available on each of its vessels, and additional accommodations are to be installed should the demand warrant.

The Luckenbach services include weekly sailings on schedule in each direction between New York and Tacoma, calling at Los Angeles, San Francisco, Portland, and Seattle; and fortnightly sailings in each direction between New Orleans and Tacoma, making the same intermediate ports of call. The vessels will accept passengers for and from the Canal Zone.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., November 25, 1932.

No. 1233.

West Coast of South America, Ecuador, entrance Caraquez River. The following information has been received by the Port Captain of Balboa:

Buoy No. 4 marking Santa Marta Bank has been removed to the following location:
Monte Sn. Vicente, bearing 93 degrees; Punta Bellaca, bearing 146 degrees.
Affects H. O. Chart U. S. N. No. 1122.

(Signed) J. F. Anda y M.
Army Director.

C. S. RIDLEY,
Acting Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending November 26, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Cerigo.....	Hamburg-American Line.....	November 20	November 20		235
Cristobal.....	Panama R. R. S. S. Line.....	November 20	November 20		896
Hollywood.....	Pacific-Argentine-Brazil Line.....	November 20	November 20		39
Salvador.....	Pacific Steam Navigation Co.....	November 26	November 26		962
Nuevo Panama.....	Hans Elliot.....	November 20	November 21	140	158
Point Aneha.....	Swayne & Hoyt.....	November 20	November 21	725	(¹)
Santa Ana.....	Panama Mail S. S. Co.....	November 20	November 21	362	746
Bolivar.....	Colombian S. S. Line.....	November 20	November 21	240	239
Quirigua.....	United Fruit Co.....	November 21	November 21	6	456
Baarn.....	Royal Netherlands S. S. Co.....	November 21	November 21	(¹)	61
Colombie.....	French Line.....	November 21	November 21	47	(²)
Seattle.....	Hamburg-American Line.....	November 21	November 21	36	244
Tacoma.....	Hamburg-American Line.....	November 21	November 22	146	210
Santa Barbara.....	Panama Mail S. S. Co.....	November 22	November 22	200	54
Stella Lykes.....	Lykes Brothers.....	November 22	November 24	2,606	87
Genevieve Lykes.....	Lykes Brothers.....	November 23	November 23	922	(²)
Colombie.....	French Line.....	November 23	November 23	1	292
Tai Ping.....	Barber S. S. Line.....	November 23	November 24	560	(²)
Eisenach.....	North German Lloyd.....	November 24	November 24	36	33
Virgilio.....	Italian Line.....	November 24	November 25	301	(²)
Santa Teresa.....	Panama Mail S. S. Co.....	November 24	November 24	77	40
Buenaventura.....	Panama R. R. S. S. Line.....	November 24	November 24	713	
Santa Maria.....	Panama Mail S. S. Co.....	November 24	November 25	170	377
Ulua.....	United Fruit Co.....	November 25	November 25	552	578
Calamares.....	United Fruit Co.....	November 25	November 25	167	11
Cefalu.....	Standard Fruit & S. S. Co.....	November 25	November 26	174	281
Colombia.....	Royal Netherlands S. S. Co.....	November 26	November 26	173	
Cali.....	North German Lloyd.....	November 26	November 26	988	
Adolf Von Baeyer.....	Hamburg-American Line.....	November 26	November 26	25	484
President Hoover.....	Dollar Line.....	November 26	November 26	543	1
Peter Kerr.....	Quaker Line.....	November 26	November 26	58	
Metapan.....	United Fruit Co.....	November 26	November 26	308	236

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending November 26, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Chateau Thierry.....	U. S. Army.....	November 18	November 22	522	54
Chiriqui.....	United Fruit Co.....	November 20	November 20	518	98
Santa Ana.....	Panama Mail S. S. Co.....	November 21	November 21	141	30
Santa Barbara.....	Grace Line.....	November 21	November 22	73	1
Nuevo Panama.....	Hans Elliot.....	November 21	November 22	47	
Tai Ping.....	Barber S. S. Line.....	November 23	November 23	213	
Santa Maria.....	Grace Line.....	November 24	November 25	169	150
Santa Teresa.....	Panama Mail S. S. Co.....	November 24	November 26	379	16
Nitro.....	U. S. Navy.....	November 24	November 25	3	12
President Van Buren.....	Dollar Line.....	November 25	November 25	9	
Indra.....	Knut Knutsen.....	November 25	November 26	340	

MOVEMENTS OF OCEAN VESSELS. Week ending at midnight, November 26, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Hollywood	19	19.45	20	6.05	20	13.09	20	14.25	American	McCormick S. S. Co.	410.5	54.3	19.0	Santa Fe, Argentina	Los Angeles, Calif.	General	2,754	6,582
Florence Luckenbach	20	4.10	20	7.05	20	14.30	20	15.30	American	Luckenbach Line	401.8	52.0	15.0	Houston, Tex.	Seattle, Wash.	Corn.	892	6,002
Point Brava	20	4.40	20	8.30	20	15.47	20	17.05	American	Swayze & Hoyt	386.8	52.2	22.0	Houston, Tex.	Seattle, Wash.	Grain, steel, etc.	5,069	5,696
Congo	16	23.15	20	10.00	20	16.40	20	17.55	German	Hamburg-American Line	227.2	34.4	14.6	Cristobal, C. Z.	Guaymas, Pinar	General	235	1,572
San Francisco	20	13.55	20	14.15	20	21.17	20	22.43	Japanese	Kokusai Kisen Kaisha	385.0	51.0	25.0	Houston, Tex.	Yavata, Japan	Scrap iron, etc.	6,028	6,213
Maru	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
Santa Ana	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
S-14	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
S-15	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
S-16	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
S-17	20	7.45	21	6.00	21	13.11	21	21.40	American	Panama Mail S. S. Co.	300.0	51.6	24.3	New York, N. Y.	San Francisco, Cal.	General	2,310	5,710
Hindanger	21	8.00	21	9.10	21	17.55	21	19.05	Norwegian	Westfal, Larsen & Co.	388.0	54.0	15.0	Rotterdam, Holland	Los Angeles, Calif.	Ballast	6,854	5,287
Barn	21	4.35	21	11.30	21	18.41	21	19.40	Dutch	Royal Neth. S. S. Co.	400.6	58.0	16.9	Amsterdam, Holland	Corral, Chile	General	1,032	7,819
Nuevo Panama	20	13.45	21	15.00	21	21.05	22	13.30	Panamanian	Hans Elliot	108.0	20.6	7.7	Cristobal, C. Z.	Buenaventura, Col.	General	110	226
J-26	20	17.40	21	16.00	22	9.51	22	11.21	American	U. S. Army	64.2	20.3		Cristobal, C. Z.	Gatun, C. Z.	Ballast	78	49
Tuira	20	23.20	21	17.25	22	9.52	22	11.21	Panamanian	A. Valdez	62.0	17.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast	46	22
Real	20	23.20	21	17.25	22	9.52	22	11.21	Panamanian	Hans Elliot	385.0	51.0	23.2	New York, N. Y.	Yokohama, Japan	Cotton, general	3,971	5,919
Kifuku Maru	21	19.55	22	6.10	22	15.09	22	16.35	Japanese	Kokusai Kisen Kaisha	88.0	21.4	9.6	Plymouth, Eng.	Fiji	Ballast	103	50
Isabel	16	5.00	22	7.25	22	18.06	22	16.35	British	W. H. Weeks	441.4	57.0	19.0	Baltimore, Md.	Loilo, P. I.	General	3,178	7,729
Anna Maersk	22	00.15	22	8.15	22	15.39	22	16.35	Danish	Isbrandtsen-Moller Co.	477.6	63.0	21.0	Hamburg, Germany	Tacoma, Wash.	General	2,653	10,277
Tacoma	21	17.00	22	10.20	22	18.02	22	19.05	German	Hamburg-American Line	500.0	63.0	27.0	London, England	Wellington, N. Z.	General	2,950	12,872
Lonic	22	11.35	22	11.50	22	19.20	22	20.55	British	Shaw, Savill & Albion	404.9	53.9	20.0	Boston, Mass.	Tacoma, Wash.	General	1,540	6,766
Hawainian	22	13.35	22	14.10	22	20.25	22	23.28	American	Ames-Hawaiian Line	390.0	54.2	22.9	Cristobal, C. Z.	Gatun, C. Z.	Ballast	2,900	6,205
Q. M. No. 1	23	1.15	23	6.15	23	13.49	23	15.00	American	Kellogg S. S. Co.	319.0	27.0	14.6	Houston, Tex.	San Francisco, Cal.	Cottonseed oil	8	8
Ruth Kellogg	11	4.00	23	7.15	23	14.28	24	16.30	American	U. S. Navy	480.6	66.0	13.2	Portsmouth, N. H.	San Diego, Calif.	Ballast	4,879	3,540
Douphin	23	2.40	23	8.20	23	15.37	23	16.35	American	Sun Oil Co.	350.0	50.6	13.2	Chester, Pa.	Los Angeles, Calif.	Ballast	4,879	3,540
Southern Sun	23	6.50	23	9.45	23	16.50	23	17.50	Norwegian	Canadian Transp. Co.	415.0	56.0	17.4	Philadelphia, Pa.	Vancouver, B. C.	Ballast	6,911	4,990
Norne	23	00.40	23	10.45	23	18.30	23	18.30	Japanese	Kawasaka Kisen Kaisha	405.0	52.0	16.6	New York, N. Y.	Yokohama, Japan	Ballast	8	8
Ryoyo Maru	23	11.30	23	11.40	23	18.55	23	20.10	British	Han S. S. Co.	405.0	52.0	16.6	Cardiff, Wales	Vancouver, B. C.	Ballast	8	8
Trelishek	23	11.30	23	11.40	23	18.55	23	20.10	British	Han S. S. Co.	405.0	52.0	16.6	Cardiff, Wales	Vancouver, B. C.	Ballast	8	8
Amy	23	11.30	23	11.40	23	18.55	23	20.10	American	J. W. Agnew	445.0	58.0	18.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	2,312	8,699
Horace Luckenbach	23	15.40	23	15.50	23	22.17	23	23.20	American	Luckenbach Line	445.0	58.0	18.0	Boston, Mass.	Seattle, Wash.	General	2,312	8,699
Nitro	23	13.15	24	5.55	24	13.21	25	11.24	American	U. S. Navy	480.0	62.0	24.7	Norfolk, Va.	Puget Sound, Wash.	Naval stores	2,504	10,084
China Arrow	23	23.45	24	7.20	24	14.47	24	15.50	American	Seoncy-Vacuum Oil Co.	468.3	62.7	21.0	Boston, Mass.	Los Angeles, Calif.	Ballast	7,489	4,652
Molire	24	3.45	24	8.45	24	15.45	24	21.30	British	Royal Mail Line, Ltd.	440.0	56.3	20.6	Barry, Wales	Vancouver, B. C.	Ballast	2,733	8,999
City of Lyons	24	6.50	24	8.50	24	16.35	24	17.55	British	Ellerman & Bucknall	455.5	58.0	21.1	Philadelphia, Pa.	Dairen, China	General	2,733	8,999

Willfaro.....	24	6.55	24	9.45	24	17.28	24	13.47	American...	Amer.-Hawaiian Line...	381.0	52.0	16.3	Charleston, S. C.	Seattle, Wash.	General	1,500	5,634	4,070
Greystoke.....	24	10.40	24	10.50	24	18.19	24	19.50	British	Lancashire S. S. Co.....	428.0	56.0	18.6	New York, N. Y.	Shanghai, China...	General	1,673	7,596	5,179
Castle.....	24	6.30	24	15.00	24	21.35	24	22.00	American...	Grace Line.....	466.0	64.0	24.6	New York, N. Y.	San Antonio, Chile...	General	2,167	10,626	6,080
San Maria.....	24	14.50	24	15.00	24	22.32	24	23.56	American...	McCormick S. S. Co.....	409.6	54.0	18.0	San Juan, P. R.	Tacoma, Wash.	Iron, steel, gen.	2,132	6,627	4,993
Absaroka.....	24	10.45	25	6.05	25	12.49	25	13.50	Italian	Soc. Italia-Flotte Rinnute	482.0	62.0	25.6	Genoa, Italy	Valparaiso, Chile...	General	442	12,941	9,329
Virgilio.....	25	4.25	25	7.25	25	14.28	25	21.40	American	Dollar Line.....	502.0	62.0	26.0	New York, N. Y.	Manila, P. I.	General	3,246	12,023	8,495
Buren.....	25	12.40	25	13.00	25	19.27	26	4.05	Norwegian...	Scand.-S. Pacific Line...	375.8	51.0	21.0	Olo, Norway	Valparaiso, Chile...	Ballast	4,030	5,456	3,797
Indra.....	26	7.00	26	6.20	26	14.28	26	15.30	Swedish	W. L. Gwynn & Sons...	392.0	55.0	15.6	Goteburg, Sweed	Seattle, Wash.	General	5,039	7,011	5,039
Sveadrott.....	26	7.50	26	8.25	26	17.48	26	18.55	American	Amer.-Hawaiian Line...	407.7	53.7	17.3	Boston, Mass.	San Francisco, Cal.	General	2,012	7,103	4,991
Ohuan.....	26	14.50	26	12.55	26	19.25	26	20.40	British	Pacific Steam Nav. Co.	215.0	33.0	16.0	Cristobal, C. Z.	Champetico, Guat.	General	650	1,270	735
Salvador.....	26	16.55	26	17.35	27	10.52	27	12.07	American...	Lockenbach Line.....	425.0	54.0	26.0	Houston, Tex.	Seattle, Wash.	General	6,580	7,217	5,295
Lena Lucken- bach.....	25	8.45	26	6.15	26	14.29	26	21.05	Panamaian	Hans Elliot.....	62.0	17.0	.....	Cristobal, C. Z.	Pto Armuellas, R.P.	General	11	46	22
Real.....	25	8.45	26	6.15	26	14.29	26	21.05	Panamaian	Stand. Fruit & S. S. Co.	.....	.....	.....	Cristobal, C. Z.	Gatun, C. Z.	Ballast	.....	.....	2

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

El Alcto ¹ Panama ²	19	20	25	20	6.25	20	13.50	20	13.50	British	Anglo-Ecuad. Oilfields.	440.8	57.5	27.0	La Libertad, Ecua.	Dunkerque, France	Crude petroleum	9,614	7,555	5,049
Nuevo Panama ²	19	14.15	20	6.25	20	13.45	21	15.00	Panamaian	Hans Elliot.	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general	123	226	101	
Turis ²	20	8.30	20	10.27	20	17.35	20	16.00	Panamaian	A. Valdez.	64.2	20.3		Panama Bay, R. P.	Cristobal, C. Z.	Bananas	45	28	49	
Doris Kellogg ²	20	8.30	20	10.27	20	17.35	20	16.00	Panamaian	Grace Line.	390.0	54.2	26.0	San Francisco, Cal.	New York, N. Y.	Fish oil	6,750	6,209	4,303	
Real ²	20	15.15	20	15.20	20	23.20	21	17.25	Panamaian	Hans Elliot.	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas	42	46	92	
Bronnoy ²	20	18.30	21	6.25	21	13.35	21	13.35	Norwegian.	Canadian Transp. Co.	380.5	54.7	25.0	Vancouver, B. C.	London, Engdand	Lumber, general	8,451	6,447	4,757	
Seattle ²	21	8.30	21	9.20	21	17.25	22	1.45	German	Hamburg-American Line	461.5	61.1	26.6	Vancouver, B. C.	Hamburg, Germany	General	7,246	9,267	6,334	
Tacoma City ²	21	12.15	21	12.52	21	20.29	22	00.45	British	Reardon Smith Line.	400.5	54.2	26.0	N. Westminster, B. C.	Cardiff, Wales.	General	8,000	6,947	5,358	
Atlantic City ²	21	12.50	21	13.28	21	21.25	21	21.25	British	Louis Dreyfus & Co.	411.7	54.5	28.0	Vancouver, B. C.	Fayal.	Wheat.	8,980	6,555	4,659	
Santa Barbara ²	21	22.09	22	6.12	22	12.50	22	16.35	American.	Grace Line.	406.0	64.0	24.0	San Antonio, Chile.	New York, N. Y.	General.	2,779	10,687	6,633	
Matthew Luck- enbach	21	19.55	22	7.24	22	14.25	22	14.25	American.	Lukenbach Line.	434.3	57.7	20.0	Portland, Oreg.	New Orleans, La.	General	3,566			
Nurture on ²	22	1.10	22	8.06	22	15.50	22	15.50	British.	Dale & Co.	423.0	58.3	26.0	Vancouver, B. C.	London, England.	Wheat, general	9,232	6,854	4,746	
Misourian ²	22	2.40	22	8.53	22	16.56	22	16.56	American.	Amer.-Hawaiian Line.	443.1	59.8	28.0	Portland, Oreg.	Boston, Mass.	Lumber, general.	8,754	8,567	6,020	
Aldington ²	22	2.50	22	9.30	22	17.30	22	17.30	British.	Canadian Transp. Co.	405.6	55.5	26.0	Vancouver, B. C.	Avonmouth, Eng.	Grain, general	8,918	6,989	5,251	
Cour ²	22	4.05	22	10.01	22	19.15	22	19.15	American.	Lukenbach Line.	436.6	57.2	26.0	Seattle, Wash.	Boston, Mass.	Lumber, general	6,657	8,543	6,427	
Edwards Luck- enbach	22	4.05	22	10.01	22	19.15	22	19.15	American.	Lukenbach Line.	436.6	57.2	26.0	Seattle, Wash.	Boston, Mass.	Lumber, general	6,657	8,543	6,427	
Chateau	18	21.12	22	10.20	22	18.20	23	11.30	American.	U. S. Army.	436.9	58.2	26.0	Balboa, C. Z.	New York, N. Y.	Army supplies	2,656	7,611	5,450	
Thierry	22	5.20	22	10.31	22	20.30	22	20.30	American.	Isidman S. S. Lines.	424.2	56.2	18.0	Port Allen, T. H.	Baltimore, Md.	Pines, general	10,630	7,639	5,135	
Bessener City.	22	12.15	22	13.02	22	21.40	23	21.40	American.	James B. Berry Sons Co.	435.0	56.2	29.0	San Francisco, Cal.	Tiverton, R. I.	Furnace oil	10,630	7,639	5,135	
R. J. Hanna	22	12.15	22	13.02	22	21.40	23	21.40	American.	U. S. Navy.	240.0	21.0		Balboa, C. Z.	Cristobal, C. Z.					
S-48			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-10			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-11			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-12			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-13			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-14			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-15			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-16			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-17			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-18			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-19			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-20			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-21			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-22			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-23			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-24			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-25			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-26			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-27			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-28			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-29			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-30			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-31			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-32			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-33			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-34			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-35			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-36			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-37			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-38			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-39			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-40			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-41			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-42			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-43			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-44			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-45			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-46			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-47			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-48			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-49			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-50			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-51			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-52			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-53			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-54			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-55			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-56			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-57			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-58			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-59			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-60			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-61			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-62			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-63			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-64			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-65			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-66			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-67			23	6.25	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
S-68			23	6.25																

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.			Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.		Net.
Villager	23	11 20	23	12 13	23	20 25	23	20 25	Norwegian.	Westfal Larsen & Co.	388 0	54 7	27 0	Vancouver B. C.	Rotterdam, Holl'd	General.	7 263	6 869	5 131
Lauren	23	11 40	23	13 39	23	13 45	23	13 45	American.	U. S. Navy	477 2	63 3	26 1	Balboa, C. Z.	Cristobal, C. Z.	Ballast.	7 168	10 678	7 679
Tai Ping	23	5 00	23	14 23	23	21 45	24	2 45	British.	Com'th & Dom. Line.	603 2	63 3	26 1	Anckland, N. Z.	London, England.	Frozen, general.	3 855	9 894	6 829
Fal Gung	23	5 00	23	14 23	23	23 00	24	13 50	Norwegian.	Barber S. S. Line.	461 9	60 2	23 0	Davao, P. I.	New York, N. Y.	Frozen.	7 030	7 611	5 450
Larry City	24	00 20	24	6 09	24	13 25	24	13 25	American.	Isthmian S. S. Lines	441 11	56 0	26 0	Vancouver B. C.	Dublin, Ireland.	General.	10 994		
Farley Dobey	23	18 19	24	7 34	24	15 15	24	15 15	American.	Richfield Oil Co. of Calif.	430 0	59 2	28 3	Los Angeles, Calif.	Port Arthur, Tex.	Fuel oil.			
Draxington	24	6 00	24	8 15	24	16 10	24	16 10	British.	Canadian Transp. Co.	405 6	55 6	25 4	Vancouver B. C.	London, England.	Grain.	8 740	7 075	5 308
Court	24	6 30	24	8 45	24	18 20	25	9 34	German.	North & German Lloyd.	360 8	51 0	23 7	Valparaiso, Chile	Bremen, Germany	General.	5 368	4 814	3 370
Eisen	24	13 00	24	13 48	24	20 50	24	21 45	British.	T. & J. Harrison	420 0	54 6	25 1	N. Westminster, B. C.	Liverpool, England	General.	7 319	6 558	4 621
Bar-Bara Cates.	19	18 00	24	14 18	24	22 15	24	23 45	American.	Sudden & Christensen.	409 5	54 2	22 0	Seattle, Wash.	New York, N. Y.	Lumber, general.	5 771	6 904	4 552
Santa Teresa.	24	6 00	24	15 24	24	23 35	25	11 05	American.	Panama Mail S. S. Co.	330 2	51 6	23 3	San Francisco, Cal.	New York, N. Y.	General.	2 054	5 726	4 086
Real	24	16 15	24	17 36	25	8 45	26	6 15	Panamanian.	Hans Elliot.	62 2	17 1	5	Darien, P. I.	Cristobal, C. Z.	Bananas.	42	46	32
Punta Lobos.	24	20 12	25	6 05	25	13 30			American.	Gulf-Pacific Mail Line	280 1	53 1	14 6	Vancouver, B. C.	Houston, Tex.	General.	1 707	7 650	5 925
Silveray	24	21 30	25	7 09	25	14 40	25	14 00	British.	Canadian Transp. Co.	395 7	57 0	24 0	Vancouver, B. C.	Hull, England.	Grain, lumber.	10 400	7 218	5 184
Oregon	25	2 30	25	7 52	25	16 00	25	16 00	American.	The Texas Co.	432 8	57 2	27 0	Los Angeles, Calif.	Port Arthur, Tex.	Gas oil.	5 388	4 950	3 375
Missoula	25	19 30	26	6 11	26	13 35	26	13 35	American.	Hancock Lumber Co.	305 3	51 2	24 6	Eureka, Calif.	New York, N. Y.	Lumber.			
President	26	00 10	26	6 57	26	15 35	26	23 00	American.	Dollar Line.	615 6	81 3	32 5	Manila, P. I.	New York, N. Y.	General.	5 744	27 813	20 104
Hoover	26	00 15	26	8 25	26	16 20	26	16 20	American.	Pacific Atlantic S. S. Co.	410 0	54 4	22 2	Portland, Ore.	Philadelphia, Pa.	Lumber, general.	7 105	6 484	4 675
San Rafael	26	00 20	26	8 47	26	16 45	26	16 45	American.	Shell Oil Co. of Calif.	425 0	57 2	29 5	San Francisco, Cal.	Fall River, Mass.	Kerosene oil.	10 005	7 481	5 095
S. C. T. Dodd	26	1 00	26	9 37	26	17 35	26	17 35	American.	Shepard S. S. Co.	402 6	53 2	26 0	San Francisco, Cal.	Philadelphia, Pa.	Lumber, general.	8 207	6 760	4 764
Harpoon	26	1 30	26	10 31	26	19 10	26	19 10	German.	North German Lloyd	216 5	32 9	14 6	Guayaquil, Ecuador	Cristobal, C. Z.	General.	987	1 105	698
Calif.	26	12 50	26	14 00	26	22 15	26	22 15	Norwegian.	Cities Service Oil Co.	458 0	59 8	26 5	Los Angeles, Calif.	London, England.	Gasoline.	10 039	8 291	5 822
O-Kanger R.	26	13 30	26	14 20	26	23 15	26	23 15	American.	McCormick S. S. Co.	401 4	53 2	26 0	Pt. Ludlow, Wash.	New York, N. Y.	Lumber, general.	6 343	7 082	5 167
Charles R.	26	13 30	26	14 20	26	23 15	26	23 15	American.	McCormick S. S. Co.	401 4	53 2	26 0	Pt. Ludlow, Wash.	New York, N. Y.	Lumber, general.	6 343	7 082	5 167

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
November 20.	No. 0672	Pan American Airways.	San Salvador via wayp'ts.	November 20.	Skaola.	United Fruit Co.	New York via wayports.
November 20.	No. 945-M	Pan American-Grace Airways.	Chicleyo via wayports.	November 20.	Castolal.	Panama R. R. S. S. Line.	New York via wayports.
November 20.	Bolivar.	Colombian S. S. Line.	New York.	November 20.	Bolivar.	Colombian S. S. Line.	New York via Kingston.
November 21.	Colombic.	French Line.	Havre via wayports.	November 21.	No. 659-M	Pan American Airways.	Baranquilla, Colombia.
November 21.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.	November 21.	Colombic.	French Line.	Port Limon, Costa Rica.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From--	Date.	Vessel.	Line.	For--
November 21.	No. 145-M ¹¹ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	November 21	Quirigua	United Fruit Co.	New York via wayports.
November 21	No. 659-M ¹¹	Pan American Airways.	Barraquilla, Colombia.	November 22	No. 300-N ¹¹	Pan American-Grace Airways.	Talara via wayports.
November 21	Canden	United Fruit Co.	Curacao, D. W. I.	November 22	No. 9673 ¹¹	Pan American Airways.	San Salvador via wayports.
November 22	Stella Lykes	Lykes Brothers S. S. Co.	Tampa via wayports.	November 22	Canden	United Fruit Co.	Port Limon, Costa Rica.
November 22	Ovorton ¹²	U. S. Navy.	High seas.	November 23	Pearl Marie ¹³	G. I. Bryan.	Bluefields, Nicaragua.
November 23	Genevieve Lykes	French Line.	Port Limon, Costa Rica.	November 23	Genevieve Lykes	Lykes Brothers S. S. Co.	Galveston, Tex.
November 23	Big Bill ¹³	Lykes Brothers S. S. Co.	Gbara, Cuba.	November 23	Colombie.	French Line.	Havre via wayports.
November 23	Pearl Marie ¹³	G. I. Bryan.	Colon, Rep. of Panama.	November 24	No. 659-M ¹¹	Pan American Airways.	Miami via wayports.
November 24	Buenaventura	L. P. Foster.	High seas.	November 24	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
November 24	No. 698-M ¹¹	Panama R. R. S. S. Line.	New York.	November 24	Stella Lykes.	Lykes Brothers S. S. Co.	Sto. Domingo via wayp ts.
November 24	Cefalu	Pan American Airways.	Miami via wayports.	November 25	No. 945-M ¹¹	Pan American-Grace Airways.	Port Limon, Costa Rica.
November 25	Calamares	Standard Fruit & S. S. Co.	New Orleans via wayp ts.	November 25	Ulua	United Fruit Co.	New Orleans via wayp ts.
November 25	Ulua	United Fruit Co.	New Orleans via Habana.	November 25	Anaheueuna ¹⁴	A. Tagaropulos.	Colon, Rep. of Panama.
November 25	No. 145-M ¹¹	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	November 25	Anaheueuna ¹⁴	P. W. Hamilton	Colon, Rep. of Panama.
November 25	Arachueuna ¹⁴	A. Tagaropulos	Colon, Rep. of Panama.	November 26	Annetta I. ¹⁴	Pan American Airways.	Colon, Rep. of Panama.
November 25	Inapaquina ¹⁴	A. Tagaropulos	Colon, Rep. of Panama.	November 26	No. 9688 ¹¹	Uraba, Medellin & Cent. Airways	San Salvador via wayp ts.
November 26	Mcapan.	United Fruit Co.	New York via Kingston.	November 26	No. 145-M ¹¹	Standard Fruit & S. S. Co.	Medellin, Colombia.
November 26	Colombia	Royal Netherlands S. S. Co.	Amsterdam via wayports.	November 26	Cefalu	Standard Fruit & S. S. Co.	New Orleans via wayp ts.
November 26	Annetta I. ¹⁴	P. W. Hamilton.	Colon, Rep. of Panama.				

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
November 20.	Chiriqui.	United Mail S. S. Co.	San Francisco, Calif.	November 20.	Chiriqui.	United Mail S. S. Co.	San Francisco, Calif.
November 20.	Sambu ¹³ .	Hans Elliot.	Darien, Rep. of Panama.	November 20.	Sambu ¹³ .	Hans Elliot.	Panama Bay, R. P.
November 21.	El Sona ¹³ .	G. Tamm.	Panama Bay, R. P.	November 21.	El Sona ¹³ .	G. Tamm.	Panama Bay, R. P.
November 24.	Santa Monica ¹⁵ .	Panama Mail S. S. Co.	San Francisco, Calif.	November 25.	Santa Monica ¹⁵ .	Panama Mail S. S. Co.	San Francisco, Calif.
November 24.	Des Hermanos ¹³ .	Panama Bay, R. P.	Panama Bay, R. P.	November 25.	Des Hermanos ¹³ .	A. Valdez.	Panama Bay, R. P.
November 25.	El Sona ¹³ .	G. Tamm.	Panama Bay, R. P.	November 25.	El Sona ¹³ .	G. Tamm.	Panama Bay, R. P.
November 25.	Sambu ¹³ .	Hans Elliot.	Panama Bay, R. P.	November 26.	Sambu ¹³ .	Hans Elliot.	Panama Bay, R. P.
November 26.	All America.	All America Cables.	Callao, Peru.				

* Other than ships passing through the Canal.

¹⁰ Motor ship.¹¹ Motor boat.¹² Destroyer.¹³ Motor schooner.¹⁴ Air mail carrier.

Traffic of Motor Vessels Through the Panama Canal.

During the past 10 years the number and proportion of motor vessels in the traffic using the Panama Canal has shown a marked increase. In the year ending June 30, 1923, the transits of motor vessels through the Canal numbered 121 and their aggregate net tonnage, Panama Canal measurement, was 574,553 tons. This was slightly more than 3 per cent of the total traffic (3,967 transits, 18,605,786 net tons). From that time there was an uninterrupted succession of increases to and including 1931, in which year there were transited 1,571 motor vessels, aggregating 8,297,874 net tons (Panama Canal measurement); these were 28.4 per cent of transits and 29.9 per cent of the total net tonnage of all types of vessels passing through in 1931. In 1932, the actual number of motor-propelled vessels and their tonnage decreased, in the general decrease in traffic; however, the proportion of motor ship traffic continued to rise, reaching 32.0 per cent of the total transits and 34.0 of the net tonnage.

In the table following are given the number of vessels and net tonnage (Panama Canal measurement) of motor shipping through the Canal in the past 10 fiscal years, together with the number of vessels and net tonnage of all types of commercial traffic, and the percentage which motor shipping formed of the total traffic:

Fiscal year.	Motor ship traffic.		Total traffic.		Per cent motor ship tonnage.	
	No. of vessels.	Panama Canal net tonnage.	No. of vessels.	Panama Canal net tonnage.	Vessels.	Net tonnage.
1923.....	121	574,553	3,967	18,605,786	3.1	3.1
1924.....	203	1,005,591	5,230	26,148,878	3.9	3.8
1925.....	282	1,303,911	4,673	22,855,151	6.0	5.7
1926.....	443	1,996,278	5,197	24,774,591	8.5	8.1
1927.....	654	2,966,296	5,475	26,227,815	11.9	11.3
1928.....	890	3,817,589	6,456	29,458,634	13.8	13.0
1929.....	1,240	6,017,728	6,413	29,837,794	19.3	20.2
1930.....	1,411	7,118,014	6,185	29,980,614	22.8	23.7
1931.....	1,571	8,297,874	5,529	27,792,146	28.4	29.9
1932.....	1,444	8,039,994	4,506	23,625,419	32.0	34.0

NOTE.—The above motor ship traffic does not include small vessels classified as "motor schooners."

NATIONALITY.

In the following table are grouped the total transits and net tonnage of the ships of each nationality which made up 100,000 net tons or more of the motor ship traffic through the Panama Canal during the fiscal year 1932. There were 11 such nationalities. For each there are shown also the total traffic during the year, and the percentages which the motor ship transits and net tonnage formed of the total for the corresponding nationality:

Nationality.	Motor ship traffic.		Total traffic.		Per cent motor ship traffic of all traffic of nationalities.	
	No. of vessels.	Panama Canal net tonnage.	No. of vessels.	Panama Canal net tonnage.	Vessels.	Tonnage.
British.....	371	2,425,864	1,054	5,905,997	35.2	41.1
Norwegian.....	274	1,386,780	311	1,530,459	88.1	90.6
United States.....	257	1,361,578	1,917	10,790,751	13.4	12.6
Danish.....	99	552,910	105	561,492	94.3	98.5
Swedish.....	106	505,331	114	538,989	93.0	93.8
Japanese.....	73	459,117	179	980,349	40.8	46.8
German.....	61	371,110	338	1,280,999	18.0	30.0
Italian.....	36	266,318	67	479,441	53.7	55.5
Dutch.....	36	257,304	117	553,085	30.8	46.5
Danzig.....	33	244,300	33	244,300	100.0	100.0
French.....	15	190,565	81	454,890	18.5	22.1
All other.....	83	108,817	190	304,667	43.7	35.7
Total.....	1,444	8,039,994	4,506	23,625,419	32.0	34.0

From the foregoing it will be seen that the net tonnage of British motor ships exceeded by over 1,000,000 tons that of the next highest nationality, Norwegian, and formed slightly over 30 per cent of all the motor ship traffic. With respect, however, to proportion which motor ship traffic formed of all traffic of the corresponding nationality, the traffic of 7 nationalities showed higher percentages of motor ship tonnage than did the British. The traffic of Danzig, all tank ships, was 100 per cent motor. The Scandinavian countries, which were pioneers in the development of motor ships, used them for over nine-tenths of their tonnage through the Canal during the year. Italian traffic was over 50 per cent motor. Among the nations listed the United States used the smallest proportion of motor ships in traffic through the Canal, approximately one-eighth of the total traffic of that nationality. Motor ships were also a relatively small part of French traffic, about one-fifth.

TRADE ROUTES.

The following table shows the number of transits and net tonnage of the motor ship vessels engaged in the important trades using the Panama Canal during 1932, together with the total number of vessels and net tonnage of all types of propulsion, and the percentages which motor shipping formed of the total:

Trade route.	Motor ship traffic.		Total traffic.		Per cent motor ship traffic.	
	No. of vessels.	Panama Canal net tonnage.	No. of vessels.	Panama Canal net tonnage.	Vessels.	Tonnage.
Europe and west coast of United States-Canada.....	478	2,881,336	889	5,087,139	53.8	56.6
United States and Far East (including Philippine Islands).....	252	1,426,630	517	3,151,141	48.7	45.3
Europe and South America.....	131	847,034	368	2,032,399	35.6	41.7
United States intercoastal.....	114	665,501	1,309	7,472,159	8.7	8.9
East coast United States and South America.....	123	644,155	262	1,212,850	46.9	53.1
Miscellaneous.....	346	1,575,338	1,161	4,669,731	29.8	33.7
Total.....	1,444	8,039,994	4,506	23,625,419	32.0	34.0

The leading trade through the Panama Canal in so far as motor shipping was concerned was that between Europe and the west coast of North America. This trade, in which all the leading maritime nations of Europe participate, accounted for 35.8 per cent of the total motor tonnage through the Canal in 1932. Motor vessels comprised 56.6 per cent of the total tonnage of all types of propulsion plying over this route during the year. In the regularly established services alone the proportion of motor shipping is higher; the proportion for the year is reduced by the employment of other vessels, mostly coal-burning steamers, in seasonal movements of produce from the Pacific coast.

Second in importance in actual tonnage is the trade between the United States and the Far East, which accounted for 17.7 per cent of the total net tonnage of motor shipping during the year. Motor ships furnished 45.3 per cent of the total tonnage of all types over that route during the year. This trade was followed in importance by that between Europe and South America, and the United States intercoastal trade. The trade between the east coast of the United States and South America ranked fifth in actual tonnage of motor shipping in 1932, but motor ships comprised 53.1 per cent of the total tonnage of all propulsive types plying over that route, and in this respect ranked

second only to their proportion in the trade between Europe and the west coast of the United States and Canada.

CLASSES OF MOTOR SHIPS.

The following table shows the number and net tonnage of motor tank ships as compared with all other motor ships, together with total number and tonnage of each class and the percentage which motor shipping formed of the total of each class through the Canal in 1932:

Class.	Motor ship traffic.		Total traffic.		Per cent motor ship traffic.	
	No. of vessels.	Panama Canal net tonnage.	No. of vessels.	Panama Canal net tonnage.	Vessels.	Tonnage.
Tank ships	307	1,966,430	612	3,570,398	50.2	55.1
All other ¹	1,137	6,073,564	3,894	20,055,021	29.2	30.3
Total	1,444	8,039,994	4,506	23,625,419	32.0	34.0

¹ While the greater portion of "all others" are freight and passenger/freight vessels, several yachts, etc., are included.

It will be seen from the above that 55.1 per cent of the total tank ship tonnage through the Canal in the past year was motor-propelled vessels, while 30.3 per cent of the "all other" class was motor. Of the total motor tonnage through the Canal in the year, 24.5 per cent were tank ships and 75.5 per cent "all other."

OWNERSHIP OF MOTOR VESSELS.

The following is a summary of the motor ship traffic through the Panama Canal during the fiscal year 1932 by owners of vessels, arranged in the order of aggregate net tonnage of each owner or line. The table shows for each the flag under which vessels operated, the total transits, and the aggregate net tonnage:

Owner.	Flag.	No. of transits.	Panama Canal net tonnage.
Furness Lines	British	63	417,159
Grace, W. R. & Company	United States	87	406,246
Hamburg-American Line	German	50	308,894
Westfal, Larsen & Company	Norwegian	57	304,984
East Asiatic Company	Danish	42	277,850
Motor Tank Ship Corporation	United States	41	268,563
Osaka Shosen Kaisha	Japanese	39	248,137
Baltic-American Petroleum Company	Danish	33	244,300
Imperial Oil Company	British	35	238,890
Olsen, Fred & Company	Norwegian	39	230,684
Pacific Steam Navigation Company	British	30	218,071
New Zealand Shipping Company	British	16	216,126
Holland-America Line	Dutch	24	191,454
United States Shipping Board	United States	34	182,620
Wilhelmsen, Wilh.	Norwegian	27	180,262
Johnson Line	Swedish	34	178,862
Jansen, S. W.	Swedish	34	151,589
Weir, Andrew & Company	British	29	150,260
Royal Mail Line, Ltd.	British	19	144,298
Moller, A. P. & Company	Danish	28	141,431
Societa Italia-Flotte Riunite	Italian	15	140,243
Navigazione Libera-Triestina	Italian	21	126,075
International Petroleum Company	British	12	118,620
Commonwealth & Dominion Line	British	15	113,834
American-Hawaiian Line	United States	19	112,793
Klaveness, A. F. & Company	Norwegian	24	111,719
Thompson, Stanley & John	British	17	111,479
Sun Oil Company	United States	17	110,136
Fearnley & Eger	Norwegian	23	106,517
Others	Miscellaneous	520	2,287,898
Total		1,444	8,039,994

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective December 1, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.23
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.33
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.10
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Lubricating Oils.

THE PANAMA CANAL, SUPPLY DEPARTMENT,
BALBOA HEIGHTS, C. Z., August 7, 1931.

To all concerned.—For the information of all concerned there is submitted herewith a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils together with a statement of the purpose for which they are generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list.

R. R. WATSON,
Chief Quartermaster.

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, M-2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, H-2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, E H-2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, U H-2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed soaponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive for preserving boiler tubes.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Information from American Consuls.

The Consular officers of the United States at seaports all over the world are *ex officio* representatives of The Panama Canal for the purpose of furnishing information to shipping and allied interests as to conditions, charges, etc., at the Panama Canal affecting the operation of ships. The current publications of The Panama Canal of interest to shipping are furnished to the Consular officers and filed for reference.

It is not desired that inquiries of a general nature be addressed to the Consular officers, or that they be burdened with requests which should be made direct to The Panama Canal; but ships' operators who may not be sufficiently advised as to charges, supplies, facilities, etc., at the Canal will often save time by applying to the nearest American Consul.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal Record, Balboa Heights, Canal Zone, or

The Panama Canal, Washington, D. C.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., December 7, 1932. No. 19.

Canal Traffic During November, 1932.

During the month of November, 1932, 388 commercial vessels and 4 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,756,865.84, and on the launches, \$15.15, or a total tolls collection of \$1,756,880.99.

The daily average of commercial vessels was 12.93, and the daily average tolls collection was \$58,562.19, as compared with an average of 12.71 transits and \$55,315.45 in tolls for the previous month, and an average of 12.53 transits and \$58,734.54 in tolls for the month of November, 1931. The average amount of tolls paid by each of the commercial transits in the past month was \$4,528, as compared with \$4,686.27 for the month of November, 1931. This lower average tolls per vessel is due largely to the fact that a larger proportion of the traffic was in ballast in the past month as compared with the corresponding month last year.

Although the number of transits was less by 6 than in the previous month, the daily average for the month was higher, and was the highest daily average for any month since September, 1931, when it was 13.20. The amount of tolls collected last month was over \$42,000 higher than the aggregate collected in the previous month, and was the highest tolls collection since January, 1932, when the amount collected aggregated \$1,770,250.68. The daily average for this feature was the highest of any month since December, 1931, when it was \$58,734.54. In comparison with November, 1931, last month's traffic made an increase of 3.2 per cent in transits, while tolls collected registered a decrease of 0.3 of 1 per cent.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 11 months of the current calendar year, with the daily averages of transits and tolls, and the totals for the first 11 months of the calendar years 1931 and 1930:

Month.	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	358	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
July.....	326	1,468,728.36	10.52	47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
Total, first 11 months of calendar year 1932.....	3,936	17,903,731.78	11.75	53,443.98
Total, first 11 months of calendar year 1931.....	4,585	20,772,951.30	13.73	62,194.46
Total, first 11 months of calendar year 1930.....	5,390	23,953,441.11	16.14	71,716.89

As compared with the first 11 months of the calendar year 1931, the corresponding period this year has had 649 fewer transits and \$2,869,219.52 less tolls, decreases of 14.2 per cent and 13.8 per cent, respectively; in comparison with the first 11 months of the calendar year 1930, there occurred a decrease of 1,454 transits and \$6,049,709.33 in tolls, decreases of 27.0 per cent and 25.3 per cent, respectively.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 3, 1932.

No. 1237.

South America, west coast, Ecuador, aids to navigation. The following observations were made by the S. S. *Manizales* on its last voyage to Guayaquil.

Bahia.—Santa Marta buoy, position changed. Position of buoy now in latitude 00° 34' S., longitude 80° 28' 25" W. On the northern end of Santa Marta Bank.

Punta Galera Light.—Characteristic changed. An unwatched flashing white light, period 8 seconds; 1 second flash, 7 seconds eclipse. Position from "1932 List of Lights" latitude 00° 51' 00" S., longitude 80° 05' 30" W.

Punta Coquilo Light.—Characteristic changed. An unwatched flashing white light, period 47.5 seconds; 0.5 second flash, 47 seconds eclipse. Position from "1932 List of Lights" latitude 01° 00' 00" S., longitude 79° 42' 21" W.

Colombia, west coast, Buenaventura River, buoy established.—A gas buoy with a flashing white light, period 5.5 seconds, has been established in latitude 3° 48' N., longitude 77° 13' 30" W.

C. S. RIDLEY,
Acting Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 6, 1932.

No. 1239.

Ecuador, information concerning aids. The following is quoted from Notice to Mariners No. 48, dated Washington, D. C., November 26, 1932:

Information has been received from the Director de la Armada, Guayaquil, Ecuador, under date of November 12, 1932, that Santa Elena Point Light and La Plata Island Light are again functioning with their normal characteristics as stated in the light list. Santa Elena Point Light now has a visibility of 22 miles and La Plata Island Light a visibility of 9 miles.

Approximate position of Santa Elena Point Light, latitude 2° 11' 30" S., longitude 81° 00' 00" W.

NOTE.—Notices to Mariners (Washington, D. C.) No. 42 (2929, 2930) are hereby canceled.

C. S. RIDLEY,
Acting Governor.

Traffic by Nationality for November, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of November, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for November, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	8,142	4,997	8,043	5,052	\$6,246.25	1,610
British.....	64	349,003	251,733	415,420	255,038	273,209.77	72,532
Colombian.....	1	307	302	405	308	368.40	625
Danish.....	5	23,528	15,906	26,334	16,236	18,492.33	7,015
Danzig.....	3	22,655	17,975	30,664	17,346	16,311.60	.....
Dutch.....	3	22,003	15,132	25,100	15,476	18,915.00	3,752
French.....	2	10,770	6,928	13,134	7,321	8,660.00	2,213
German.....	11	32,801	21,911	38,997	22,615	27,388.75	15,904
Italian.....	2	15,353	8,815	17,798	10,507	11,018.75	1,996
Japanese.....	12	63,044	51,838	79,901	47,753	60,020.66	42,681
Norwegian.....	18	86,448	57,947	97,132	58,560	63,193.64	17,559
Panamanian.....	13	7,552	4,204	7,610	4,177	5,109.80	3,943
Swedish.....	5	24,637	14,105	24,455	18,012	17,277.30	5,605
United States.....	67	416,396	306,969	500,965	306,449	367,034.32	167,794
Total, November, 1932...	207	1,082,639	778,762	1,285,958	784,850	893,246.57	343,229
Total, November, 1931...	197	1,064,003	774,033	1,289,531	783,230	903,026.06	472,373
Total, November, 1930...	232	1,148,859	841,183	1,398,460	847,512	970,646.33	554,098

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	47	244,014	181,205	299,170	182,389	\$226,303.88	326,694
Danish.....	4	20,734	12,765	21,903	13,622	15,956.25	24,702
Danzig.....	1	8,592	6,123	10,353	5,943	7,653.75	15,595
Dutch.....	3	19,573	13,568	22,083	13,697	16,960.00	20,339
French.....	3	20,335	12,805	23,579	13,706	16,006.25	17,476
German.....	12	36,861	24,227	41,605	24,768	30,279.29	38,953
Italian.....	3	19,806	12,663	23,859	14,430	15,828.75	14,146
Japanese.....	5	27,885	20,884	33,867	20,619	26,105.00	23,210
Norwegian.....	19	98,985	66,545	109,854	65,401	83,181.25	154,096
Panamanian.....	11	6,581	3,977	6,717	4,033	4,948.60	8,636
Swedish.....	3	17,594	13,543	22,717	16,975	16,928.75	30,449
United States.....	70	432,697	322,974	524,777	321,087	403,467.50	513,984
Total, November, 1932.....	181	953,157	691,279	1,140,484	696,670	863,619.27	1,188,280
Total, November, 1931.....	179	937,742	688,974	1,145,795	694,675	859,010.13	1,105,150
Total, November, 1930.....	247	1,222,628	903,370	1,492,110	912,280	1,127,711.03	1,709,102

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	8,142	4,997	8,043	5,052	\$6,246.25	1,610
British.....	111	593,017	432,938	714,590	437,427	499,513.65	399,226
Colombian.....	1	307	302	405	308	368.40	625
Danish.....	9	44,262	28,671	48,237	29,858	34,448.58	31,717
Danzig.....	4	31,247	24,098	41,017	23,289	23,965.35	15,595
Dutch.....	6	41,576	28,700	47,183	29,173	35,875.00	24,091
French.....	5	31,105	19,733	36,713	21,027	24,666.25	19,689
German.....	23	69,162	46,138	80,602	47,383	57,668.04	54,857
Italian.....	5	35,159	21,478	41,657	24,937	26,847.50	16,142
Japanese.....	17	90,929	72,722	113,768	68,372	86,125.66	65,891
Norwegian.....	37	185,433	124,492	206,986	123,961	146,374.89	171,655
Panamanian.....	24	14,133	8,181	14,327	8,210	10,058.40	12,579
Swedish.....	8	42,231	27,648	47,172	34,987	34,206.05	36,054
United States.....	137	849,093	629,943	1,025,742	627,536	770,501.82	681,778
Total, November, 1932.....	388	2,035,796	1,470,041	2,426,442	1,481,520	1,756,865.84	1,531,509
Total, November, 1931.....	376	2,001,745	1,463,007	2,435,326	1,477,905	1,762,036.19	1,577,523
Total, November, 1930.....	479	2,371,487	1,744,553	2,890,570	1,759,792	2,098,357.36	2,263,200

Supplement No. 17, Tariff No. 10.

THE PANAMA CANAL, PANAMA RAILROAD COMPANY,
EXECUTIVE OFFICE, BALBOA HEIGHTS, C. Z., November 28, 1932.

Supplement No. 17, Tariff No. 10. Item 27. Hotels. Effective December 1, 1932.

Hotel Washington. European plan. Rooms:

Grade.	Daily room rates.	
	1 person.	2 persons.
A Private tub and shower bath.....	\$6.00	\$8.00
1 Private tub and shower bath.....	5.00	7.00
2 Private tub and shower bath.....	4.00	6.00
3 Private tub and shower bath.....	3.50	5.50
3 Shower bath only.....	3.50	5.50
4 Shower bath only.....	3.00	5.00
5 Without bath.....	2.50	4.50

* Grade 5 rooms rented only in connection with other rooms with bath.

Hotel Tivoli. European plan. Rooms:

Grade.	Daily room rates.	
	1 person.	2 persons.
Parlor and bedroom.....	\$8.00	\$12.00
A Private tub and shower bath.....	5.00	7.00
1 Private tub and shower bath.....	4.00	6.00
2 Private tub.....	3.50	4.50
3 Without bath.....	2.50	4.00
4 Without bath.....	2.50	3.50

C. S. RIDLEY,
Acting Governor, The Panama Canal,
2d Vice President, Panama Railroad Company.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, December 3, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Adolph von Baeyer	26	7 00	27	6 00	27	13 31	27	14 40	German	Hamburg-American Line	409.0	53.11	18.11	Hamburg, Germany	Valparaiso, Chile	General.	2,942	5,504
Peter Kerr	26	18 25	27	7 05	27	13 56	27	15 05	American	Quaker S. S. Line	415.0	55.6	17.5	New York, N. Y.	Seattle, Wash.	General.	913	5,696
Kadrisan	26	6 15	27	8 30	27	15 14	28	1 16	British	Dale & Co.	390.0	53.6	17.0	Boston, Mass.	Vancouver, B. C.	Ballast.	7,704	4,162
Annisson City	27	9 55	27	10 00	27	16 35	27	17 40	American	I. S. S. Lines	424.2	56.2	17.0	Baltimore, Md.	Seattle, Wash.	General.	2,135	5,450
Atwell Vincent	27	14 45	27	15 10	27	22 05	27	7 00	British	O. S. K. K.	475.0	66.3	20.1	New York, N. Y.	California.	Ballast.	9,572	6,345
Evagoras	27	14 10	27	18 35	28	10 45	28	11 58	Cyprian	Troodos Shipping Co.	405.0	53.0	17.0	Amsterdam, Holland	Vancouver, B. C.	Ballast.	5,872	4,305
Reina del Pacifico	27	20 05	28	6 10	28	12 45	28	13 28	British	Pacific Steam Nav. Co.	550.0	76.6	27.4	Liverpool, England	Talcahuano, Chile	General.	2,179	18,871
Tamihua	28	3 45	28	7 05	28	17 28	28	22 48	American	Proctor Products Co.	500.0	71.2	21.0	New York, N. Y.	Los Angeles, Calif.	Ballast.	11,667	8,542
Eugene	28	6 35	29	6 05	29	14 30	29	15 45	French	French Line	351.0	52.0	16.4	Dunkirk, France	Noumea, N. Caled.	General.	959	5,470
Cal	28	18 10	29	6 15	29	14 34	29	15 45	German	North German Lloyd	216.0	32.9	13.6	Cristobal, C. Z.	Guayaquil, Ecuador	General.	261	1,105
Carier	28	12 30	29	6 15	29	15 19	29	16 40	Belgian	Cie. Maritime Belge	471.0	60.0	16.0	Antwerp, Belgium	Vancouver, B. C.	Ballast.	9,264	7,044
Port Denison	28	14 35	29	7 20	29	15 46	29	16 50	British	Com. th & Don. Line.	480.0	60.0	21.1	New York, N. Y.	Fremantle, Auslia.	Oil, general.	1,610	10,795
Dansterdyk	28	16 30	29	7 25	29	16 17	29	17 20	Dutch	Holland-America Line.	480.0	64.6	19.7	Rotterdam, Holland	Vancouver, B. C.	General.	1,415	11,721
Volunteer	28	18 50	29	8 45	29	17 25	29	18 30	American	Lykes Bros. Ship. Co.	410.0	56.0	25.0	New Orleans, La.	Gebu, P. I.	Cotton, general.	5,524	8,214
Santa Cecilia	28	21 20	29	9 30	29	17 41	29	18 37	American	Argonaut S. S. Co.	404.6	54.0	19.0	Baltimore, Md.	Seattle, Wash.	General.	771	6,745
Willowood	29	6 20	29	10 00	29	18 12	30	00 15	British	Anglo-Can. Ship. Co.	390.0	55.5	16.4	Tyne, England	Vancouver, B. C.	Ballast.	6,898	4,321
Monkleigh	28	17 45	29	11 15	29	19 10	29	20 15	British	Tatem Steam Nav. Co.	426.0	53.0	16.4	Cardiff, Wales	Vancouver, B. C.	Ballast.	6,886	4,873
Juyo Maru	29	5 35	29	12 05	29	20 30	30	3 44	Japanese	Yamashita Kisen Kaisha	400.0	53.0	15.0	Immingham, Eng.	Seattle, Wash.	Ballast.	5,844	4,108
Virginian	29	9 00	29	12 55	29	21 11	29	21 55	American	Amer-Hawaiian Line.	491.5	58.2	19.0	Boston, Mass.	Seattle, Wash.	General.	1,020	10,491
J-12	29	29	29	8 29	29	8 29	29	8 29	American	U. S. Army				Cristobal, C. Z.	Gatun, C. Z.	Ballast.		
No. 101	29	11 20	29	14 00	29	12 02	30	13 35	American	Shaw, Savill & Albion	477.0	63.0	28.6	London, England	Wellington, N. Z.	Ballast.	3,950	11,018
Pakeha	29	16 45	30	6 10	30	15 09	30	16 30	Danish	W. Tankerhoff Rhoderei	468.6	63.2	17.2	New York, N. Y.	Talara, Peru	General.	5,932	6,209
Persephone	29	17 20	30	8 30	30	15 52	30	17 25	Japanese	J. Iwakawa	385.0	51.0	25.0	Pt. Alfred, Canada.	Yokohama, Japan.	Cotton, spelter.	4,473	6,775
Kofuku Maru	29	21 45	30	8 35	30	16 17	30	17 35	Swedish	Canadian Transport Co.	389.0	54.0	18.9	Liverpool, England	Vancouver, B. C.	Cement, salt.	4,473	6,775
Sumarvik	29	21 45	30	8 35	30	16 17	30	17 35	Swedish	Canadian Transport Co.	389.0	54.0	18.9	Liverpool, England	Vancouver, B. C.	Cement, salt.	4,473	6,775
Harry Luckenbach	29	23 50	30	8 45	30	16 33	30	17 35	American	Luckenbach Line.	448.9	60.2	20.6	Boston, Mass.	Seattle, Wash.	General.	2,805	9,262
Gen. M. H. Sherman	30	2 45	30	9 45	30	16 57	30	18 05	American	Arrow Line	402.6	53.0	17.4	Baltimore, Md.	Seattle, Wash.	General.	1,175	6,775
Wichita	30	7 10	30	10 05	30	17 25	30	18 15	American	Roosevelt S. S. Co., S.B.	395.6	55.0	22.0	New York, N. Y.	Shanghai, China.	General.	3,416	7,209
Napier	30	8 15	30	11 00	30	18 42	30	20 00	British	Blue Star Line.	476.0	67.3	19.0	Newcastle, Eng.	Vancouver, B. C.	Ballast.	11,635	5,172
Imperial	30	10 40	30	12 10	30	20 55	30	21 40	British	Reardon Smith Line.	401.6	54.3	16.6	Liverpool, England	Vancouver, B. C.	Ballast.	6,656	4,954
Valley	30	8 05	30	13 40	30	20 31	30	21 40	British	Donaldson Line.	399.5	51.9	17.4	Glasgow, Scotland.	Vancouver, B. C.	General.	128	5,831
Parthenia	30	8 05	30	13 40	30	20 31	30	21 40	British	N. Z. Shipping Co.	531.0	70.0	26.0	London, England.	Wellington, N. Z.	General.	2,860	18,206
Rangitara	1	4 00	1	7 25	1	13 21	1	21 22	British	Nippon Yusen Kaisha.	440.0	57.0	24.0	New York, N. Y.	Yawata, Japan.	Cotton.	6,273	8,139
Asuka Maru	1	4 40	1	6 20	1	15 00	1	16 30	Japanese	Nippon Yusen Kaisha.	440.0	57.0	24.0	New York, N. Y.	Yawata, Japan.	Cotton.	6,273	8,139

Sage Brush	30	21	30	1	8	30	1	15	51	1	17	00	American	Shepard S. S. Co.	409	8	54	2	17	0	General	Seattle, Wash.	1,818	6,627	4,941
Chr. Knudsen	1	4	40	1	8	30	1	18	15	1	18	15	Norwegian	Canadian Transp. Co.	381	0	54	6	14	6	Ballast	Vancouver, B. C.	6,083	4,610	
S. O.	1	8	30	1	8	30	1	16	33	2	16	33	American	U. S. Navy	231	0	51	1	21	1	Ballast	Balboa, C. Z.	6,837	4,729	
Bidwell	1	6	15	1	9	45	1	18	15	1	18	15	American	Home Fuel Oil Co.	431	0	59	2	22	6	Ballast	Los Angeles, Calif.	4,132	8,016	
Knute Nelson	1	8	50	1	10	25	2	3	20	2	3	20	Norwegian	Fred Olsen & Co.	436	0	56	0	21	0	General	Vancouver, B. C.	6,823	4,827	
Granton	1	9	30	1	11	15	1	18	02	1	19	18	British	R. Chapman & Son	423	0	58	3	17	9	Ballast	Vancouver, B. C.	1,323	15,286	
President	1	15	20	2	6	05	2	12	54	2	21	11	American	Dollar Line	517	0	72	2	27	3	General	New York, N. Y.	2,221	25,254	
Wilson	1	15	20	2	6	05	2	12	54	2	21	11	American	Dollar Line	517	0	72	2	27	3	General	New York, N. Y.	2,221	25,254	
Virginia	2	5	05	2	7	10	2	15	12	3	20	04	American	Panama-Pacific Line	586	0	80	3	26	3	General	San Francisco, Cal.	6,073	4,764	
Paris City	1	22	50	2	8	30	2	16	05	2	20	30	British	Reardon Smith Line	412	0	53	0	16	0	Ballast	Vancouver, B. C.	8,566	5,878	
Malvina	2	4	45	2	9	15	2	16	36	2	17	55	Dutch	Anglo-Saxon Pet. Co.	451	0	52	0	19	0	Ballast	Los Angeles, Calif.	7,773	5,634	
Pat Doherty	2	7	55	2	9	50	2	17	05	2	18	22	American	Richfield Oil Co.	430	0	59	2	20	0	Ballast	Los Angeles, Calif.	388	10,086	
Pacific Grove	1	20	55	2	11	10	2	18	12	2	19	34	British	Furness Line	450	0	60	1	19	6	General	Seattle, Wash.	3,801	11,007	
Santa Rosa	1	20	55	2	11	10	2	18	12	2	19	34	British	Furness Line	450	0	60	1	19	6	General	Seattle, Wash.	3,801	11,007	
Donau	2	7	25	2	12	10	2	21	18	3	3	30	American	Panama Mail S. S. Co.	484	0	72	0	25	3	General	Tacoma, Wash.	11,007	7,698	
Pan Norway	2	2	15	2	12	10	2	21	18	3	3	30	American	Panama Mail S. S. Co.	484	0	72	0	25	3	General	Tacoma, Wash.	11,007	7,698	
Solana	2	23	35	3	6	15	3	13	48	3	15	10	Norwegian	North German Lloyd	520	0	63	0	24	0	Ballast	Talara, Peru	9,963	6,806	
Stead	2	19	35	3	7	20	3	14	35	3	16	30	British	Harrol Product Corp.	419	0	56	0	20	0	Ballast	San Francisco, Cal.	7,060	5,025	
Silverpress	3	7	35	3	7	30	3	14	35	3	16	30	British	Harrol Product Corp.	419	0	56	0	20	0	Cotton, rosin	Manila, P. I.	5,042	9,576	
Drakepool	3	7	35	3	7	30	3	14	35	3	16	30	British	Harrol Product Corp.	419	0	56	0	20	0	Ballast	Vancouver, B. C.	5,890	4,199	
Steel Inventor	3	11	35	3	11	45	3	18	46	4	12	05	American	Pool Shipping Co.	390	0	55	0	13	0	General	Seattle, Wash.	2,775	7,611	
A. B. Obario	3	18	25	3	18	40	4	10	36	4	12	05	American	Isfshman S. S. Lines	424	0	56	0	18	6	Ballast	Balboa, C. Z.	57	29	
Real	2	23	20	3	10	10	3	19	36	3	19	36	Panamanian	A. Valdez	57	8	19	7			Ballast	Balboa, C. Z.	57	29	
El Sona	2	23	20	3	10	10	3	19	36	3	19	36	Panamanian	A. Valdez	57	8	19	7			Ballast	Balboa, C. Z.	57	29	
El Sona	3	8	05	3	12	45	3	21	34	3	21	34	Panamanian	Hans Elliot	63	0	16	0			Ballast	Balboa, C. Z.	53	23	
Tura	3	8	05	3	11	45	3	19	36	3	19	36	Panamanian	G. Tamn	59	0	16	6			Ballast	Balboa, C. Z.	78	49	

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Goisha	26	14	30	27	6	36	27	13	45	27	14	40	Norwegian	Knut Knudsen	375	8	51	4	25	0	Grain, fruit	Hull, England	6,115	5,681	3,925
Titania	26	14	30	27	7	29	27	8	13	28	19	15	British	Canadian Transp. Co.	400	6	54	2	26	0	General, lumber	London, England	7,206	6,558	4,633
Egero	27	8	50	27	8	15	27	15	30	27	15	30	Norwegian	Anglo-Saxon Pet. Co.	450	8	51	0	27	0	Stove oil	Curacao, D. W. I.	11,031	8,175	5,482
Dakota	27	8	50	27	9	29	27	16	35	27	16	35	American	Amer-Hawaiian Line	407	7	53	3	23	0	General	Boston, Mass.	5,367	7,156	5,094
Atlantic	27	16	35	27	17	35	28	12	00	28	12	00	American	Argonaut S. S. Co.	410	5	54	3	25	0	General	Baltimore, Md.	5,226	6,567	4,917
Elstree Grange	28	0	20	28	6	19	28	18	00	28	23	30	British	Furness, Wulhy & Co.	420	0	53	5	25	0	Fruit	Glasgow, Scotland	3,483	7,037	5,084
Ville de Stras-	28	6	00	28	7	21	28	18	10	28	22	45	French	French Line	409	3	53	5	23	0	General	Marseilles, France	2,475	7,677	5,633
bourg	28	7	00	28	8	13	28	19	15	28	19	15	British	Dale & Co.	390	0	53	5	25	0	Wheat, flour	London, England	8,101	5,612	4,119
Carlton	28	9	55	29	6	30	29	14	35	29	15	00	American	Panama-Pacific Line	586	4	80	3	30	0	General	New York, N. Y.	8,316	25,262	18,194
Pennsylvania	28	9	55	29	6	30	29	14	35	29	15	00	American	Panama-Pacific Line	586	4	80	3	30	0	General	New York, N. Y.	8,316	25,262	18,194
David Mc-	29	2	30	29	7	15	29	16	55	29	16	55	American	Tidewater Oil Co.	430	0	59	2	26	0	Gasoline	New York, N. Y.	8,316	7,629	5,325
Kelvy	28	23	35	29	8	06	29	17	50	29	17	50	British	Royal Mail Line, Ltd.	440	0	56	2	24	0	Apples	Hamburg, Germany	2,750	7,487	4,641
Meissonier	28	12	40	29	8	37	29	19	30	30	00	40	German	Hamburg-American Line	462	2	61	1	24	0	General	Hamburg, Germany	6,526	8,713	5,688
Leuna	28	15	30	29	9	26	29	20	45	29	20	40	American	Suburban Oil Serv. Corp.	391	9	51	2	26	0	Furnace oil	New York, N. Y.	6,384	5,410	3,761
Elizabeth	28	17	46	29	10	05	29	21	30	29	21	30	American	James B. Berry Sons Co.	400	8	54	3	29	0	Furnace oil	New York, N. Y.	8,777	6,336	4,389
Phoenix	28	20	20	29	10	28	29	21	00	30	14	30	British	Rt. Hon. Lord Moyn.	273	6	34	2	12	0	Ballast	Southampton, Eng.	1,454	554	
Rousalka	28	20	20	29	10	28	29	21	00	30	14	30	British	Rt. Hon. Lord Moyn.	273	6	34	2	12	0	Ballast	Southampton, Eng.	1,454	554	
Dorothy Luck-	29	8	45	29	10	49	29	23	00	29	23	00	American	Lackenbach Line	448	9	60	2	27	0	Lumber, general	Boston, Mass.	4,342	9,294	6,861
bach	29	20	00	30	6	27	30	14	30	14	30	14	British	Union Oil Co.	470	0	63	6	28	0	Gasoline	Lands End, Eng.	12,016	9,152	6,440
Corbank	30	4	30	30	7	14	30	16	20	1	00	00	British	Pacific Steam Nav. Co.	569	0	67	0	31	0	General	Liverpool, England	8,517	17,146	12,015
Orduna	30	4	30	30	7	14	30	16	20	1	00	00	British	Pacific Steam Nav. Co.	569	0	67	0	31	0	General	Liverpool, England	8,517	17,146	12,015

* For orders.

* Yachet.

* Motor schooner.

* Submarine.

* Launch.

* Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Georgian	29	17.55	30	8.25	30	17.10	30	17.10	American	Williams S. S. Corp.	434.3	57.7	27.0	Seattle, Wash.	Newburgh, N. Y.	Lumber, general.	8,315	7,980
Pacific Pioneer	29	20.30	30	9.07	30	17.35	30	17.35	British	Furness, Withy & Co.	452.0	60.1	27.1	Vancouver, B. C.	London, England.	General.	8,072	9,630
Apfellore	29	21.30	30	9.37	30	18.15	30	18.15	British	Anglo-Canadian Co.	410.0	54.0	25.0	Victoria, B. C.	Liverpool, England.	Wheat, general.	9,079	6,997
Point Chico	29	22.30	30	10.07	30	19.10	30	19.10	American	Swayne & Hoyt	386.8	52.2	22.0	Seattle, Wash.	Mobile, Ala.	Lumber, general.	5,236	5,727
Kansas	30	9.00	30	10.56	30	20.25	30	20.25	American	Amer-Hawaiian Line	420.5	53.9	26.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	5,952	6,779
Quebec City	1	7.00	1	7.50	1	15.10	1	15.10	British	Reardon Smith Line	400.5	54.3	25.0	Vancouver, B. C.	Manchester, Eng.	General	7,340	7,003
Emergency Aid	1	8.00	1	8.59	1	16.35	1	16.35	American	Pac. Arg. Brazil Line	400.7	54.2	25.0	Powell River, B. C.	Santa Fe, Arg.	General	6,856	6,534
California	1	11.00	1	12.09	1	21.40	2	14.05	Italian	Nav. Libera-Triestina	523.1	64.0	29.0	Vancouver, B. C.	Genoa, Italy	General	9,492	13,787
America	1	19.00	2	6.13	2	13.30	2	16.10	Danish	East Asiatic Co.	465.4	63.2	29.0	Vancouver, B. C.	Copenhagen, Den.	General	9,630	11,060
Boskoop	2	2.40	2	7.25	2	16.10	2	20.50	Dutch	Royal Neth. S. S. Co.	400.6	58.3	26.2	Valparaiso, Chile	Liverpool, England	General	8,130	7,817
K. R. Kingsbury	2	6.45	2	8.25	2	16.35	2	16.35	American	Standard Oil Co.	440.0	55.2	27.0	Los Angeles, Calif.	Tiverton, R. I.	Gasoline	11,500	9,033
Heranger	2	7.15	2	9.09	2	17.10	2	17.10	Norwegian	Interocean S. S. Corp.	398.1	54.8	26.0	Vancouver, B. C.	Rotterdam, Holl'd	General	7,278	6,864
Manzates	2	7.20	2	9.25	2	19.10	4	9.25	German	Grace Line	216.5	32.9	16.5	Guayaquil, Ecuador	Cristobal, C. Z.	General	909	1,132
A. B. Osario	2	10.28	2	10.28	2	23.20	3	10.10	Panamanian	A. Valdez	57.8	19.7		Panama Bay, R. P.	Cristobal, C. Z.	Bananas	45	57
Real	2	13.15	2	13.48	2	23.20	3	11.45	Panamanian	Haus Elliot	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas	40	46
Tura	2	15.30	2	16.37	3	8.45	3	12.15	Panamanian	G. Tamun	59.0	16.5		Panama Bay, R. P.	Cristobal, C. Z.	Bananas	45	78
El Sona	2	16.37	3	8.45	3	12.15	3	11.45	Panamanian		59.0	16.5		Panama Bay, R. P.	Cristobal, C. Z.	Bananas	29	53
Constance	2	16.20	2	18.31	3	11.35	3	11.35	American	Arrow Line	409.6	54.2	23.0	Seattle, Wash.	Baltimore, Md.	Lumber, general	6,755	6,021
Chandler	2	5.45	3	6.24	3	13.45	3	22.00	American	U. S. Navy	483.1	61.7	20.0	San Francisco, Cal.	Norfolk, Va.	General	175	
Durazzo	2	14.20	3	7.17	3	15.15	4	14.35	German	Hamburg-American Line	227.5	34.4	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	1,130	1,632
Acapulca	2	23.50	3	7.32	3	15.00			British	Pacific Steam Nav. Co.	215.7	33.6	14.3	Champerico, Guat.	Cristobal, C. Z.	General	338	1,273

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.		Line.	* ARRIVALS.		From—	Vessel.	Date.	Line.	* DEPARTURES.		For—
	Day.	Hour.		Day.	Hour.					Day.	Hour.	
November 27	Daivian		Leyland S. S. Line			Liverpool via waypoints.	Metapan	November 27	United Fruit Co.			New York via waypoints.
November 27	No. 300-N	10	Pan American Airways			Talara via waypoints.	Buenaventura	November 27	Panama R. R. S. S. Line			New York, N. Y.
November 27	No. 9685	10	Pan American Airways			San Salvador via waypoints.	No. 669-M	November 28	Pan American Airways			Barranquilla, Colombia.
November 28	Calamars		United Fruit Co.			Port Limon, Costa Rica.	Daivian	November 28	Leyland S. S. Line			Sagua La Grande, Cuba.
November 28	No. 145-M	10	Urba, Medellin & Cent. Airways			Medellin, Colombia	Calamars	November 28	United Fruit Co.			New York via Habana.
November 28	No. 669-M	10	Pan American Airways			Barranquilla, Colombia.	No. 9685	November 29	Pan American Airways			San Salvador via waypoints.
November 29	Orinoco		Hamburg-American Line			Pto. Barrios, and waypoints.	Coronado	November 30	Elders & Tyfles, Ltd.			Avonmouth via waypoints.
November 29	Bogota		Colombian S. S. Line			New York via waypoints.	Bogota	November 30	Colombian S. S. Line			New York via Kingston.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
November 29	Coronado	Elders & Fyfe's Ltd.	Avonmouth via wayp'ts.	November 30	Orinoco	Hamburg-American Line.	Europe via wayports.
November 30	Ancon	Panama R. R. S. S. Line.	New York via Haiti.	December 1	No. 699-M ¹⁰	Pan American Airways	Miami via wayports.
November 30	No. 9673	Pan American Airways	San Salvador via wayp'ts.	December 1	No. 145-M ¹⁰	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
November 30	No. 144-M ¹⁰	Pan American-Graee Airways	Talara via wayports.	December 2	No. 300-N ¹⁰	Pan American-Graee Airways	Buenaventura, Colombia.
November 30	No. 945-M ¹⁰	Pan American-Graee Airways	Chileayo via wayports.	December 2	Tolosa	United Fruit Co.	New Orleans via wayp'ts.
December 1	No. 639-M ¹⁰	Pan American Airways	Miami via wayports.	December 2	Vergara	United Fruit Co.	Port Limon, Costa Rica.
December 2	Atlantida	Standard Fruit & S. S. Co.	New Orleans via Habana.	December 3	Atlantida	Standard Fruit & S. S. Co.	New Orleans via wayp'ts.
December 2	Tolosa	United Fruit Co.	New Orleans via Habana.				
December 2	Tabasco	Vaccaro S. S. Co.	New Orleans La.				
December 2	Vergara	United Fruit Co.	New York via wayports.				
December 2	Anaehueana ¹¹	A. Tagaropoulos	Colon, Rep. of Panama.				
December 2	No. 145-M ¹⁰	Uraba, Medellin & Cent. Airways	Medellin, Colombia.				
December 2	No. 8299 ¹⁰	U. S. Government	Managua, Nicaragua.				
December 3	Colombia	Colombian Line.	New York via wayports.				
December 3	Santa Marta.	United Fruit Co.	New York via Kingston.				
PORT OF BALBOA.							
November 27	Nuevo Panama ⁸	Hans Elliot.	Buenaventura, Colombia.	November 27	All America	All America Cables	Callao, Peru.
November 30	Heiyo Maru ⁸	Nippon Yusen Kaisha.	Hongkong, China.	November 28	Nuevo Panama ⁸	Hans Elliot.	Buenaventura, Colombia.
December 2	Condor	Graee Line.	San Antonio, Chile.	December 2	Condor	Graee Line.	San Francisco, Calif.
December 3	Dos Hermanos ⁹	A. Valdez	Panama Bay, R. P.	December 3	Dos Hermanos ⁹	A. Valdez	Panama Bay, R. P.
				December 1	Heiyo Maru ⁸	Nippon Yusen Kaisha	Valparaiso, Chile.

* Other than ships passing through the Canal.

† Motor boat.

° Air mail carrier.

° Motor schooner.

° Motor ship.

† Tanker.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending December 3, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Buenaventura.....	Panama R. R. S. S. Line.....		November 27		230
Colombia.....	Royal Netherlands S. S. Co.....		December 4		242
Cali.....	North German Lloyd.....		November 29		214
Peter Kerr.....	Quaker Line.....		November 27		(¹)
Reina del Pacifico.....	Pacific Steam Navigation Co.....	November 27	November 28	73	189
Davisan.....	Leyland Line.....	November 27	November 28	201	(²)
Damsterdyk.....	Holland-America Line.....	November 28	November 28	252	(²)
Calamares.....	United Fruit Co.....	November 28	November 28	167	407
Bogota.....	Colombian S. S. Co.....	November 29	November 30	174	231
Lenna.....	Hamburg-American Line.....	November 29	November 29	28	108
Orinoco.....	Hamburg-American Line.....	November 29	November 30	40	718
Coronado.....	Elders & Fyffes, Ltd.....	November 29	November 30	20	1
Orduna.....	Pacific Steam Navigation Co.....	November 30	December 1	61	(²)
Parthenia.....	Donaldson Brothers.....	November 30	November 30	(²)	68
Ancon.....	Panama R. R. S. S. Line.....	November 30		1,667	
Donau.....	North German Lloyd.....	December 1	December 2	103	432
Syra.....	Hamburg-American Line.....	December 1		76	
California.....	Italian Line.....	December 1	December 1	(²)	81
President Wilson.....	Dollar Line.....	December 1	December 2	(²)	11
Vragua.....	United Fruit Co.....	December 2	December 2	52	94
Santa Rosa.....	Panama Mail S. S. Co.....	December 2	December 2	24	1
Tolosa.....	United Fruit Co.....	December 2	December 2	701	198
Amerika.....	East Asiatic Co.....	December 2	December 2	(²)	40
Atlantida.....	Standard Fruit & S. S. Co.....	December 2	December 3	279	541
Boskoop.....	Royal Netherlands S. S. Co.....	December 2	December 2	23	35
Manizales.....	Hamburg-American Line.....	December 2		1,000	
Dnrazzo.....	Hamburg-American Line.....	December 3		938	
Acajntla.....	Pacific Steam Navigation Co.....	December 3		338	
Colombia.....	Colombian S. S. Co.....	December 3		274	
Santa Marta.....	United Fruit Co.....	December 3	December 3	365	178

¹ No cargo discharged.² No cargo laded.

Panama Railroad Time-Table No. 40, Effective December 15, 1932.

COLON-PANAMA TRAINS.

Read down.

Read up.

SOUTHWARD.				Miles from Colon.	STATIONS.	NORTHWARD.			
SUN-DAYS AND HOLIDAYS ONLY.	DAILY EXCEPT SUNDAYS AND HOLIDAYS.	DAILY.							
105	7	5	3			2	4	6	106
P.M.	P.M.	P.M.	A.M.		Leave	Arrive	A.M.	P.M.	P.M.
4.00	4.40	12.30	9.25	0	Colon.....	8.40	2.10	6.20	7.40
4.04	4.44	12.34	9.29	1.57	Mount Hope.....	8.36	2.06	6.16	7.36
4.15	4.55	12.45	9.40	6.79	Gatun.....	8.27	1.57	6.07	7.27
f 4.24	f 5.04	f 12.54	f 9.49	11.77	Quebrancha.....	f 8.17	f 1.47	f 5.57	f 7.17
4.29	5.09	12.59	9.54	14.48	Monte Lirio.....	8.12	1.42	5.52	7.12
f 4.34	f 5.14		f 9.59	17.53	Bohio.....	f 8.06		f 5.46	f 7.06
4.40	5.20	1.10	10.05	20.92	Frijoles.....	8.01	1.31	5.41	7.01
4.48	5.28	1.18	10.13	25.32	Darien.....	7.53	1.23	5.33	6.53
4.56	5.36	1.26	10.21	30.25	Gamboa.....	7.45	1.15	5.25	6.45
5.06	5.46	1.36	10.31	35.19	Summit.....	7.35	1.05	5.15	6.35
5.16	5.56	1.46	10.41	40.24	Pedro Miguel.....	7.24	12.54	5.04	6.24
5.24	6.04	1.54	10.49	44.23	Corozal.....	7.16	12.46	4.56	6.16
5.30	6.10	2.00	10.55	46.26	Balboa Heights.....	7.10	12.40	4.50	6.10
5.35	6.15	2.05	11.00	47.61	Panama.....	7.05	12.35	4.45	6.05
P.M.	P.M.	P.M.	A.M.		Arrive	Leave	A.M.	P.M.	P.M.
105	7	5	3				2	4	6
Trains Nos. 105 and 106 will run on Sundays and the following holidays only: January 1, February 22, Good Friday, May 30, July 4, Labor Day, November 3, Thanksgiving, and December 25. Trains Nos. 4, 5, 6, and 7 will not run on Sundays or holidays. When a holiday falls on a Sunday the MONDAY following will be observed.					f—Stop on flag only.				
					DAILY.				
					DAILY EXCEPT SUNDAYS AND HOLIDAYS.				
					SUN-DAYS AND HOLIDAYS ONLY.				

THE PANAMA CANAL RECORD

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., December 14, 1932. No. 20.

Commercial Traffic Through the Panama Canal in November, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of November, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for November, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	54	315,909	234,937	380,972	234,600	\$276,994.32	122,296
Europe to Canada:							
Belgian.....	1	7,044	4,567	7,217	4,398	5,071.68	.....
British.....	30	149,134	108,167	175,749	108,246	110,289.11	2,883
Danish.....	2	9,805	6,913	11,123	6,978	8,494.99	1,116
Dutch.....	2	15,902	11,977	19,554	12,151	14,971.25	2,720
French.....	1	7,027	3,873	8,062	4,295	4,841.25	1,254
German.....	2	13,648	8,619	15,048	9,070	10,773.75	6,975
Italian.....	1	6,024	3,639	6,080	3,757	4,548.75	1,554
Japanese.....	2	9,296	7,036	11,337	6,990	6,693.12	.....
Norwegian.....	8	40,866	25,464	42,577	25,934	29,525.57	2,259
Swedish.....	2	10,008	5,547	9,681	7,211	6,933.75	5,605
Total.....	51	268,754	185,802	306,428	189,030	202,143.22	24,366
United States to Far East:							
British.....	6	35,369	21,780	36,691	21,889	27,225.00	24,646
Japanese.....	9	48,985	40,436	62,742	36,483	47,870.04	36,748
Norwegian.....	2	9,288	5,162	8,930	5,110	6,452.50	9,560
United States.....	4	21,909	16,234	26,092	16,126	20,292.50	20,513
Total.....	21	115,551	83,612	134,455	79,608	101,840.04	91,467
Europe to South America:							
British.....	4	30,911	23,421	40,910	24,955	26,045.96	11,451
Danzig.....	1	8,592	6,123	10,313	5,943	6,186.24	.....
Dutch.....	1	6,101	3,155	5,546	3,325	3,943.75	1,032
German.....	2	7,814	5,342	9,069	5,473	6,677.50	5,654
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	442
Norwegian.....	1	3,797	3,039	5,041	3,101	3,798.75	4,030
Total.....	10	66,544	46,256	82,597	49,547	53,122.20	22,609
Europe to United States:							
British.....	1	7,595	5,764	9,409	5,812	7,205.00	1,603
Danish.....	1	3,651	2,468	4,150	2,506	3,085.00	2,721
Danzig.....	1	7,653	6,616	11,395	6,362	5,510.16	.....
Norwegian.....	4	24,003	18,908	31,672	18,921	17,138.02	.....
Swedish.....	2	10,161	5,880	10,189	7,594	7,126.59	.....
Total.....	9	53,063	39,636	66,815	41,195	40,064.77	4,324
Europe to Australasia:							
British.....	6	48,671	35,066	58,887	36,753	41,708.53	13,300
French.....	1	3,743	3,055	5,072	3,026	3,818.75	959
Total.....	7	52,414	38,121	63,959	39,779	45,527.28	14,259

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to Philippines:							
Danish	1	5,975	3,170	5,339	3,346	\$3,962.50	3,178
Panamanian	1	6,967	3,610	6,801	3,622	4,512.50	3,584
United States	3	36,951	27,232	43,840	27,228	34,040.00	8,768
Total	5	49,893	34,012	55,980	34,196	42,515.00	15,530
United States to South America:							
British	1	5,049	4,395	7,203	4,382	3,635.28	
Danzig	1	6,410	5,236	8,956	5,041	4,615.20	
Swedish	1	4,468	2,678	4,585	3,207	3,216.96	
United States	2	14,154	9,142	17,793	9,135	11,427.50	4,303
Total	5	30,081	21,451	38,537	21,765	22,894.94	4,303
Canadian intercoastal:							
British	5	22,516	16,826	27,865	17,096	17,669.81	4,900
United States to Australasia:							
British	3	21,754	13,637	21,794	13,741	17,046.25	11,200
Around the world:							
United States	2	16,990	12,456	21,068	12,390	15,570.00	5,993
United States to Canada:							
British	2	8,671	6,412	10,318	6,407	6,243.12	
Norwegian	1	3,540	2,390	3,971	2,452	2,548.80	
Total	3	12,211	8,802	14,289	8,859	8,791.92	
Canada to Australasia:							
British	2	8,516	6,534	10,862	6,602	8,167.50	2,929
Europe to Central America:							
German	1	6,409	4,453	7,659	4,482	5,566.25	1,771
Norwegian	1	579	553	941	557	691.25	555
Total	2	6,988	5,006	8,600	5,039	6,257.50	2,326
Foreign vessels in ballast—							
United States inter-							
coastal:							
British	1	6,345	5,577	8,882	5,259	4,568.40	
United States to Hawaii:							
United States	1	5,450	3,465	5,687	3,450	4,331.25	3,212
Cristobal to South America:							
German	6	4,930	3,497	7,221	3,590	4,371.25	1,504
Panamanian	3	303	309	609	303	363.60	328
Total	9	5,233	3,806	7,830	3,893	4,734.85	1,832
South America to United States:							
United States	1	5,033	3,503	5,513	3,520	4,378.75	2,709
Canada to Far East:							
Japanese	1	4,763	4,366	5,822	4,280	5,457.50	5,933
South America to Canada:							
Norwegian	1	4,375	2,431	4,000	2,485	3,038.75	1,155
West Indies to Canada:							
British	1	4,129	3,298	5,378	3,246	2,972.88	
Africa to South America:							
Danish	1	4,097	3,355	5,722	3,406	2,949.84	
Cristobal to Central America:							
British	2	1,441	1,286	2,298	1,304	1,607.50	1,230
Panamanian	2	44	48	90	58	52.80	31
Total	4	1,485	1,334	2,388	1,362	1,660.30	1,261
South American intercoastal:							
Colombian	1	307	302	405	308	368.40	625
Cristobal to Balboa:							
Panamanian	7	238	237	110	194	180.90	
Grand total, Nov., 1932	207	1,082,639	778,762	1,285,958	784,850	893,246.57	343,229
Grand total, Nov., 1931	197	1,064,003	774,033	1,289,531	783,230	903,026.06	472,373
Grand total, Nov., 1930	232	1,148,859	841,183	1,398,460	847,512	970,646.33	554,098

PACIFIC TO ATLANTIC.

United States intercoastal:							
United States	58	339,754	257,383	416,490	256,476	\$321,478.75	438,327

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Canada to Europe:							
British.....	30	157,932	113,169	184,060	113,332	\$141,461.25	214,018
Danish.....	2	13,339	8,529	14,956	9,295	10,661.25	16,835
Dutch.....	1	7,619	5,782	9,338	5,808	7,227.50	9,142
French.....	2	14,702	8,500	16,441	9,326	10,625.00	15,001
German.....	4	25,529	16,753	28,573	17,174	20,941.25	28,272
Italian.....	1	6,012	3,676	6,083	3,768	4,595.00	9,113
Norwegian.....	12	60,553	38,316	62,302	37,215	47,895.00	92,855
Panamanian.....	1	6,065	3,447	5,745	3,507	4,308.75	8,070
Swedish.....	1	5,485	3,406	5,558	4,246	4,257.50	7,972
United States.....	2	10,900	6,930	11,370	6,900	8,662.50	14,689
Total.....	56	308,136	208,508	344,430	210,571	260,635.00	415,967
South America to Europe:							
British.....	5	31,637	25,167	42,197	25,751	31,458.75	44,325
Danzig.....	1	8,592	6,123	10,353	5,943	7,653.75	15,595
Dutch.....	1	5,980	3,111	5,554	3,339	3,888.75	8,227
German.....	1	3,370	2,515	4,159	2,535	3,143.75	5,414
Italian.....	1	9,373	5,223	11,669	6,779	6,528.75	2,410
United States.....	1	8,060	6,663	9,482	5,923	8,328.75	14,300
Total.....	10	67,012	48,802	83,414	50,270	61,002.50	90,271
Philippine Islands to United States:							
Danish.....	1	5,500	3,081	5,038	3,155	3,851.25	4,965
Japanese.....	3	16,644	12,036	19,528	11,923	15,045.00	39,510
Norwegian.....	1	6,829	3,654	7,019	3,868	4,567.50	4,171
United States.....	3	36,891	27,083	43,783	27,057	33,853.75	18,142
Total.....	8	65,864	45,854	75,368	46,003	57,317.50	46,788
United States to Europe:							
British.....	1	6,440	5,367	8,898	5,366	6,708.75	12,106
Italian.....	1	4,421	3,764	6,107	3,883	4,705.00	2,623
Norwegian.....	3	17,046	14,178	23,327	13,946	17,722.50	30,989
Swedish.....	1	5,784	4,924	8,187	6,110	6,155.00	10,259
United States.....	1	8,619	7,026	11,247	6,953	8,782.50	15,340
Total.....	7	42,310	35,259	57,766	36,258	44,073.75	71,317
Australasia to Europe:							
British.....	3	17,222	12,296	20,829	12,797	15,167.63	13,457
French.....	1	5,633	4,305	7,138	4,380	5,381.25	2,475
Total.....	4	22,855	16,601	27,967	17,177	20,548.88	15,932
South America to United States:							
British.....	1	3,101	2,251	3,668	2,219	2,813.75	5,000
Norwegian.....	1	4,017	3,046	4,953	3,054	3,807.50	7,350
United States.....	2	13,313	7,887	16,310	7,887	9,858.75	5,768
Total.....	4	20,431	13,184	24,931	13,160	16,480.00	18,118
United States to West Indies:							
British.....	1	5,779	4,882	8,236	4,828	6,102.50	11,926
Norwegian.....	1	5,482	4,563	7,590	4,525	5,703.75	11,031
Swedish.....	1	6,325	5,213	8,972	6,619	6,516.25	12,218
Total.....	3	17,586	14,658	24,798	15,972	18,322.50	35,175
Far East to United States:							
Japanese.....	2	11,241	8,848	14,339	8,696	11,060.00	3,700
Hawaiian Islands to United States:							
United States.....	2	10,900	6,930	11,374	6,900	8,662.50	5,710
South America to Canada:							
British.....	1	6,772	5,975	11,309	5,781	7,468.75	15,900
Around the world:							
Dutch.....	1	5,974	4,675	7,191	4,550	5,843.75	2,970
United States to South America:							
British.....	1	5,424	4,271	6,817	4,340	5,338.75	3,005
South America to Cristobal:							
German.....	6	4,930	3,497	6,421	3,590	4,371.25	5,267
Panamanian.....	3	303	309	609	303	363.60	279
Total.....	9	5,233	3,806	7,030	3,893	4,734.85	5,546
Far East to Europe:							
Norwegian.....	1	5,058	2,788	4,663	2,793	3,435.00	7,700

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Canada to United States:							
United States.....	1	4,260	3,072	4,717	2,991	\$3,840.00	1,708
Anstraliasia to Canada:							
British.....	1	4,172	3,286	5,454	3,340	4,107.50	1,233
Canadian intercoastal:							
British.....	1	4,094	3,255	5,404	3,331	4,068.75	5,437
Central America to United States:							
German.....	1	2,533	1,462	2,452	1,469	1,823.04	
Central America to Europe:							
Danish.....	1	1,895	1,155	1,909	1,172	1,443.75	2,902
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	287
Balboa to Cristobal:							
Panamanian.....	7	213	221	363	* 223	276.25	287
Grand total, Nov., 1932..	181	953,157	691,279	1,140,484	696,670	863,619.27	1,188,280
Grand total, Nov., 1931..	179	937,742	688,974	1,145,795	694,675	859,010.13	1,105,150
Grand total, Nov., 1930..	247	1,222,628	903,370	1,492,110	912,280	1,127,711.03	1,709,102

Tanker Traffic Through the Panama Canal in November, 1932.

During the month of November, 1932, 53 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 324,706, on which tolls amounting to \$295,265.92 were paid. Cargo amounted to 371,135 tons, comprised of 361,485 tons of mineral oils, 2,900 tons of cottonseed oil, and 6,750 tons of fish and vegetable oils.

In point of net tonnage, tanker traffic increased 11.3 per cent in comparison with the corresponding month a year ago, while cargo tonnage made a gain of 26.8 per cent.

Tank ships comprised 13.7 per cent of the total commercial transits through the Canal during the month; made up 15.9 per cent of the total Panama Canal net tonnage; were the source of 16.8 per cent of the tolls collected; and carried 24.2 per cent of the total cargo through the Canal.

The number, aggregate net tonnage (Panama Canal measurement), tolls, and cargo of tank ships transiting the Canal during the month of November, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for November, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	3	19,937	\$14,354.64	
Danish.....	1	4,097	2,949.84	
Danzig.....	3	22,655	16,311.60	
Norwegian.....	3	18,716	13,475.52	
United States.....	13	76,570	60,505.57	* 25,898
Total, November, 1932.....	23	141,975	107,597.17	25,898
Total, October, 1932.....	28	157,341	119,911.76	23,011
Total, September, 1932.....	28	168,756	132,490.38	51,289
Total, November, 1931.....	25	142,834	109,638.99	30,788
<i>Pacific to Atlantic.</i>				
British.....	5	32,583	35,155.00	64,512
Danzig.....	1	8,592	7,653.75	15,595
Norwegian.....	4	22,528	23,426.25	42,020
Swedish.....	2	12,109	12,671.25	22,477
United States.....	18	106,919	108,762.50	* 200,633
Total, November, 1932.....	30	182,731	187,668.75	345,237
Total, October, 1932.....	26	141,180	146,286.88	261,710
Total, September, 1932.....	23	140,618	140,991.30	239,921
Total, November, 1931.....	25	148,982	152,928.34	261,918

* Includes 2,900 tons cottonseed oil.

* Includes 6,750 tons fish and vegetable oil.

The following tabulation shows the tanker traffic through the Canal in November, 1932, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	13	77,944	\$60,087.72	¹ 19,682
United States to South America.....	2	11,459	8,250.48	
United States to Far East.....	1	4,971	4,986.25	² 6,216
Europe to United States.....	4	26,369	18,985.68	
Europe to South America.....	2	17,135	12,337.20	
Africa to South America.....	1	4,097	2,949.84	
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	16	90,240	91,651.25	³ 170,993
United States to West Indies.....	3	17,586	18,322.50	35,175
United States to Europe.....	6	37,889	39,368.75	68,694
South America to Canada.....	1	6,772	7,468.75	15,900
South America to Europe.....	4	30,244	30,857.50	54,475

¹ Includes 2,900 tons cottonseed oil.

² 357 tons scheduled for discharge at Los Angeles.

³ Includes 6,750 tons fish and vegetable oil.

Of the tanker traffic passing through the Canal in November, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for November, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
November, 1932.....	12	75,537	\$55,575.35	6,216
October, 1932.....	11	62,560	45,043.20	
September, 1932.....	14	81,564	59,726.08	
November, 1931.....	10	60,426	44,733.10	1,920
<i>From Los Angeles.</i>				
November, 1932.....	18	109,608	112,335.00	209,064
October, 1932.....	16	89,713	93,648.75	174,141
September, 1932.....	10	61,290	60,127.48	105,384
November, 1931.....	12	69,516	69,835.33	117,569

Notice to Mariners and Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 7, 1932.

No. 1241.

Panama Canal, Pacific entrance, Ancon Hill, steel tower erected. A 40-foot steel triangulation tower, surmounted by a white and black flag, has been temporarily erected by the Navy on Ancon Hill, in latitude 8° 57' 26" N., longitude 79° 33' 09" W. This tower is over the Panama Canal's triangulation station and may be used as a day mark by incoming ships; a red 50-watt light will shortly be exhibited at the top of the tower. Menace to aviators.

C. S. RIDLEY,
Acting Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 10, 1932.

No. 1244.

Panama Canal, Miraflores Lake, changes in buoyage. Light buoy No. M-5, Miraflores Lake, moved 400 feet in a northerly direction on the old prism line to protect a shoal reaching to old channel prism line.

Spar buoy No. 7 moved 125 feet in a westerly direction from its former position to mark the new prism line.

Full channel depths are now found on a straight line drawn from the end of the west wing wall to position of spar buoy No. 7, thence to light buoy No. M-5.

C. S. RIDLEY,
Acting Governor.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, December 10, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Japan Arrow ¹	3	20 10	4	6 10	4	13 36	4	14 45	American...	Stand. Vac. Transp. Co.	468 0	62 0	20 6	Albany, N. Y.	Los Angeles, Calif.	Ballast.	10,084	7,388	
American	3	21 30	4	7 05	4	14 10	4	15 10	American...	Amer.-Hawaiian Line	404 0	53 0	17 0	Boston, Mass.	Portland, Oreg.	General	1,494	4,761	
Lapwing ³	4	7 15	4	7 15	4	16 55	4	17 00	American...	U. S. Navy	180 0	35 6	17 0	Cristobal, C. Z.	Balboa, C. Z.	(11)	1,362	3,350	
Syra ⁴	1	13 55	4	8 20	4	15 48	4	17 00	German...	Hamburg-AmericanLine	309 0	44 0	19 0	Hamburg,Germany	Champerico, Guat.	General	1,362	2,292	
Kristen	3	23 45	4	8 30	4	16 55	4	19 05	Danish...	A. P. Moller & Co.	284 0	42 0	12 0	Tucupido, Venez.	Talara, Peru	Ballast.	2,460	1,701	
Maersk.	2	19 00	4	9 25	4	17 56	4	19 20	German...	Grace Line	216 0	32 0	12 5	Cristobal, C. Z.	Guayaquil,Ecuador	General	1,132	741	
Manizales	2	19 00	4	9 25	4	17 56	4	19 20	German...	Grace Line	216 0	32 0	12 5	Cristobal, C. Z.	Guayaquil,Ecuador	General	1,132	741	
Point Palmas	4	7 05	4	9 35	4	17 58	4	19 20	American...	Swayne & Hoyt	386 0	52 0	23 0	Houston, Tex.	Tacoma, Wash.	Corn, general	4,858	4,138	
Durazzo	3	15 15	4	14 35	4	21 25	4	22 54	German...	Hamburg-AmericanLine	227 0	34 0	13 0	Cristobal, C. Z.	Buenaventura, Col.	General	1,633	1,041	
Frumenton	4	18 00	4	20 15	5	13 27	5	14 55	British...	R. Chapman & Sons	436 0	60 0	17 6	North Shields, Eng.	Vancouver, B. C.	Ballast.	217	8,144	
Gen. Wm. M. Graham ⁴	4	18 05	4	8 45	4	16 48	5	15 27	American...	U. S. Army	156 0	32 0	20 0	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	12,618	8,126	
R. L. Hague ¹	4	18 05	5	6 15	5	15 27	5	16 50	Danzig...	Waried Tankschiff Co.	520 0	70 0	21 6	Antwerp, Belgium	Talara, Peru	Ballast.	12,618	8,126	
Nelson	4	19 20	5	7 10	5	16 35	5	17 55	American...	Nelson Line	380 0	53 0	18 0	New York, N. Y.	Seattle, Wash.	General	2,046	5,637	
Traveler	4	19 20	5	7 10	5	16 35	5	17 55	American...	Nelson Line	380 0	53 0	18 0	New York, N. Y.	Seattle, Wash.	General	2,046	5,637	
Surry	5	5 10	5	8 15	5	17 31	6	00 45	British...	Federal Steam Nav. Co.	460 0	62 0	27 6	Newport, Eng.	Bluff, N. Z.	General	8,067	10,592	
S48 ³	5	5 10	5	8 30	5	16 47	5	16 39	American...	U. S. Navy	266 0	21 6	21 1	Cristobal, C. Z.	Balboa, C. Z.	General	1,599	7,480	
8-11 ¹	5	8 30	5	8 30	5	16 39	5	16 39	American...	U. S. Navy	231 0	21 1	21 1	Cristobal, C. Z.	Balboa, C. Z.	General	1,599	7,480	
Hokuroku	5	3 25	5	9 55	5	18 20	5	19 40	Japanese...	Oosaka Shosen Kaisha	466 0	60 0	25 4	Boston, Mass.	Kobe, Japan	Gen., phosphate.	6,333	8,942	
Maru ²	1	8 20	5	9 45	5	19 07	5	20 35	American...	U. S. Navy	201 0	28 0	15 8	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	6,333	8,942	
Nokomis	5	10 00	5	11 00	5	20 35	5	21 40	Norwegian...	Rapen & Loennechen	446 0	60 0	20 0	Stockholm, Sweden	La Libertad, Ecua.	Ballast.	6,643	4,426	
Havston ¹	5	11 05	5	13 05	5	21 30	5	22 50	Swedish...	Johnson Line	426 0	56 0	18 8	Antwerp, Belgium	Vancouver, B. C.	Cement, pulp, gen.	1,599	7,480	
Balboa ¹	5	11 05	5	13 05	5	21 30	5	22 50	American...	Williams Line	418 0	55 0	18 0	Baltimore, Md.	Seattle, Wash.	General	1,602	7,731	
Willzipo	5	13 25	5	13 50	5	22 10	5	23 30	American...	Hans Elliot	108 0	20 0	7 6	Cristobal, C. Z.	Buenaventura, Col.	General	100	226	
Nuevo Panama ²	4	18 25	5	14 08	5	21 13	6	12 15	Panamanian...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
No. 223 ⁶	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...	U. S. Navy	105 0	14 9	14 9	Cristobal, C. Z.	Balboa, C. Z.	General	100	226	
Launch	5	6 00	5	6 00	5	15 22	5	16 40	American...										

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
Tuira	8 6 20	8 7 34	8 15 50	9 1 15	Panamanian	Hans Elliot	Bananas
New Orleans ..	7 2 34	8 10 21	8 17 40	8 22 00	American	Roosevelt S. S. Co.	New York, N. Y.
Texas	8 11 15	8 12 00	8 18 35	8 18 55	American	Amer-Hawaii Line	General
Santa Cecilia ..	8 5 00	8 13 27	8 20 10	9 1 15	American	Panama Mail S. S. Co.	Lumber, general
Eli	8 14 15	8 15 01	8 22 20	9 1 15	American	Conyn & Co.	General
Buenos Aires ..	8 15 25	8 16 26	9 11 40	9 15 10	Norwegian	Johnson Line	General
Turicum	8 13 50	9 6 12	9 17 20	9 20 10	Norwegian	Anglo-Saxon Pet. Co.	General
Odenwald	8 17 40	9 7 12	9 19 50	9 20 50	German	Hamburg-American Line	General
Roland	9 4 00	9 7 51	9 19 50	10 2 10	German	North German Lloyd	General
Trebertha	9 6 00	9 9 06	9 20 50	9 20 50	British	Sunday & Co.	General
Cerigo	9 8 30	9 9 37	9 19 50	11 8 50	German	Hamburg-American Line	General
Real	9 9 43	9 11 07	9 20 50	11 6 15	Panamanian	Hans Elliot	General
Oregon	9 10 10	9 11 17	9 22 30	10 1 40	French	French Line	General
El Sona	9 11 25	9 12 21	9 22 10	10 1 40	Panamanian	G. Tamm	General
Childa	8 7 30	10 6 05	10 14 30	12 6 15	American	U. S. Navy	Bananas
Barry, No. 241 ..	8 7 30	10 6 05	10 14 30	12 6 00	American	U. S. Navy	General
Twigg, No. 127 ..	8 7 30	10 6 25	10 14 30	12 6 15	American	U. S. Navy	General
Williams, No. 244 ..	8 7 30	10 6 25	10 14 30	12 6 00	American	U. S. Navy	General
Herman Frasel ..	9 21 30	10 7 26	10 15 35	10 15 35	American	Dutton Lumber Co.	General
President Herrenschildt ..	10 8 45	10 9 09	10 17 10	10 17 10	Norwegian	Pachbloom, Norway	General
Mercury Sun ..	10 11 00	10 12 04	10 19 10	10 19 10	American	Shell Oil Co.	General
San Bernardino ..	10 13 45	10 14 16	10 21 20	10 21 20	American	States S. S. Co.	General

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 4....	No. 9688 ¹⁶ ...	Pan American Airways	San Salvador via wayp'ts.	December 4....	Acacia ¹⁹ ...	U. S. Navy	San Juan, Puerto Rico.
December 5....	No. 144-M ¹⁶ ...	Pan American-Grace Airways	Talara via wayp'ts.	December 4....	Santa Maria	United Fruit Co.	New York via wayp'ts.
December 5....	Veragua	United Fruit Co.	Port Limon, Costa Rica.	December 4....	Colombia (Dutch)	Royal Netherlands S. S. Co.	Amsterdam via wayp'ts.
December 5....	Pellerin de la Touche	French Line	Havre via West Indies.	December 4....	Ancon	Panama R. R. S. S. Line	New York via Haiti.
December 5....	No. 145-M ¹⁶ ...	Urbina, Medellin & Cent. Airways	Medellin via wayp'ts.	December 4....	Colombia (U. S.)	Colombian Line	New York via wayp'ts.
December 5....	Persistence ¹⁷ ...	Palmerson Coulson	San Andres, Colombia.	December 4....	Camden	United Fruit Co.	Guaraco, D. W. I.
December 5....	No. 659-M ¹⁶ ...	Pan American Airways	Barranquilla, Nicaragua.	December 4....	Veragua	Pan American Airways	Miami via wayp'ts.
December 6....	Pearl Marie ¹⁷ ...	G. I. Bryan	San Salvador via wayp'ts.	December 4....	No. 9888 ¹⁶ ...	Pan American Airways	New York via wayp'ts.
December 6....	No. 9685 ¹⁶ ...	Hamburg-American Line	Hamburg via wayp'ts.	December 4....	No. 945-M ¹⁶ ...	Urbina, Medellin & Cent. Airways	Talara via wayp'ts.
December 7....	No. 300-L ¹⁶ ...	Pan American-Grace Airways	Chidayo via wayp'ts.	December 4....	Pellerin de la Touche	French Line	Havre via wayp'ts.
December 7....	Guayaquil	Panama Railroad S. S. Line	New York via Haiti.	December 4....	No. 659-M ¹⁶ ...	Pan American Airways	Miami via wayp'ts.
December 8....	No. 669-M ¹⁶ ...	Pan American Airways	Miami via wayp'ts.	December 4....	No. 145-M ¹⁶ ...	Urbina, Medellin & Cent. Airways	Medellin, Colombia.
December 8....	Anachucua ¹¹ ...	A. Tagaropoulos	Colon, Rep. of Panama.	December 4....	Troja	Hamburg-American Line	Tampico via wayp'ts.

¹¹ Tanker.¹² Motor ship.¹³ Destroyer.¹⁴ Coffee, cacao, and general.¹⁵ Gasoline and kerosene.¹⁶ Air mail carrier.¹⁷ Schooner.¹⁸ Motor boat.¹⁹ Lighthouse tender.²⁰ Other than ships passing through the Canal.

MOVEMENTS OF OCEAN VESSELS.—Continued.

PORT OF CRISTOBAL.—Continued.							
* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 8.	Inapaquina ²⁰ .	A. Tagaropolos.	Colon, Rep. of Panama.	December 8.	Tabasco.	Vaccaro S. S. Co.	Philadelphia, Pa.
December 9.	Quirigua	United Fruit Co.	New York via wayports.	December 8.	Anacuena ²⁰ .	A. Tagaropolos.	Colon, Rep. of Panama.
December 9.	Columbus	North German Lloyd.	New York via wayports.	December 8.	Inapaquina ²⁰ .	A. Tagaropolos.	Colon, Rep. of Panama.
December 9.	Cefalu	Standard Fruit & S. S. Co.	New Orleans via Habana.	December 9.	No. 144-M ²¹ .	Pan American-Grace Airways.	Chielayo via wayports.
December 9.	Loezigan	T. & J. Harrison.	Liverpool, England.	December 9.	Columbus	North German Lloyd	New York via Habana.
December 9.	No. 145-M ²¹ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	December 9.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.
December 10.	Annetta I. ²⁰	P. W. Hamilton.	Colon, Rep. of Panama.	December 10.	Logician.	Pan American Airways.	New Orleans, La.
December 10.	Inapaquina ²⁰ .	A. Tagaropolos.	Colon, Rep. of Panama.	December 10.	No. 9685 ²¹ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.
December 10.	Velma Lykes.	Lykes Brothers S. S. Co.	Tampa via wayports.	December 10.	No. 145-M ²¹ .	Standard Fruit & S. S. Co.	New Orleans via wayports.
December 10.	Sxaola.	United Fruit Co.	New York via Kingston.	December 10.	Cefalu.	Panama Railroad S. S. Line.	New York, N. Y.
				December 10.	Guayaquil.	A. Tagaropolos.	Colon, Rep. of Panama.
					Inapaquina ²⁰ .		
PORT OF BALBOA.							
December 4.	Talamanca.	United Mail S. S. Co.	San Francisco, Calif.	December 4.	Talamanca.	United Mail S. S. Co.	San Francisco, Calif.

* Other than ships passing through the Canal.

²⁰ Motor boat. ²¹ Air mail carrier.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 80 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Facilities for Shipping.

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from 46 tanks aggregating approximately 2,361,040 barrels of storage capacity. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide the means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective, in the course of handling large traffic through the Canal in over 17 years of operation.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 12, 1932.

No. 1245.

Nicaragua, west coast, Corinto Harbor, light buoys replaced. The U. S. S. *Memphis* reports that buoys Nos. 9, 14, and 20 have been replaced in their former positions. For positions of buoys see H. O. Chart No. 2604 (corrected June 14, 1932).

C. S. RIDLEY,
Acting Governor.

Correction.

In the issue of THE PANAMA CANAL RECORD for December 7, 1932 (Vol. XXVI, No. 19), page 258, in statement headed, "Traffic by Nationality for November, 1932," the figures for Belgian and British in the Atlantic to Pacific traffic should be changed to read as follows:

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,071.68	.....
British.....	64	350,101	252,163	416,246	255,692	274,384.34	74,142

In the combined traffic on page 259, figures for Belgian and British should be changed to read as follows:

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,071.68	.....
British.....	111	594,115	433,368	715,416	438,081	500,688.22	400,836

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective December 12, 1932.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.33
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending December 10, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Ancon.....	Panama Railroad S. S. Line.....		December 4		463
Colombia.....	Royal Netherlands S. S. Co.....		December 4		242
Syra.....	Hamburg-American Line.....		December 4		158
Manizales.....	Grace Line.....		December 4		120
Durazzo.....	Hamburg-American Line.....		December 4		217
Colombia.....	Colombian S. S. Line.....		December 4		124
Camden.....	United Fruit Co.....	December 4	December 4	7,150	(²)
Nuevo Panama.....	Hans Elliot.....	December 4	December 5	174	18
Hokuroko Maru.....	Osaka Shosen Kaisha.....	December 5	December 5	(¹)	66
Balboa.....	Johnson S. S. Line.....	December 5	December 5	59	(²)
Veragua.....	United Fruit Co.....	December 5	December 5	308	595
India.....	Danish East Asiatic Line.....	December 5	December 6	344	(²)
Pellerin de la Touche.....	French Line.....	December 5	December 7	6	335
Sollund.....	Panama Mail S. S. Co.....	December 5	December 7	500	617
Heron.....	Anglo-Saxon Petroleum Co.....	December 5	December 8	7,285	(²)
Santa Clara.....	Grace Line.....	December 6	December 6	269	144
Benjamin Franklin.....	Fred Olsen & Co.....	December 6	December 6	(¹)	70
Schwaben.....	North German Lloyd.....	December 7	December 7	326	274
Troja.....	Hamburg-American Line.....	December 7	December 8	28	92
Tbasco.....	Standard Fruit & S. S. Co.....		December 8		343
Sanyo Maru.....	Osaka Shosen Kaisha.....	December 8	December 8	475	24
New Orleans.....	Roosevelt S. S. Co.....	December 8	December 8	170	(²)
Santa Cecilia.....	Panama Mail S. S. Co.....	December 8	December 9	262	51
San Gabriel.....	States S. S. Line.....	December 8	December 9	713	(²)
Santa Barbara.....	Grace Line.....	December 8	December 9	149	227
Fella.....	Navigazione Libera-Triestina.....	December 8	December 9	200	(²)
Guayaquil.....	Panama Railroad S. S. Line.....	December 8	December 10	1,435	244
Buenos Aires.....	Johnson S. S. Line.....	December 9	December 9	(¹)	175
Ulua.....	United Fruit Co.....	December 9	December 9	729	(²)
Quirigua.....	United Fruit Co.....	December 9	December 9	192	42
Cerigo.....	Hamburg-American Line.....	December 9		905	
Logician.....	Leyland Line.....	December 9	December 10	135	(²)
Oregon.....	French Line.....	December 9	December 10	104	(²)
Cefalu.....	Standard Fruit & S. S. Co.....	December 9	December 10	257	633
Roland.....	North German Lloyd.....	December 9	December 10	46	123
Acajutla.....	Pacific Steam Navigation Co.....		December 10		551
Sixtoña.....	United Fruit Co.....	December 10		163	
Velma Lykes.....	Lykes Brothers.....	December 10		1,809	
Santa Elisa.....	Panama Mail S. S. Co.....	December 10	December 10	127	72
Carl Legien.....	Hamburg-American Line.....	December 10		47	

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending December 10, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Nuevo Panama.....	Hans Elliot.....	November 27	November 27	188	
Heijo Maru.....	Nippon Yusen Kaisha.....	November 30	December 1	23	1
Knute Nelson.....	Fred Olsen & Co.....	December 1	December 1	174	
Durazzo.....	Hamburg-American Line.....	December 2	December 3	184	
Donau.....	Hamburg-American Line.....	December 2	December 2		203
Manizales.....	Grace Line.....	December 2	December 2	(¹)	
Condor.....	Grace Line.....	December 2	December 2	114	
Santa Rosa.....	Panama Mail S. S. Co.....	December 2	December 3	400	3
Vega.....	U. S. Government.....	December 3	December 4	2	
Talamanca.....	United Fruit Co.....	December 4	December 4	570	193
Nuevo Panama.....	United Fruit Co.....	December 4	December 4	19	
Santa Clara.....	Grace Line.....	December 5	December 6	412	74
Brazos.....	U. S. Government.....	December 6	December 7	6,903	
Sollund.....	Panama Mail S. S. Co.....	December 7	December 7		45
New Orleans.....	Roosevelt S. S. Co.....	December 7	December 8	307	
Santa Cecilia.....	Panama Mail S. S. Co.....	December 8	December 8	160	16
Odenwald.....	Hamburg-American Line.....	December 8	December 8	89	
Santa Barbara.....	Grace Line.....	December 9	December 9		150
President Garfield.....	Dollar Line.....	December 9	December 9		4
Democracy.....	Nelson S. S. Line.....	December 10	December 11	354	
Santa Elisa.....	Panama Mail S. S. Co.....	December 10	December 10	28	147
Nuevo Panama.....	United Fruit Co.....	December 6	December 6		37

¹ 20 pounds.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., December 21, 1932. No. 21.

Holiday Greetings.

BALBOA HEIGHTS, C. Z., *December 21, 1932.*

It gives me pleasure to extend the season's greetings and best wishes for the New Year to the personnel and patrons of The Panama Canal and Panama Railroad and to our friends in the Republic of Panama.

During the past year the adverse effect of depressed business conditions has been felt by all employees, but their spirit and standard of service have remained on the usual high plane. The Canal Administration appreciates this cooperation on the part of the employees and hopes that the New Year will bring a material improvement in economic conditions.

C. S. RIDLEY,

*Acting Governor, The Panama Canal,
2d Vice President, Panama Railroad.*

Cargo Through the Canal During November, 1932.

On pages 280 and 281 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in November, 1932. This cargo, segregated according to direction as compared with November, 1931, and the differences, are shown in the following tabulation:

	November, 1931.	November, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	472,373	343,229	-129,144
Pacific to Atlantic.....	1,105,150	1,188,280	+83,130
Total.....	1,577,523	1,531,509	-46,014

Total cargo tonnage through the Canal showed a decline of 46,014 tons (2.9 per cent) compared with November, 1931. The loss in tonnage moving from the Atlantic to the Pacific equalled 129,144 tons, or 27.3 per cent, which was partially offset by a gain of 183,130 tons, or 7.5 per cent, in the amount of cargo moving from the Pacific to the Atlantic. In comparison with the preceding month (October, 1932), total cargo tonnage declined 50,752 tons, or 3.2 per cent. Decreased shipments in both directions contributed to this decline, the Atlantic to Pacific movement showing a decrease of 7.8 per cent and the Pacific to Atlantic movement, 1.8 per cent.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the 343,229 tons of cargo originating in the Atlantic area, that coming from the United States amounted to 259,231 tons, or 75.5 per cent of the total moving from the Atlantic to the Pacific. This was a decrease of 88,796 tons, or 25.5 per cent, in comparison

with the amount coming from the east coast of the United States in November, 1931. Cargo from Europe which amounted to 59,650 tons, or 17.4 per cent of the total Pacific-bound tonnage in November, 1932, registered a loss of 29,617 tons, or 33.2 per cent, compared with November, 1931. Cargo from the United States and Europe made up nearly 93 per cent of the total cargo moving from the Atlantic to the Pacific in November, 1932. Of the total traffic, the proportion originating in the United States was slightly higher than in November, 1931, and Europe's proportion to the total was somewhat lower.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in November, 1932, was reported routed as follows: 151,921 tons, or 44.3 per cent, to the United States; 110,591 tons, or 32.2 per cent to Asia; 28,783 tons, or 8.4 per cent to South America; and 28,379 tons, or 8.3 per cent, to Australasia. The amounts destined to all these areas declined, in comparison with November, 1931, as follows: To the United States, 41,627 tons, or 21.5 per cent; to Asia, 56,891 tons, or 34.0 per cent; to South America, 6,710 tons, or 18.9 per cent; to Australasia, 10,654 tons, or 27.3 per cent. The proportion of the total traffic destined to the United States increased from 41.0 per cent in November, 1931, to 44.3 per cent in November, 1932. Asia's proportion decreased from 35.4 per cent to 32.2 per cent in the same period, South America's percentage increased from 7.5 per cent to 8.4 per cent, while Australasia's proportion remained unchanged at 8.3 per cent.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in November, 1932, 675,355 tons, or 56.9 per cent of the total, originated in the United States; 305,815 tons, or 25.8 per cent, in Canada; 129,833 tons, or 10.9 per cent in South America 48,895 tons, or 4.1 per cent, in Asia; and 17,165 tons, or 1.4 per cent, in Australasia. In comparison with November, 1931, cargo from three of the above areas increased as follows: From United States, 73,896 tons, or 12.3 per cent; from Canada, 155,189 tons, or 103.0 per cent; and from Asia, 2,832 tons, or 6.1 per cent. Cargo from South America declined 119,250 tons, or 47.9 per cent, and that from Australasia declined 23,164 tons, or 57.4 per cent. The proportion of the total cargo originating in the United States was slightly higher in November, 1932, than in November, 1931. Canada's proportion increased substantially from 13.6 per cent to 25.8 per cent in the same period. South America's proportion suffered a severe decline from 22.5 per cent to 10.9 per cent. Australasia's proportion also suffered a severe decline, considered from a percentage basis, from 3.7 per cent to 1.4 per cent. Asia's proportion remained practically unchanged.

The heavy increase in tonnage from Canada was due to greatly improved wheat shipments from that region. The heavy decrease in tonnage from South America can be attributed to curtailment in the shipment of a number of important commodities, the most important of which are nitrates, iron ore, copper, and sugar. Routing of a portion of traffic to other routes has been a principal cause of the lowered tonnage coming from Australasia.

Destination.—Segregated according to destination, 506,304 tons, or 42.6 per cent, of the cargo moving from the Pacific to the Atlantic was destined to ports on the east coast of the United States, and 599,332 tons, or 50.5 per cent to Europe. These two areas absorbed 93.1 per

cent of the total cargo moving in this direction. Cargo destined to the United States declined 13,998 tons, or 2.7 per cent, in comparison with November, 1931, while cargo to Europe increased 98,103 tons, or 19.6 per cent. The proportion of the total traffic destined to the United States was somewhat less in November of this year than last, while that destined to Europe increased from 45.3 per cent to 50.5 per cent. Heavy wheat shipments were the principal factor in the increase of tonnage destined to Europe.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify practically 89 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of November, 1932. The remaining 11 per cent consisted, for the most part, of manufactured goods in small lots reported a "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for November, 1931, or November, 1932, are listed in the following tabulation:

Commodity.	November, 1931.	November, 1932.	Difference.
Cotton.....	91,919	51,783	-40,136
Creosote.....	10,405	63	-10,342
Iron and steel.....	60,003	36,720	-23,283
Tinplate.....	10,043	7,321	-2,722
Oils, mineral.....	38,170	32,149	-6,021
Paper.....	17,289	16,783	-506
Sulphur.....	10,089	7,928	-2,161
Tobacco.....	13,097	8,064	-5,033

The above 8 commodity groups for November, 1932, comprise about 47 per cent of the total cargo moving from the Atlantic to the Pacific. All of the items show decreases in comparison with November, 1931. The heaviest losses were made in shipments of cotton, iron and steel, and creosote.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 per cent of the cargo moving from the Pacific to the Atlantic during November, 1932. Commodities which aggregated more than 10,000 tons either during the past month or November, 1931, are listed below:

Commodity.	November, 1931.	November, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	5,965	14,524	+8,559
Beans.....	19,902	6,473	-13,429
Canned goods.....	70,527	74,619	+4,092
Cold storage (food products).....	22,902	12,687	-10,215
Copra.....	10,641	7,368	-3,273
Flour.....	11,962	16,556	+4,594
Fruit, dried.....	47,344	51,985	+4,641
Fruit, fresh.....	38,165	50,312	+12,147
Lumber.....	142,027	139,585	-2,442
Metals (principally copper).....	42,214	22,007	-20,207
Nitrates.....	43,547	7,350	-36,197
Oils, mineral.....	256,054	339,014	+82,960
Ores.....	33,218	5,420	-27,798
Paper.....	10,219	8,497	-1,722
Wood pulp.....	16,629	12,587	-4,042
Sugar.....	53,047	35,118	-17,929
Wheat.....	118,072	253,246	+135,174

The above 17 commodity groups for November, 1932, comprise almost 89 per cent of the cargo moving from the Pacific to the Atlantic. Seven of the items show increases and 10 decreases. The principal increases were in wheat, mineral oils, fresh fruit, and barley. The largest decreases were in nitrates, ores, metals, sugar, and beans.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, November, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.						AUSTRALASIA.				ASIA.				Per cent of total cargo.		
	West States.	West coast of United States.	West coast of Canada.	West coast of Central America and Mexico.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. †	Total, Australasia.	Philippine Islands.	China.	Japan.		Far East. †	Total, Asia.	Grand total.
NORTH AMERICA:																							
UNITED STATES—																							
North Atlantic ports	75,268			329	689	2,894	79,180	1,503	245	381	942		3,071	1,252	728		1,980	8,159	14,536	16,505	2,181	41,381	125,612
South Atlantic ports	3,996						5,996							3,292			3,292		209	977	14	1,200	10,488
Gulf ports	46,631	4,000				488	51,119							2,000	3,928		5,928	2,303	8,962	54,451	368	66,084	123,131
Total, United States	127,895	4,000	329	689	3,382	136,295	1,503	245	381	942		3,071	6,544	4,656		11,200	10,462	23,707	71,933	2,563	108,665	259,231	
East coast of Canada	1,980	2,920		9			4,909							1,550	1,370		2,920			1,844		1,844	9,673
Cristobal, C. Z. †	797		2,840				3,637	1,207	951	1,064	870	2	4,154							77		77	7,868
West Indies	438	18					456	10			3		13						5			5	474
Total, North America	131,110	6,938	3,169	698	3,382	145,297	2,780	1,196	1,445	1,815	2	7,238	8,094	6,026		14,120	10,462	23,712	73,854	2,563	110,591	277,246	
EUROPE:																							
British Isles	4,781	4,127					8,908	8,593	63	222	1,780		10,658			11,075							30,641
Belgium	2,489	661	28				3,178	693	192		315	87	1,287										4,465
France	3,379	84	13				476	102			144		246			2,225	834	3,059					8,781
Germany	2,836	583	1,685	2			5,106	1,541	100	369	1,665		3,675										8,781
Holland	1,174	123					1,297	64		20	169		253										1,550
Italy	506	51	963				1,520	204			123		327										1,550
Norway	1,775			340			2,540	3,273		407	10	3,690											1,847
Spain and Portugal	98	4	39				141	70			35	1	106										6,230
Europe †	510						510				22	647	669										1,179
Sweden	911	18					929																929
Total, Europe	15,459	5,651	3,153	342			24,605	14,540	355	611	4,660		745	20,911	13,300	834	14,134						59,650
East coast of South America	5,332	215	5				5,552		634				634										6,186
Far East	19			2			21																21
Africa																							125
Egypt	1						1																1
Grand total	151,921	12,804	6,327	1,042	3,382	175,476	17,320	2,185	2,056	6,475	747	28,783	8,094	19,326	959	28,379	10,462	23,712	73,854	2,563	110,591	343,229	
Per cent of total cargo:																							
November, 1932	44.3	3.7	1.8	0.3	1.0	51.1	5.1	0.6	0.6	1.9	0.2	8.4	2.4	5.6	0.3	8.3	3.0	6.9	21.6	0.7	32.2	100.0	
November, 1931	41.0	1.3	2.0	3.5	1.0	48.8	4.3	0.4	0.5	2.0	0.3	7.5	1.2	6.8	0.3	8.3	2.2	13.0	19.4	0.8	35.4	100.0	
November, 1930	46.0	2.0	1.3	2.5	2.5	54.3	8.5	0.5	0.6	1.2	5.1	15.9	2.8	6.9	0.9	10.1	2.4	1.9	6.4	9.0	19.7	100.0	

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, November, 1932.

(Figures represent tons of 2,240 pounds.)

FROM —	NORTH AMERICA.						EUROPE.														Grand total.	Per cent of total cargo.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	UNITED STATES.						Total, North America.	West Indies.	Cristobal, C. Z.*	E. coast Cen. Am. and Mexico.	East coast of Canada.	Europe.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	North Atlan- tic ports.	South Atlan- tic ports.	Gulf ports.	Total, United States.	East coast of Canada.	British Isles.						Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.			Europe. ²	Total, Europe.	East coast of South America.	Africa.	Far East.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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* General cargo not routed so as to allow segregation between definite ports.

² Includes both local and transit cargo.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, December 17, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Carl Legien.	10	13.55	11	6.10	11	13.49	11	15.05	German	Hamburg-American Line	409.8	53.9	21.0	Hamburg, Germany	Valparaiso, Chile.	General.	3,517	7,145	5,474
Steel Maker.	10	21.15	11	7.05	11	14.43	11	15.55	American	Isthmian S. S. Lines	395.5	55.0	19.0	Baltimore, Md.	Seattle, Wash.	General.	3,131	7,330	5,245
Aymeric.	12	2.05	11	8.30	11	16.23	11	17.45	British	Andrew Weir & Co.	400.0	52.0	21.0	Galveston, Tex.	Osaka, Japan.	Cotton.	4,512	6,076	4,463
Cerigo.	9	19.50	11	8.50	11	10.44	11	17.45	German	Hamburg-American Line	227.0	34.8	14.7	Cristobal, C. Z.	Guayaquil, Ecuador	General.	473	1,572	1,011
Langstedt.	11	9.05	11	9.35	11	16.44	11	20.00	British	F. Carnieck & Co.	416.0	55.8	15.6	St. Thomas, V. I.	Vancouver, B. C.	Ballast.	6,671	4,831	6,671
Fernmore.	11	11.05	11	11.15	11	17.58	11	19.10	Norwegian	Fearnley & Eger.	381.4	53.8	14.0	Hamburg, Germany	Los Angeles, Calif.	Ballast.	6,291	4,530	6,291
Real.	9	20.50	11	6.15	11	14.45	12	7.50	Panamanian	Haus Elliot.	62.0	17.0		Cristobal, C. Z.	Pro-Amuelles, R.P.	General.	26	46	22
Glaucus.	9	20.10	12	6.10	12	14.10	12	15.40	British	Alfred Holt & Co.	459.5	56.3	22.4	Boston, Mass.	Yokohama, Japan.	General.	3,403	8,366	5,988
Belganne.	12	4.05	12	7.25	12	14.50	12	16.00	Norwegian	W. L. Conyn & Co.	414.4	67.0	17.0	Hamburg, Germany	Vancouver, B. C.	Ballast.	7,546	5,021	7,546
Stassfurt.	12	6.20	12	8.35	12	15.10	12	16.30	German	Hamburg-American Line	476.0	63.0	11.7	Hamburg, Germany	Vancouver, B. C.	Ballast.	9,393	6,025	9,393
Rigmo.	12	00.10	12	9.30	12	16.18	12	17.20	Norwegian	Waages Tank Rederie	408.3	55.3	17.0	Göteborg, Sweden	Los Angeles, Calif.	Ballast.	4,850	6,246	4,279
Portbridge.	12	7.35	12	9.40	12	17.13	12	18.37	British	Crosby Son & Co.	390.0	54.8	20.0	Osaka, Japan.	Cotton.	824	7,771	4,657	
San Antonio.	12	7.25	12	12.10	12	17.57	12	18.55	French	Royal Neth. S. S. Co.	431.0	57.0	18.8	Antwerp, Belgium	Vancouver, B. C.	Iron, steel, gen.	1,122	7,834	6,018
Bodegraven.	11	15.35	12	13.13	12	19.55	12	21.15	Dutch	Haus Elliot.	108.0	21.0	8.6	Hamburg, Germany	Corral, Chile	General.	20	226	101
Nuevo Panama.	11	19.10	12	13.05	12	19.50	12	21.15	Panamanian	Haus Elliot.	432.2	59.0	19.0	Cristobal, C. Z.	Buenaventura, Col.	General.	2,187	8,454	6,344
San Francisco.	12	19.40	13	6.15	13	16.34	13	17.50	German	Hamburg-American Line	432.2	59.0	19.0	Hamburg, Germany	Vancouver, B. C.	General.	2,187	8,454	6,344
R. J. Hanna.	12	19.30	13	7.20	13	17.01	13	18.20	American	James B. Berry & Sons.	435.0	56.2	19.0	Tiverton, R. I.	San Francisco, Cal.	Ballast.	7,639	5,135	7,639
Canadian Win-	13	13.05	13	13.20	13	20.43	13	22.00	British	Can. Nat. Steamships	400.0	52.0	20.4	Montreal, Canada	Vancouver, B. C.	General.	2,606	5,885	4,073
net.	13	13.10	13	14.20	13	21.30	13	22.45	American	Amer.-Hawthorn Line	407.0	53.0	22.0	Boston, Mass.	Seattle, Wash.	General.	2,343	7,150	5,024
Minnesota.	13	16.45	14	7.25	14	14.52	14	16.05	British	Sir W. R. Smith & Sons	411.6	54.6	22.9	Houston, Tex.	Shanghai, China.	Cotton.	4,782	6,512	4,665
Indian City.	13	19.05	14	8.25	14	15.13	14	16.35	American	Luckenbach Line.	436.6	57.3	20.0	Boston, Mass.	Seattle, Wash.	Wire, pipe, gen.	2,165	8,543	6,402
Julia Lucken-	13	19.05	14	8.25	14	15.13	14	16.35	American	Luckenbach Line.	436.6	57.3	20.0	Boston, Mass.	Seattle, Wash.	Wire, pipe, gen.	2,165	8,543	6,402
bach.	13	19.05	14	8.25	14	15.13	14	16.35	American	Luckenbach Line.	436.6	57.3	20.0	Boston, Mass.	Seattle, Wash.	Wire, pipe, gen.	2,165	8,543	6,402
Charles Chris-	13	23.15	14	8.35	14	16.04	14	16.55	American	Sudden & Christenson.	409.7	54.2	16.8	Baltimore, Md.	Seattle, Wash.	General.	1,303	6,093	4,903
tenson.	13	23.15	14	8.35	14	16.04	14	16.55	American	Sudden & Christenson.	409.7	54.2	16.8	Baltimore, Md.	Seattle, Wash.	General.	1,303	6,093	4,903
Sortevant.	14	6.30	14	9.15	14	15.55	14	16.55	American	U. S. Navy.	310.0	31.0		High seas.	Balboa, C. Z.	Ballast.	7,000	4,545	7,000
Moritz.	14	4.15	14	9.45	14	16.26	14	17.25	French	General Petroleum Corp.	422.0	57.0	20.0	Gette, France	Vancouver, B. C.	Ballast.	1,266	10,772	7,581
Lothman.	13	19.25	14	10.40	14	17.29	14	18.30	British	Royal Mail Lines, Ltd.	485.6	63.0	18.8	Rotterdam, Holland	Vancouver, B. C.	General.	5,781	9,283	6,401
Siamese Prince.	13	17.45	14	18.05	14	15.10	14	16.46	British	Rio Cape Line.	441.0	62.4	24.0	New Orleans, La.	Far East.	General.	5,781	9,283	6,401
Chalder.	14	18.00	15	6.15	15	13.09	15	14.30	Norwegian	Wiel & Amundsen	377.0	54.0	18.10	Albany, N. Y.	Vancouver, B. C.	Ballast.	6,076	4,375	6,076
William A. Mc-	14	21.20	15	7.10	15	14.28	15	15.50	American	McCormick S. S. Co.	395.0	55.0	19.0	Albany, N. Y.	Seattle, Wash.	General.	2,088	6,993	5,099
Kenney.	15	2.00	15	8.20	15	16.54	15	18.50	Norwegian	Fearnley & Eger.	375.0	53.6	13.6	Nuevitas, Cuba	Los Angeles, Calif.	Ballast.	6,204	4,651	6,204
Fernlane.	15	6.55	15	8.25	15	17.02	15	18.50	German	North German Lloyd	295.0	40.0	11.8	Hamburg, Germany	Champerico, Guat.	Ballast.	3,041	1,967	3,041
Agua.	15	6.55	15	8.25	15	17.02	15	18.50	German	North German Lloyd	295.0	40.0	11.8	Hamburg, Germany	Champerico, Guat.	Ballast.	3,041	1,967	3,041
California Stan-	15	2.30	15	9.55	15	17.55	15	19.25	American	Standard Oil Co.	513.0	68.2	22.0	London, England.	Los Angeles, Calif.	Ballast.	11,719	8,619	11,719
dard.	15	2.30	15	9.55	15	17.55	15	19.25	American	Standard Oil Co.	513.0	68.2	22.0	London, England.	Los Angeles, Calif.	Ballast.	11,719	8,619	11,719
Pajala.	15	9.30	15	10.50	15	19.15	15	21.00	Swedish	Anglo-Amer. Ship. Co.	418.0	55.0	15.0	London, England.	Vancouver, B. C.	Ballast.	7,274	5,213	7,274
Nyhaug.	15	13.55	15	13.50	15	20.35	15	22.17	Norwegian	J. J. Moore.	350.7	51.5	14.6	Philadelphia, Pa.	Los Angeles, Calif.	Ballast.	4,788	3,347	4,788
A. B. Ovarrio.	14	16.55	15	15.15	15	19.15	15	20.10	Panamanian	A. Valdez.	57.8	19.7		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	4	57	29

L. Wilson B.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
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THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Democracy	10	0.05	11	6.24	11	14.00	11	14.00	American	Nelson S. S. Co.	377.0	52.0	24.0	Seattle, Wash.	New York, N. Y.	Lumber, general.	4,466	5,434	3,969
President Jack-son	11	6.00	11	7.15	11	15.00	11	21.23	American	Dollar Line.	517.0	72.2	28.0	Manila, P. I.	New York, N. Y.	General	3,814	15,286	10,427
Langloes-crag.	10	20.30	11	8.02	11	15.45	11	15.45	British	F. Carriek & Co.	416.0	55.8	24.0	Vancouver, B. C.	London, England.	Grain	8,563	6,668	4,836
Nevadan	11	2.00	11	8.45	11	16.10	11	16.10	American	Amer.-Hawaiian Line.	460.0	57.8	21.0	Portland, Ore.	Boston, Mass.	General	4,949	6,829	4,627
Gerrude Kel-log 2	11	10.55	11	11.36	11	18.00	11	19.00	American	Kellogg S. S. Co.	391.9	51.2	25.0	Shanghai, China.	New Orleans, La.	Coffee	6,600	5,419	3,787
Nuevo Panama 2	11	6.20	11	12.29	11	18.10	12	13.05	Panamanian	Hans Elliot.	108.5	20.0	9.2	Buenaventura, Col.	Cristobal, C. Z.	Army supplies.	208	226	101
Republic.	11	2.18	11	13.53	11	20.55	12	10.00	American	U. S. Army.	615.0	68.0	29.1	Manila, P. I.	New York, N. Y.	General	1,044	3,345	6,983
Berganger 2	11	15.48	11	16.46	12	11.35	12	11.35	Norwegian.	Interocean S. S. Co.	464.4	61.4	27.3	San Francisco, Cal.	Rotterdam, Holland	General	8,307	9,963	6,983
Pan Norway 2	11	18.35	12	6.21	12	13.45	12	13.45	Norwegian.	Huasteca Petroleum Co.	484.4	65.6	27.0	Talara, Peru.	Dunkirk, France.	Gasoline.	12,811	9,963	6,806
Tremorah.	11	21.40	12	7.25	12	15.00	12	15.00	British.	Kerr Gifford & Co.	400.0	52.3	25.0	Vancouver, B. C.	Falmouth, England	Wheat.	7,443	5,774	4,045
City of Ray-ville 2	12	3.10	12	8.10	12	16.05	12	16.05	American.	Roosevelt S. S. Co.	401.9	54.2	15.0	Port Adelaide, Aust.	New York, N. Y.	General	142	7,097	5,241
Sacramento	12	9.25	12	9.53	12	17.25	12	17.25	British.	Reardon Smith Line.	401.6	54.3	25.0	Vancouver, B. C.	Cardiff, Wales.	General	7,432	6,621	4,916
Valley.	12	11.25	12	12.15	12	18.30	12	19.45	American	United Fruit Co.	425.0	54.3	26.0	Pro Arundelles, R.P.	New Orleans, La.	Bananas.	937	3,477	24,506
Ulu.	12	11.33	13	6.28	13	13.30	13	14.05	American.	Panama-Pacific Line.	574.4	80.3	29.0	San Francisco, Cal.	New York, N. Y.	General	3,477	24,506	17,565
California.	12	11.33	13	6.28	13	13.30	13	14.05	American.	Panama-Pacific Line.	574.4	80.3	29.0	San Francisco, Cal.	New York, N. Y.	General	3,477	24,506	17,565
New Jersey 1	13	5.00	13	7.10	13	14.35	13	14.55	American	The Texas Co.	416.8	56.1	27.0	Los Angeles, Calif	New York, N. Y.	C. H. gasoline.	9,500	6,925	4,982
R. L. Hague 2	13	6.45	13	8.16	13	16.30	13	16.30	Danzig.	W. Tankeschiff Rhederei	521.7	70.2	30.0	Talara, Peru	Rotterdam, Holland	Naphtha	15,763	12,618	8,126
Pacific Enter-prise 2	12	18.00	13	8.48	13	17.35	13	17.35	British.	Furness, Withy & Co.	435.9	60.2	28.0	Vancouver, B. C.	Glasgow, Scotland	Wheat, general.	8,240	9,641	6,989
Deroche 2	12	22.30	13	9.29	13	18.45	13	18.45	American.	Union Oil Co.	435.0	56.0	28.0	Los Angeles, Calif.	Baltimore, Md.	Furnace oil.	10,500	7,452	5,199

Tanker.

Motor ship.

Motor schooner.

Destroyer.

Tug.

Coconut, wood oil.

* Coconut, wood oil.

* Tug.

* Destroyer.

* Motor schooner.

* Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Susan V. Luckenbach	12	21.50	13	9.30	13	17.50	13	17.50	American	Luckenbach Line	434.3	57.7	21.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	3,569	7,945	5,670
Daylight	12	23.00	13	10.10	13	21.10	13	21.10	American	Stand. Vacuum Transp.	480.5	66.0	30.0	Los Angeles, Calif.	New York, N. Y.	Lumber, general.	13,800	9,789	6,725
Mercier	12	23.30	13	10.40	13	19.50	13	19.50	Belgium	Cie. Maritime Belge	473.6	60.9	27.0	Vancouver, B. C.	London, England	Lumber, general.	10,122	8,771	6,292
Inverbank	13	0.30	13	11.19	13	22.05	13	22.05	British	Canadian Transp. Co.	420.0	53.9	27.0	Vancouver, B. C.	Avonmouth, Eng.	Grain, general.	8,498	7,099	5,014
Canadian Challenger	13	0.30	13	11.45	14	8.45	14	8.45	British	Can. Nat. Steamships	400.0	52.2	16.0	Brisbane Australia.	Halifax, N. S.	General	2,313	6,142	4,354
S. A. Perkins	13	1.10	13	12.19	13	23.00	13	23.00	American	Gulf-Pacific Line	397.0	53.2	21.0	Seattle, Wash.	New Orleans, La.	General	3,969	5,660	4,059
Havsten	13	2.00	13	13.03	14	8.55	14	10.00	Norwegian	Nicolsen	420.8	53.5	26.1	La Libertad, Ecua.	Nynashamn, Swed.	Crude oil	9,463	6,643	4,426
Fresno Star	13	7.45	13	14.18	14	9.19	14	10.40	British	Blue Star Line	449.5	58.2	24.0	N. Westminster, B. C.	Newcastle, England	General	5,303	8,336	5,401
Suecia	13		13		13				Swedish	Otto Strangman	22.0	8.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast		3	2
Columbian	14	4.12	14	6.18	14	13.25	14	13.25	American	Amer.-Hawaiian Line	404.6	53.9	25.0	Seattle, Wash.	Boston, Mass.	General	4,850	6,760	4,450
A. B. Obarrío	14		14	6.24	14	16.55			Panamanian	A. Valdez	57.8	19.7		Darien, R. P.	Cristobal, C. Z.	Bananas	49	57	29
Modavia	14	6.00	14	7.02	14	14.40	14	14.40	British	Donaldson Bros	387.0	53.7	26.0	Vancouver, B. C.	Glasgow, Scotland	Fruit, general	5,283	6,719	4,979
Arizona	14	6.01	14	8.25	14	15.35	14	15.35	American	Williams S. Corp.	434.3	57.7	25.0	Tacoma, Wash.	Baltimore, Md.	Lumber, general	7,668	7,983	5,983
Manitales	14	7.40	14	8.50	14	16.55			German	Grace Line	216.5	32.9	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	695	1,132	741
Bastidas	6	20.00	14	9.34	14	16.55	14	16.55	Colombian	Colombian Government	126.7	32.2	14.0	Buenaventura, Col.	Cartagena, Col.	Ballast		532	256
Sidney M. Hauptmann	14	10.00	14	10.43	14	18.05	14	18.05	American	McCormick S. S. Co.	401.4	53.2	27.3	Tacoma, Wash.	New York, N. Y.	Lumber, general	7,064	7,082	5,167
Rangitiki	14	4.40	14	12.26	14	19.25	14	19.25	British	N. Z. Shipping Co.	531.0	70.2	29.0	Napier, N. Z.	London, England	Frozen, general	7,821	18,197	13,526
Waziristan	14	14.50	14	15.32	14	22.55	14	22.55	British	Common Bros.	390.0	53.3	25.0	Vancouver, B. C.	London, England	(¹³)	8,082	5,612	4,119
West Nilus	15	9.50	15	10.36	15	19.30	15	19.30	American	McCormick S. S. Co.	410.5	54.3	22.0	San Francisco, Cal.	Buenos Aires, Arg.	Lumber, general	5,200	6,583	5,095
Southern Sun	15	13.00	15	13.40	15	21.40	15	21.40	American	Sun Oil Co.	480.5	66.0	29.4	Los Angeles, Calif.	Marcus Hook, Pa.	Gasoline	13,903	9,716	6,544
Justin	15	13.10	15	14.16	15	23.10	16	1.55	German	North German Lloyd	449.1	58.2	26.0	Vancouver, B. C.	Bremen, Germany	General	7,928	7,933	5,799
Helder	15	23.00	16	6.14	16	13.50	16	21.10	Dutch	Royal Neth. S. S. Co.	361.4	49.8	23.0	San Antonio, Chile.	Hamburg, Germany	General	5,598	5,117	3,807
Florence R.	16	0.45	16	7.15	16	14.55	16	14.55	American	R. R. Ross	29.0	9.0		Balboa, C. Z.	Pedro Miguel, C. Z.	Ballast		10	8
Oasis	16	0.45	16	7.15	16	14.55	16	14.55	German	Hamburg-American Line	376.1	51.7	25.0	Valparaiso, Chile	Hamburg, Germany	Sugar, general	6,602	5,788	4,023
Real	16	8.30	16	7.28	16	20.40	18	6.15	Panamanian	Hans Eliot	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas	30	46	22
Calif.	16	8.30	16	9.15	16	16.35	18	6.05	German	North German Lloyd	216.5	32.9	15.3	Guayaquil, Ecuador	Cristobal, C. Z.	General	891	1,105	698
Taira	16	8.55	16	10.12	16	20.40	17	9.00	Panamanian	Hans Eliot	64.2	20.3	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas	50	78	40
El Sona	16		16	10.38	16	20.40			Panamanian	G. Tamm	59.0	16.5		Darien, R. P.	Cristobal, C. Z.	Bananas	33	53	23
Lundby	16	13.00	16	14.00	16	21.55	16	21.55	Danish	Canadian Transport Co.	357.0	51.3	25.0	Vancouver, B. C.	Sharpness, England	Whiskey, general	6,769	4,973	3,651
F. H. Bedford, Jr.	16	10.45	16	15.36	17	11.05	17	11.05	Danzig	Baltic Amer. Pet. Co.	520.0	70.0	30.3	Talara, Peru	Fawley, England	Crude oil	15,720	12,285	8,188
Marian Odis Chandler	16	22.26	17	6.11	17	14.00	17	14.00	American	Arrow Line	409.6	54.1	22.3	Seattle, Wash.	New York, N. Y.	Lumber, general	5,830	6,653	4,863
Swan, No. 34	16		17	6.28	17	13.40			American	U. S. Navy	187.0	34.0		Balboa, C. Z.	Cristobal, C. Z.				
Theodore	17	3.00	17	7.19	17	15.30	17	15.30	Norwegian	Fred Olsen Line	425.5	55.2	29.0	Vancouver, B. C.	Antwerp, Belgium	Grain, general	9,999	7,593	5,640

Lapwing 10	17	7 26	17 15 25	American	U. S. Navy	174 0	35 0	Balboa, C. Z.	Cristobal, C. Z.	Wheat, general	9,754	6,888	4,961
Rabutan	17 6 30	17 8 25	17 17 50	British	Anglo-Canad. Ship. Co.	425 1	57 0	Vancouver, B. C.	Rotterdam, Holland	Coffee	198	226	101
Nuevo Panama	17 10 30	17 11 11	17 17 35	18 45	Hans Elliot	108 0	20 6	Buenaventura, Col.	Cristobal, C. Z.	Grain, lumber	7,340	6,491	4,790
Nordfarer 7	17 16 35	17 17 10	18 11 45	Danish	W. L. Conyn	384 7	54 4	Vancouver, B. C.	Antwerp, Belgium	Ballast	73		52
Plgrim 7 12	14	14 12 34	15 45	American	D. C. Starr	75 0	20 0	Paraiso, C. Z.	Balboa, C. Z.				

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 11.	No. 9673 ¹²	Pan American Airways	San Salvador via wayp'ts.	December 11.	Sixsola.	United Fruit Co.	New York via wayports.
December 11.	No. 945-M ¹²	Pan American-Grace Airways	Talara via wayports.	December 12.	No. 669-M ¹²	Pan American Airways	Barraquilla, Colombia.
December 12.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.	December 12.	Quirigua.	United Fruit Co.	New York via wayports.
December 12.	Martinique.	Colombian S. S. Line.	New York via wayports.	December 12.	Martinique.	Colombian S. S. Line.	New York via Kingston.
December 12.	No. 145-M ¹²	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	December 13.	Annetta I. ¹³	P. W. Hamilton.	Colon, Rep. of Panama.
December 12.	No. 669-M ¹²	Pan American Airways	Barraquilla, Colombia.	December 13.	Velma Lykes.	Lykes Brothers S. S. Co.	Sto. Domingo via wayp'ts.
December 12.	No. 12636 ¹²	United Fruit Co.	Tela, Honduras.	December 13.	No. 300-N ¹²	Pan American-Grace Airways	Talara via wayports.
December 13.	Kreta.	Hamburg-American Line.	Tampico, Mexico.	December 13.	Kreta.	Hamburg-American Line.	Europe via Cartagena.
December 13.	Venezuela.	Royal Netherlands S. S. Co.	Amsterdam via wayports.	December 14.	Magdalena.	Hamburg-American Line.	Pto. Barrios and wayp'ts.
December 14.	Marques de Comillas.	Hamburg-American Line.	Hamburg via wayports.	December 14.	Pearl Marie ⁹ .	G. I. Bryan.	Bluefields, Nicaragua.
December 14.	Cristobal.	Panama Railroad S. S. Line.	New York via wayp'ts.	December 15.	Teapa.	Standard Fruit & S. S. Co.	Philadelphia, Pa.
December 14.	No. 144-M ¹²	Pan American Airways	San Salvador via wayp'ts.	December 15.	Inapaguina ¹³ .	A. Tagaropolos.	Colon, Rep. of Panama.
December 14.	No. 144-M ¹²	Pan American-Grace Airways	New York via Haiti.	December 15.	Anachucuna ¹³ .	A. Tagaropolos.	Colon, Rep. of Panama.
December 14.	No. 144-M ¹²	Standard Fruit & S. S. Co.	Chiclayo via wayports.	December 15.	Annetta I. ¹³ .	P. W. Hamilton.	Colon, Rep. of Panama.
December 15.	A. Tagaropolos.	A. Tagaropolos.	New Orleans, La.	December 16.	Marques de Comillas.	Spanish S. S. Line.	Barcelona via wayports.
December 15.	Inapaguina ¹³ .	Colon, Rep. of Panama.	Colon, Rep. of Panama.	December 16.	No. 945-M ¹²	Pan American-Grace Airways	Chiclayo via wayports.
December 15.	Magallanes.	Colon, Rep. of Panama.	Colon, Rep. of Panama.	December 16.	No. 12636 ¹²	United Fruit Co.	Panama, Rep. of Panama.
December 16.	No. 600-M ¹² .	Miami via wayports.	Miami via wayports.	December 16.	Calamates.	United Fruit Co.	Port Limon, Costa Rica.
December 16.	No. 600-M ¹² .	New Orleans via Habana.	New Orleans via Habana.	December 16.	Tolosa.	Spanish S. S. Line.	New Orleans via wayports.
December 16.	Calamates.	New Orleans via Habana.	New Orleans via Habana.	December 16.	Magallanes.	Uraba, Medellin & Cent. Airways	New York via wayports.
December 16.	Calamates.	Avonmouth via wayports.	Avonmouth via wayports.	December 17.	No. 145-M ¹²	Pan American Airways	Medellin, Colombia.
December 16.	Bayano.	Elders & Fyffes, Ltd.	Avonmouth via wayports.	December 17.	No. 414-H ¹²	Pan American Airways	San Salvador via wayports.
December 16.	No. 145-M ¹² .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	December 17.	Bayano.	Elders & Fyffes, Ltd.	Avonmouth via wayports.
December 16.	Glennpool.	Standard Shipping Co.	Baytown via San Juan.	December 17.	Contessa.	Standard Fruit & S. S. Co.	New Orleans via wayports.
December 16.	Annetta I. ¹³	P. W. Hamilton.	Colon, Rep. of Panama.	December 17.	Venezuela.	Royal Netherlands S. S. Co.	Hamburg via wayports.
December 17.	Metapan.	United Fruit Co.	New York via Kingston.				

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 11	No. 9673 12	Pan American Airways	San Salvador via waypts.	December 11	Sixsola	United Fruit Co.	New York via wayports.
December 11	No. 945-M 12	Pan American-Grace Airways	Talara via wayports.	December 12	No. 669-M 12	Pan American Airways	Barraquilla, Colombia
December 12	Quirigua	United Fruit Co.	Port Limon, Costa Rica.	December 12	Quirigua	United Fruit Co.	New York via wayports.
December 12	Martine	Colombian S. S. Line	New York via wayports.	December 12	Martine	Colombian S. S. Line	New York via Kingdon.
December 12	No. 145-M 12	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	December 13	Annetta 1 13	P. W. Hamilton	Colon, Rep. of Panama.
December 12	No. 669-M 12	Pan American Airways	Barraquilla, Colombia.	December 13	Velma Lykes	Lykes Brothers S. S. Co.	Sto. Domingo via waypts.
December 12	No. 12636 12	United Fruit Co.	Tela, Honduras.	December 13	No. 300-N 12	Pan American-Grace Airways	Talara via wayports.
December 13	Kreta	Hamburg-American Line	Tampico, Mexico.	December 13	Kreta	Hamburg-American Line	Europe via Cartagena.
December 13	Venezuela	Royal Netherlands S. S. Co.	Amsterdam via wayports.	December 14	Magdalena	Hamburg-American Line	Pto. Barrios and waypts.
December 14	Marques de Comillas	Hamburg-American Line	Hamburg via wayports.	December 14	Pearl Marie 9	Standard Fruit & S. S. Co.	Philadelphia, Pa.
December 14	Cristobal	Panama Railroad S. S. Line	New York via wayports.	December 15	Teapa	A. Tagaropolos	Colon, Rep. of Panama.
December 14	No. 144-M 12	Pan American Airways	San Salvador via waypts.	December 15	Anachucuna 13	A. Tagaropolos	Colon, Rep. of Panama.
December 14	No. 144-M 12	Pan American-Grace Airways	New York via Haiti.	December 15	Anachucuna 13	P. W. Hamilton	Colon, Rep. of Panama.
December 14	No. 144-M 12	Standard Fruit & S. S. Co.	Chiclayo via wayports.	December 16	Annetta 1 13	Spanish S. S. Line	Barcelona via wayports.
December 15	A. Tagaropolos	A. Tagaropolos	New Orleans, La.	December 16	Marques de Comillas	Pan American-Grace Airways	Chiclayo via wayports.
December 15	Inapaguina 13	Colon, Rep. of Panama.	Colon, Rep. of Panama.	December 16	No. 945-M 12	United Fruit Co.	Panama, Rep. of Panama.
December 15	Magallanes	Colon, Rep. of Panama.	Colon, Rep. of Panama.	December 16	No. 12636 12	United Fruit Co.	Port Limon, Costa Rica.
December 16	No. 660-M 12	Miami via wayports.	Miami via wayports.	December 16	Tolosa	Spanish S. S. Line	New Orleans via wayports.
December 16	No. 660-M 12	New Orleans via Habana.	New Orleans via Habana.	December 16	Magallanes	Uraba, Medellin & Cent. Airways	New York via wayports.
December 16	Calamates	New Orleans via Habana.	New Orleans via Habana.	December 17	No. 145-M 12	Pan American Airways	Medellin, Colombia.
December 16	Calamates	Avonmouth via wayports.	Avonmouth via wayports.	December 17	Bayano	Elders & Fyffes, Ltd.	Avonmouth via wayports.
December 16	Bayano	Medellin, Colombia.	Medellin, Colombia.	December 17	Contessa	Standard Fruit & S. S. Co.	New Orleans via wayports.
December 16	No. 145-M 12	Baytown via San Juan.	Baytown via San Juan.	December 17	Venezuela	Royal Netherlands S. S. Co.	Hamburg via wayports.
December 16	Glennpool	Colon, Rep. of Panama.	Colon, Rep. of Panama.				
December 16	Annetta 1 13	United Fruit Co.	New York via Kingston.				

11 Gasoline and fuel oil.

12 Motor boat.

13 Air mail carrier.

14 Yacht.

15 Tug.

16 Launch.

17 Motor ship.

18 Grain, lumber, and general.

19 Other than ships passing through the Canal.

20 Tanker.

21 Petroleum Co.

22 Motor boat.

23 Air mail carrier.

24 Yacht.

25 Tug.

26 Launch.

27 Motor ship.

28 Grain, lumber, and general.

29 Other than ships passing through the Canal.

30 Tanker.

31 Petroleum Co.

32 Motor boat.

33 Air mail carrier.

34 Yacht.

35 Tug.

36 Launch.

37 Motor ship.

38 Grain, lumber, and general.

39 Other than ships passing through the Canal.

40 Tanker.

41 Petroleum Co.

42 Motor boat.

43 Air mail carrier.

44 Yacht.

45 Tug.

46 Launch.

47 Motor ship.

48 Grain, lumber, and general.

49 Other than ships passing through the Canal.

50 Tanker.

51 Petroleum Co.

52 Motor boat.

53 Air mail carrier.

54 Yacht.

55 Tug.

56 Launch.

57 Motor ship.

58 Grain, lumber, and general.

59 Other than ships passing through the Canal.

60 Tanker.

61 Petroleum Co.

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91 Petroleum Co.

92 Motor boat.

93 Air mail carrier.

94 Yacht.

95 Tug.

96 Launch.

97 Motor ship.

98 Grain, lumber, and general.

99 Other than ships passing through the Canal.

100 Tanker.

Traffic by Commodities for November, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of November, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. These figures represent tons of 2,240 pounds.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific	Pacific to Atlantic.
Aircraft and parts.....			15	
Agricultural implements.....	629		1,003	
Alfalfa meal.....		893		893
Ammonium compounds.....	71		2,116	
Animal foods.....	19	1,871	34	2,196
Apparel, wearing (hats, shoes, clothing, etc.).....	84	10	85	59
Asbestos.....	119	25	440	25
Asphalt and tar.....	143	18	2,321	1,931
Automobiles (and auto trucks).....	1,834	190	3,578	194
Automobile parts and accessories.....	303	45	1,713	55
Bags and bagging, textile.....	221	120	1,009	120
Bananas.....			59	287
Barks, miscellaneous.....				272
Barley.....	16		16	14,524
Beans, edible, dry.....	44	5,421	65	6,473
Beverages, nonalcoholic.....	182	27	216	27
Blood and tankage.....	50		50	
Bones and bone meal.....	50		440	
Books and printed matter.....	359		360	
Borax.....		566	51	5,903
Bran and pollards.....			5	2,448
Bricks and tile.....	255	25	284	25
Camphor.....		9		68
Canned and preserved goods:				
Fish.....	295	9,331	636	11,235
Fruit.....	317	21,981	441	39,244
Meat.....	39	199	468	483
Milk.....	36	726	224	812
Soup.....	1,258		1,273	
Vegetables.....	593	4,437	613	4,524
Miscellaneous and unclassified.....	2,229	17,981	2,835	18,321
Carbon black.....	217		561	
Celite.....		810		909
Cement.....	337		6,460	253
Chalk.....			365	
Charcoal.....	49	50	49	50
Chemicals.....	2,113	1,465	4,356	1,704
Clay, china and fire.....	172		191	
Clay, filtering.....		27		31
Clorox.....		1,617		1,617
Coal.....			7,600	
Cocoa and cacao beans.....	630	9	1,180	405
Coconuts and products.....	109	565	144	865
Coffee.....	517	559	5,316	7,907
Coke.....			1,518	
Cold storage and refrigerated products:				
Dairy products.....	38		162	10,685
Eggs.....		360		450
Fish.....	3		3	251
Lard.....	373		378	
Meats.....				1,162
Poultry.....	4		4	
Vegetables.....				53
Other and unclassified.....			10	86
Confectionery.....	614		723	
Copra.....		90		7,368
Copra meal and cake.....				151
Corn.....	8,653		8,708	
Cotton, raw.....	235	1,378	51,783	5,197
Cresote.....			63	
Dextrine.....	52		52	

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Drugs and medicines.....	922	29	1,042	30
Dyes.....	4		266	
Earthenware.....	37		80	
Eggs, dried.....		13		28
Electrical apparatus and appliances.....	607	35	744	59
Explosives.....	13		17	60
Extract, quebracho.....			44	
Fertilizers.....	18		700	
Fish, salted or dry cured.....	23	30	24	479
Fish meal.....				763
Floor coverings.....	643	234	656	234
Flour.....	237	10,715	996	16,556
Fruit, dried.....	81	28,310	637	51,985
Fruit, fresh.....	261	4,560	308	50,312
Furniture and household goods.....	362	13	400	21
Gallnuts.....				20
General.....	17,118	7,457	38,015	16,665
Glass and glassware.....	1,828	41	3,219	214
Glue.....		120		120
Groceries.....	1,361	25	1,544	25
Guano.....		24		5,000
Gums.....		20		79
Hair, all kinds.....		20		25
Hay.....		1,487	60	1,504
Hemp, unmanufactured.....		53	10	1,262
Honey.....		340		491
Hops.....		114	14	277
Horns and hoofs.....				3
Infusorial earth.....		119		320
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	20,291	345	36,720	485
Ivory nuts.....				1,140
Jute, unmanufactured.....		41		93
Lard substitute.....	247	247	247	247
Lime.....			54	
Liquors.....	53		1,464	427
Lumber (including manufactured mill products).....	1,444	94,807	1,656	139,585
Machinery (other than electrical).....	2,471	374	4,933	418
Malt.....	15		57	
Manufactured goods.....	4,608	247	6,072	604
Marble and granite.....			24	
Matches.....	125	22	139	61
Metals:				
Copper.....	108	3,498	108	11,024
Gold and silver.....			26	23
Iron.....	10		187	98
Lead.....		447	19	5,938
Scrap.....	80	470	7,121	614
Tin.....	93	30	93	2,436
Zinc.....	66	30	732	2,023
Other and unclassified.....	132	465	2,334	465
Milk, powdered.....	5	560	84	907
Molasses and syrups.....	252		271	
Nitrates.....	2,456		5,267	7,350
Nuts, edible (including meats).....	34	1,116	144	1,220
Oats.....	563		583	6,802
Oils, mineral:				
Crude.....			47	69,375
Gas and fuel.....		72,356		95,605
Gasoline, benzine, and naphtha.....	9,752	80,455	9,807	143,240
Kerosene.....	6,302	10,065	13,027	29,061
Lubricating and greases.....	3,636	1,583	9,268	1,733
Oils, vegetable:				
Coconut.....				2,322
Cottonseed.....	2,964		2,964	3
Linseed.....	27		177	
Olive.....		23	346	23
Rapeseed.....				300
Wood.....	1	31	4	1,629
Other and unclassified.....	197	525	381	1,471
Oil, fish.....		6,525	8	7,188
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		485		894
Oilseed cake and meal.....	1,452		1,452	3,730
Ores:				
Antimony.....				89
Copper.....		450		1,972
Gold and silver.....				2
Lead.....				477
Tin.....		28		1,287
Zinc.....				1,260
Other and unclassified.....	18		113	333

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Paints and varnishes.....	151	82	715	97
Paper and paper products ¹	4,768	7,721	16,783	8,497
Paper scrap.....		698	2,244	698
Peanuts.....	464		464	
Peas, dry.....		68	8	2,514
Peatmoss.....			290	
Phosphates.....	163	605	6,369	605
Plaster.....			15	
Porcelainware.....	121	116	143	1,460
Potash.....		6,281	11	6,496
Pyrethrum flowers.....		13		151
Rags and waste.....	119	182	320	1,451
Railroad material.....	52		1,567	
Rice.....	1,201	473	1,406	1,218
Rope and twine.....	150	42	241	42
Rosin.....	965		2,315	
Rubber:				
Manufactured.....	735	36	916	36
Raw.....			12	25
Scrap.....		120	130	224
Rye.....				390
Salt.....	112		1,615	
Seeds (except oilseeds).....		681	630	945
Shells, oyster.....	517		593	72
Silk, raw.....		577		2,142
Skins and hides.....		2,865	1	4,306
Slag.....			56	
State.....	650		660	
Soaps and products.....	2,058	96	2,307	179
Soda and sodium compounds.....	1,133		2,845	51
Soy beans.....	12		12	7,700
Sugar.....	201	5,678	223	35,118
Sulphur.....		45	7,928	74
Talc.....	8	107	30	121
Tallow.....	40	60	40	905
Tea.....		61	27	1,931
Textiles ²	4,941	99	6,667	767
Tinplate.....	4,049		7,321	
Tobacco and manufactures.....	693	34	8,064	67
Toilet preparations.....	86		86	
Turpentine.....	35		227	
Vegetables, dry ¹	6	443	21	1,010
Wall board.....	21		21	200
Wax, paraffin.....	190		1,000	
Wheat.....		101	737	253,246
Wines.....		215	356	620
Wood pulp.....	50	11,677	3,106	12,587
Wool.....	20	1,358	21	2,586
Total, November, 1932.....	127,895	440,303	343,229	1,188,280
Total, November, 1931.....	144,087	389,579	472,373	1,105,150
Total, November, 1930.....	193,552	552,595	554,098	1,709,102

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending December 17, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				<i>Tons.</i>	<i>Tons.</i>
Republic.....	U. S. Government.....	December 11	December 11	375	119
Nuevo Panama.....	Haus Elliot.....	December 11	December 11	19	5
California.....	Panama-Pacific Line.....	December 12	December 13	10	
Deroche.....	Union Oil Co.....	December 12	December 13	247	
Rangitiki.....	New Zealand Shipping Co.....	December 14	December 14	41	
Lobos.....	Pacific Steam Navigation Co.....	December 16	December 16		2
Cal.....	Hamburg-American Line.....	December 16	December 16	1	
Santa Catalina.....	Panama Mail S. S. Co.....	December 16	December 17	398	1
Pennsylvania.....	Panama-Pacific Line.....	December 16	December 16	8	2
Plus Ultra.....	Cia. Ecuatoriana de Transporte.....	December 16	December 18	218	

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Comparison of Canal Traffic in November, 1932, with November Traffic in Previous Years.

Commercial traffic through the Panama Canal during the month of November, 1932, showed a slight increase in comparison with November, 1931, with respect to the number of transits and net tonnage of vessels (Panama Canal measurement), although the cargo tonnage was slightly lower. The increase in the number of transits was 12, or 3.2 per cent, and in net tonnage, 34,051 tons, or 1.7 per cent. The loss in cargo tonnage was 46,014 tons, or 2.9 per cent. In comparison with November, 1930, the past month's traffic registered a decrease in all three features considered above, as follows: Number of transits, 91, or 19.0 per cent; net tonnage, 335,691, or 14.2 per cent; and cargo tonnage, 731,691 tons, or 32.3 per cent.

The peak month for November traffic since the opening of the Canal occurred in 1927, when a total of 559 commercial vessels, aggregating 2,591,717 net tons (Panama Canal measurement), were passed through. The highest cargo tonnage for any month of November occurred in 1929, when that figure aggregated 2,534,631 long tons. In comparison with these high figures last month's traffic was lower by 30.6 per cent in transit, 21.4 per cent in net tonnage, and 39.6 per cent in cargo tonnage.

In the table below are shown the number of transits, net tonnage (Panama Canal measurement), and tons of cargo carried through the Canal during the month of November each year from 1914 to 1932, inclusive, and for comparison, the monthly averages for the corresponding fiscal year ending June 30 following:

Calendar year.	Month of November.			Fiscal year.	Average per month for fiscal year.		
	Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.		Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.
1914.....	89	312,805	446,773	1915.....	102	361,197	465,567
1915.....	(*)			1916.....	63	199,687	257,843
1916.....	147	436,058	512,826	1917.....	150	483,213	588,213
1917.....	183	586,519	696,328	1918.....	172	547,839	627,669
1918.....	182	510,533	626,728	1919.....	169	510,416	576,385
1919.....	180	597,148	575,480	1920.....	206	712,170	781,208
1920.....	238	929,875	984,910	1921.....	241	951,323	966,601
1921.....	222	942,411	855,440	1922.....	228	951,455	907,075
1922.....	294	1,337,280	1,426,860	1923.....	331	1,550,482	1,630,656
1923.....	436	2,193,865	2,218,295	1924.....	436	2,179,073	2,249,559
1924.....	384	1,872,531	1,961,593	1925.....	389	1,904,596	1,996,570
1925.....	424	2,028,034	2,023,398	1926.....	433	2,064,549	2,169,787
1926.....	428	2,032,488	2,272,449	1927.....	456	2,185,651	2,312,351
1927.....	559	2,591,717	2,488,882	1928.....	538	2,454,886	2,469,226
1928.....	527	2,468,297	2,501,630	1929.....	534	2,468,483	2,555,250
1929.....	525	2,498,906	2,534,631	1930.....	515	2,498,385	2,502,519
1930.....	479	2,371,487	2,263,200	1931.....	461	2,316,012	2,090,233
1931.....	376	2,001,745	1,577,523	1932.....	376	1,968,785	1,650,667
1932.....	388	2,035,796	1,531,509	(*).....	358	1,868,734	1,498,032

* Canal opened August 15, 1914.

* Average for 10½ months of fiscal year ended June 30, 1915.

* Canal closed on account of slides.

* Average for first 11 months calendar year 1932.

CANAL WORK IN NOVEMBER, 1932.

The following is the report of the Acting Governor to the Secretary of War, of Canal work in the month of November, 1932.

BALBOA HEIGHTS, C. Z., December 20, 1932.

The Honorable, the Secretary of War,
Washington, D. C.

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of November, 1932:

TRANSITS AND TOLLS.

During the month, 388 commercial vessels and 4 small nonseagoing launches under 20 tons transited the Canal. In addition to these, there were 42 vessels belonging to the United States Army and Navy, on which no tolls were collected, making a total of 434 transits for the month, or a daily average on all traffic of 14.47.

Tolls on the 388 commercial vessels amounted to \$1,756,865.84, and on the launches to \$15.15, a total of \$1,756,880.99, or a daily average on all traffic of \$58,562.70. While the number of commercial transits during November was smaller than in the previous month, tolls were greater and the daily average in both transits and tolls was higher, which marks the third successive month in which increases in those features of traffic have been made. The November averages represent a gain of 27.6 per cent in transits and 26 per cent in tolls over this year's low point in traffic, which occurred in August. Seasonal movement of grains and fruits from the Pacific northwest continues to be the principal factor in this increase.

Commercial traffic passing through in the past month in comparison with that of November, 1931, showed an increase of 12 transits, or 3.2 per cent, and a decrease of \$5,170.35 in tolls, or 0.3 of 1 per cent.

In comparison with the first 11 months of the calendar year 1931, commercial traffic this year shows a decrease of 14.2 per cent in transits, 12.6 per cent in net tonnage (Panama Canal measurement), 19.2 per cent in cargo carried, and 13.8 per cent in tolls collected; in comparison with the first 11 months of the calendar year 1930, there was a decline of 27.0 per cent in transits, 23.3 per cent in net tonnage (Panama Canal measurement), 35.8 per cent in cargo tonnage, and 25.3 per cent in tolls collected.

Traffic through the Canal was suspended temporarily at about 11 a. m., November 28, due to a flood in the Chagres River. This caused a dangerous current in the Canal at Gamboa, and also occasioned the use of the lock culverts at Gatun and Pedro Miguel for spilling water from Gatun Lake. Traffic was resumed, in part, in the evening of November 28 and on November 29 normal traffic was reestablished, all waiting vessels making transit.

The total numbers of craft of all kinds transiting the Canal during the month of November in the two preceding years and in 1932 are shown in the following tabulation:

	November, 1930.	November, 1931.	November, 1932.
Commercial vessels.....	479	376	388
Launches (under 20 tons).....	4	11	4
Noncommercial vessels:			
United States Government.....	40	26	42
Panamanian Government.....	1		
Vessels for repairs.....	3	1	
Total.....	527	414	434

In addition to the vessels listed above, Panama Canal equipment, consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	3	3	6
Pedro Miguel.....	22	24	46
Miraflores.....	27	36	63
Total.....	52	63	115

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, for the commercial traffic transiting the

Canal each month from the beginning of the calendar year 1932, to the end of November, 1932, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January...	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February...	431	358	2,134,866	1,878,177	1,930,219	1,645,393	1,915,902.78	1,647,797.06
March.....	439	363	2,211,934	1,864,896	1,915,507	1,643,952	1,964,434.22	1,645,366.81
April.....	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,634.67
May.....	423	357	2,184,959	1,956,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June.....	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,848,638.45	1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September..	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November..	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
Total.....	4,585	3,936	23,527,094	20,556,072	20,399,293	16,478,357	20,772,951.30	17,903,731.78

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for November in the years 1930, 1931, and 1932, and comparison with the monthly averages for the fiscal year 1932:

	November, 1930.	November, 1931.	November, 1932.	Average per month for fiscal year 1932.
Number of vessels.....	479	376	388	376
Panama Canal net tonnage.....	2,371,487	2,001,745	2,035,796	1,968,785
United States net tonnage.....	1,744,553	1,463,007	1,470,041	1,433,932
Registered gross tonnage.....	2,890,570	2,435,326	2,426,442	2,397,578
Registered net tonnage.....	1,759,792	1,477,905	1,481,520	1,448,846
Tolls.....	\$2,098,357.36	\$1,762,036.19	\$1,756,865.84	\$1,725,614.75
Tons of cargo carried.....	2,263,200	1,577,523	1,531,509	1,650,667

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per month for fiscal year 1932.
	November, 1930.	November, 1931.	November, 1932.	
Number of transits.....	15.96	12.53	12.93	12.31
Panama Canal net tonnage.....	79,050	66,725	67,860	64,550
Tolls.....	\$69,945.25	\$58,734.54	\$58,562.19	\$56,577.53
Tons of cargo.....	75,440	52,584	51,050	54,120

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of November in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for fiscal year 1932.
	November, 1930.	November, 1931.	November, 1932.	
Panama Canal net tonnage.....	4,961	5,324	5,247	5,254
United States net tonnage.....	3,650	3,891	3,789	3,827
Registered gross tonnage.....	6,047	6,477	6,254	6,398
Registered net tonnage.....	3,682	3,931	3,818	3,866
Tolls.....	\$4,380.70	\$4,686.27	\$4,528.00	\$4,595.51
Tons of cargo (including vessels in ballast).....	4,735	4,196	3,947	4,405
Tons of cargo (laden vessels only).....	5,507	4,961	4,924	5,154

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fourteen nationalities were represented in the commercial traffic through the Canal in November, 1932, in comparison with 15 in the previous month, and 14 in November, 1931. Vessels of United States registry, with 137, led in the number of transits in the past month, while those flying the British flag, 111, were second. Vessels of

these two nationalities made up 63.9 per cent of the total transits for the month. Vessels of Norwegian, Panamanian, and German registry were next in numerical importance with 37, 24, and 23, respectively.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of November, 1932, was 1,531,509 tons, a decrease of 46,014 tons, or 2.9 per cent, in comparison with November, 1931. Cargo from the Atlantic to the Pacific aggregated 343,229 tons, compared with 372,459 tons in the previous month, and 472,373 tons in November, 1931. From the Pacific to the Atlantic, cargo amounted to 1,188,280 tons, as compared with 1,209,802 tons in the previous month and 1,105,150 tons in November, 1931. The combined cargo movement in November, 1932, was lower by 50,752 tons, or 3.2 per cent, than that passing through in the previous month.

From the Atlantic to the Pacific, cotton comprised the leading commodity, with shipments totaling 51,783 tons, followed by manufactures of iron and steel with 36,720 tons, mineral oils with 32,149 tons, and paper with 16,783 tons. Decreases occurred in all of these items in comparison with November, 1931.

From the Pacific to the Atlantic mineral oils formed the leading commodity with shipments of 339,014 tons. This was followed by wheat with 253,246 tons, lumber with 139,585 tons, canned goods (various) with 74,619 tons, dried fruit with 51,985 tons, fresh fruit with 50,312 tons, and sugar with 35,118 tons. In comparison with November, 1931, increases were recorded in mineral oils, wheat, canned goods, and dried and fresh fruits. A slight loss was registered in lumber shipments, while the decrease in sugar was relatively large. Wheat shipments through the Canal in the past month were the highest since February, 1929.

There was a decrease of 129,144 tons, or 27.3 per cent in the Atlantic to Pacific movement in comparison with November, 1931, while in the opposite direction an increase of 83,130 tons, or 7.5 per cent, was made.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden vessels and \$0.72 per ton for vessels in ballast, computed on the basis of the Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules of measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both the Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.894 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.719 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of November, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of the Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian.....	\$5,071.68	\$4,226.40		\$845.28		.720
British.....	500,688.22	524,113.00	\$23,424.78		.894	
Colombian.....	368.40	307.00		61.40	1.200	
Danish.....	34,448.58	40,836.40	6,387.82		.792	.720
Danzig.....	23,965.35	22,185.00		1,780.35	.891	.720
Dutch.....	35,875.00	41,576.00	5,701.00		.863	
French.....	24,666.25	31,105.00	6,438.75		.793	
German.....	57,668.04	68,149.20	10,481.16		.838	.720
Italian.....	26,847.50	35,159.00	8,311.50		.764	
Japanese.....	86,125.66	83,183.80		2,941.86	1.009	.720
Norwegian.....	146,374.89	163,197.40	16,822.51		.821	.716
Panamanian.....	10,058.40	14,037.80	3,979.40		.711	.760
Swedish.....	34,206.05	36,379.40	2,173.35		.865	.707
United States.....	770,501.82	826,290.60	55,788.78		.921	.720
Total.....	1,756,865.84	1,890,746.00	139,509.05	5,628.89	.894	.719
Net increase for all traffic.....			133,880.16			

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$34,387.53
United States foreign trade.....	21,401.25
Total.....	55,788.78

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in November, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
British.....	.42	1.34	.96
Colombian.....	2.04		2.04
Danish.....	.47	1.19	.89
Danzig.....		1.82	1.82
Dutch.....	.17	1.04	.58
French.....	.21	.86	.63
German.....	.48	1.15	.82
Italian.....	.13	.71	.46
Japanese.....	.98	.83	.92
Norwegian.....	.57	1.56	1.32
Panamanian.....	.54	1.31	.91
Swedish.....	.56	1.73	1.31
United States.....	.47	1.19	.86
Averages, November, 1932.....	.47	1.62	.92
Averages, November, 1931.....	.58	1.19	.91
Averages, November, 1930.....	.65	1.40	1.09

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of November, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	19	122,411	\$88,135.92			
Laden.....	4	19,564	19,461.25	30	182,731	\$187,668.75
All others—						
Ballast.....	54	237,058	170,284.65	1	2,532	1,823.04
Laden.....	128	703,536	615,312.85	149	767,340	673,728.60
Noncargo-carrying ships:						
Yachts.....	2	70	51.90	1	554	398.88
Total.....	207	1,082,639	893,246.57	181	953,157	863,619.27
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	132	714,283	602,265.82	111	601,437	558,711.79
Motor.....	64	367,717	290,341.15	62	350,953	304,232.35
Motor schooner.....	9	569	587.70	7	213	276.25
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	2	70	51.90	1	554	398.88
Total.....	207	1,082,639	893,246.57	181	953,157	863,619.27

Of the 243 steam driven vessels, 156 were oil burning, 77 coal burning, and 10 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of November, 1932. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Ammunition ships.....	1	³ 4,405	\$5,506.25			
Cruisers.....	1	² 7,050	3,525.00			
Destroyers.....	6	² 7,046	3,523.00	1	¹ 1,215	\$607.50
Launches.....	1	³ 10	7.50	1	³ 10	7.50
Mine sweepers.....	2	² 1,900	950.00	1	² 950	475.00
Submarines.....	9	² 8,685	4,342.50	8	² 7,242	3,621.00
Submarine tenders.....				1	² 1,315	1,578.00
U. S. Army vessels:						
Launches.....	4	³ 40	30.00			
Transports.....	3	³ 15,840	19,800.00	1	³ 3,908	4,885.00
Tugs.....	1	³ 15	11.25	1	³ 92	69.00
Total.....	28		37,695.50	14		11,243.00

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of November, 1932, carried cargo as follows: Atlantic to Pacific, 6,586 tons; Pacific to Atlantic, 55 tons; total, 6,641 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of November, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	3	11	\$9.90
Pacific to Atlantic.....	1	7	5.25
Total.....	4	18	15.15

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of November, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	17,648	6,535	24,183
Local cargo shipped..... tons..	4,599	405	5,004
Transit cargo arriving..... tons..	1,553,524	1,515,728	3,069,252
Transit cargo clearing..... tons..	1,574,477	1,544,128	3,118,605
Cargo received for transshipment..... tons..	20,390	1,384	21,774
Cargo transhipped..... tons..	20,321	1,011	21,332
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	119	42	161
Number of releases issued.....	755	302	1,057
Tons received.....	520	130	650
Tons withdrawn.....	694	101	795
Packages received.....	7,429	1,057	8,486
Packages withdrawn.....	7,339	912	8,251
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	20		20
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,432		3,432
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	86	3	89
Panama Railroad Company..... tons..	12		12
U. S. Army, including vessels..... tons..	39		39
Individuals and companies..... tons..	78		78
Transferred to Navy..... tons..	3		3
Total sales and issues..... tons..	3,650	3	3,653
Coal on hand, November 1, 1932..... tons..	32,098		32,098
Coal on hand, December 1, 1932..... tons..	28,448		28,448
Coal received from Navy..... tons..		3	3

	Cristobal.	Balboa.	Total.
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls.	4,179.67	8,461.03	12,640.70
Panama Railroad Company..... bbls.	19,695.53	466.38	20,161.91
U. S. Army and Navy..... bbls.	605.80	119.52	725.32
Individuals and companies..... bbls.		336.83	336.83
Total sales and issues..... bbls.	24,481.00	9,883.76	33,864.76
Fuel oil on hand, December 1, 1932..... bbls.	68,296.75	58,720.74	127,017.49
Diesel oil issued during November, 1932..... bbls.	207.59	2,815.05	3,022.64
Diesel oil on hand, December 1, 1932..... bbls.	2,914.35	18,997.19	21,911.54
Miscellaneous transfers..... bbls.	221.00	979.14	1,200.14
Gasoline and kerosene pumped for The Panama Canal..... bbls.	2,726.10	5,435.71	8,161.81
Gasoline pumped for individuals and companies..... bbls.	7,607.56	7,154.82	14,762.38
Oil pumped for individuals and companies:			
Receipts..... bbls.	38,464.84		38,464.84
Issues..... bbls.	124,615.18	57,526.07	182,141.25
Oil pumped for U. S. Navy..... bbls.	6,391.00	14,906.00	21,297.00
Total fuel oil, gasoline, and kerosene handled..... bbls.	204,714.27	98,200.55	302,914.82
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	14	5	19
Measured for Panama Canal net tonnage.....	4	1	5
Remeasured for Panama Canal net tonnage.....	13	5	18
Panama Canal net tonnage corrected.....	4	3	7
U. S. equivalent tonnage corrected.....	8	7	15
Services of harbor equipment:			
Tugs, total operating hours.....	215½	133¾	349
Launches, total operating hours.....	935	970½	1,905½
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$7,363.75	\$2,948.75	\$10,312.50
Pilotage.....	13,260.00	5,054.00	18,314.00
Seamen.....	9,504.00	8,264.00	17,768.00
Launch service.....	1,556.00	1,612.50	3,168.50
Wharfage.....	10,796.49	3,028.22	14,724.71
Ships measured.....	125.00	10.00	135.00
Miscellaneous.....	271.10	150.53	421.63
Clearances issued.....	232	209	441
Bills of health issued.....	228	215	443

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal.....	437	2,856,568	1,736,830	375	2,297,140	1,412,321
Vessels entering port but not transiting Canal.....	60	360,842	209,212	11	36,942	19,795
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	81	627,894	376,329	69	522,245	315,280
<i>Ships clearing.</i>						
All vessels, including those transiting Canal.....	437	2,835,189	1,721,351	379	2,334,140	1,431,184
Vessels clearing port but not transiting Canal.....	58	342,822	196,450	13	39,796	21,760
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	81	619,145	370,785	70	542,570	327,215

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First class.	Others.	Total.	First class.	Others.	Total.	First class.	Others.	Total.
Disembarking:									
From Atlantic ports.....	915	678	1,593	221	454	675	1,136	1,132	2,268
From Pacific ports.....	64	99	163	111	109	220	175	208	383
Total disembarking.....	979	777	1,756	332	563	895	1,311	1,340	2,651
Embarking:									
For Atlantic ports.....	565	428	993	61	264	325	626	692	1,318
For Pacific ports.....	108	144	252	185	168	353	293	312	605
Total embarking.....	673	572	1,245	246	432	678	919	1,004	1,923

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Remaining on board:									
From Atlantic to Pacific ports.....	1,496	1,971	3,467				1,496	1,971	3,467
From Pacific to Atlantic ports.....				430	516	946	430	516	946
From Atlantic to Atlantic ports.....	988	93	1,081				988	93	1,081
From Pacific to Pacific ports.....				11	119	130	11	119	130
Total remaining on board.....	2,484	2,064	4,548	441	635	1,076	2,925	2,699	5,624
Total arriving on Canal Zone.	3,463	2,841	6,304	773	1,198	1,971	4,236	4,039	8,275
Total departing from Canal Zone.....	3,157	2,636	5,793	687	1,067	1,754	3,844	3,703	7,547

NOTE.—In passengers "remaining on board," those from the Atlantic to Pacific and Pacific to Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.....	207	58	28.0	4,394
Pacific to Atlantic.....	181	42	23.2	1,434
Total.....	388	100	25.8	5,828

In addition to the aforesaid, 48 passenger-carrying vessels called at the port of Cristobal and 11 at the port of Balboa without transiting the Canal, making a total of 159 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of November, 1932, 39 commercial airplanes entered and cleared at Cristobal, and none at Balboa. A total of 93 passengers were reported as disembarking from these planes, while 79 embarked.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of November, 1932, together with the total sales in the corresponding month in 1931 and 1930.

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$527.99	\$3,482.86	\$5,730.19	\$80.81	\$2,531.85	\$12,353.70
Government vessels.....	268.20	2,387.26	5,734.81	18.89	254.15	8,663.31
P. R. R. vessels.....		292.15	113.30	498.38	9.59	913.42
Total sales, November, 1932.	796.19	6,162.27	11,578.30	598.08	2,795.59	21,930.43
Total sales, November, 1931.	1,267.20	5,639.79	17,933.17	912.89	4,191.65	29,944.70
Total sales, November, 1930.	2,308.90	12,146.83	32,861.72	1,119.61	8,425.35	56,862.41
Sales at Balboa to:						
Commercial vessels.....	245.23	1,948.45	3,275.59	264.33	2,024.01	7,757.61
Government vessels.....	189.60	1,554.94	7,015.46	78.23	221.78	9,060.01
P. R. R. vessels.....					8.50	8.50
Total sales, November, 1932.	434.83	3,503.39	10,291.05	342.56	2,254.29	16,826.12
Total sales, November, 1931.	498.43	4,381.07	14,559.95	925.17	3,993.68	24,358.30
Total sales, November, 1930.	693.00	4,823.61	23,333.96	985.38	13,379.81	43,215.76

The aggregate sales to commercial vessels during the month was \$20,111.31; to Government vessels, \$17,723.32; and Panama Railroad vessels, \$921.92; making the total sales to all vessels, \$38,756.55. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of November, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial. ^a					
	North.	South.	Total.	North.	South.	Total.	Nov., 1930.	Nov., 1931.	Nov., 1932.
Gatun.....	177	197	374	6	10	16	481	383	390
Pedro Miguel.....	176	194	370	13	22	35	498	404	405
Miraflores.....	176	194	370	17	22	39	497	401	409
Number of vessels put through locks.									
Gatun.....	182	207	389	30	35	65	546	425	454
Pedro Miguel.....	181	206	387	37	50	87	567	460	474
Miraflores.....	181	206	387	42	64	106	568	464	493

^a Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	50	39	39
Panama Canal equipment.....	6	46	63
Lunches under 20 tons measurement.....	9	2	4

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in November, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
	<i>Cubic feet.</i>	<i>Cubic feet.</i>	<i>Cubic feet.</i>
Lockages.....	1,593,230,000	1,395,660,000	1,303,830,000
Leakage.....	30,000,000	75,000,000	40,000,000
Maintenance.....			23,460,000
Total, November, 1932.....	1,623,230,000	1,470,660,000	1,367,290,000
Total, October, 1932.....	1,607,900,000	1,372,770,000	1,373,510,000
Total, November, 1931.....	1,647,340,000	3,414,970,000	1,317,630,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of November, 1932, are shown in comparative form in the following tabulation:

	November.		November—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagres River at Alhajuela.....	9,503	8,466	11,167	2,481	4,849
Maximum momentary discharge for the month.....	88,000	111,360	161,200	1,356	.....
Gatun Lake watershed, total yield.....	26,630	27,767	27,767	8,673	14,622
Gatun Lake watershed, net yield.....	26,091	27,221	27,221	7,995	14,113
Draft on Gatun Lake for lockages and power.....	2,880	2,880	.....	.....	2,704

^a November, 24, 1879.

^b 1914 excluded.

The monthly mean discharge of the Chagres River at Alhajuela for November, 1932, was 8,466 c. f. s. which is 75 per cent above the 31-year average of 4,849 c. f. s. The maximum monthly mean discharge on record for November is 11,300 c. f. s. in 1909 and the minimum, 2,267 c. f. s. in 1905. The maximum momentary discharge for the month was 111,360 c. f. s. at elevation 116.92 feet on the 28th, which is a new record for the month of November since American occupation, but exceeded in the the French records, in both 1879 and 1885. During the period November 19–25, 1879, the Chagres River at Alhajuela probably reached an elevation of about 123.64

feet and discharged in the neighborhood of 176,000 c. f. s. The minimum discharge for the month of November, 1932, was 2,423 c. f. s. at elevation 92.93 feet on the 9th. The minimum on record for November is 1,356 c. f. s. at elevation 92.26 feet on November 30, 1918. Heavy rains over the Chagres River watershed during the latter part of the month caused a three-crest type of flood on the river that was similar in form, but of less duration and discharge, than the flood of French record, December 11-17, 1888.

Gatun Lake varied in elevation during November from a minimum of 85.72 feet on the 1st to a maximum of 86.77 feet on the 27th, averaged 86.35 feet, and ended the month at 86.33 feet. The total yield of the Gatun Lake watershed for the month was 27,767 c. f. s., which is 90 per cent above the 19-year November average of 14,622 c. f. s. It is a maximum total yield of record for the month of November since the formation of Gatun Lake. It is not, however, a record-breaker for any month although c. f. s. values would indicate that it was. This is due to the difference in length of months. The current November yield of 27,767 c. f. s. or 71,971 million cubic feet is slightly exceeded by the October, 1923, yield of 27,260 c. f. s. or 73,015 million cubic feet.

Miraflores Lake varied between elevations 54.20 on the 16th and 51.45 feet on the 29th, averaged 53.43 feet, and ended the month at 52.71 feet.

SEISMOLOGY.

Two local tremors were recorded during the month, on the 11th and 13th.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 6,048,400 kilowatt hours, and the computed water consumption was 4,476,295,855 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 79,400 kilowatt hours, and the fuel oil consumption was 198.14 barrels. Diesel engines were in service 14 times during the month on account of reduced capacity at Gatun hydroelectric station caused by spillway flood operations, by generator No. 4 being out of service for maintenance, and on account of dry dock pump operations.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 32 vessels during the month. There were 353 work orders issued during the month, as compared with 392 during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of November, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	5	26	24
U. S. Army and Navy.....	11	6	12
Other U. S. Government.....		1	
Panama Canal equipment.....	1		
At Balboa:			
Commercial.....	1	8	8
U. S. Army and Navy.....	3	4	4
Panama Canal equipment.....	2	6	6
Total.....	23	51	54
Vessels in dry dock.			
At Cristobal:			
Commercial.....	2	3	5
U. S. Army and Navy.....		3	2
Other U. S. Government.....		1	1
At Balboa:			
Commercial.....	1	1	2
U. S. Army and Navy.....		2	1
Total.....	3	10	11

Minor repairs to the U. S. submarines *S-11* and *S-48* were completed. Work was carried forward on the U. S. S. *Overton* and *Memphis*. General overhaul, was commenced on the U. S. S. *Mallard*.

MUNICIPAL ENGINEERING DIVISION.

In connection with the installation of oil lines to the coaling dock at Cristobal, there were installed, 3,680 feet of 16-inch W. I. screw and victaulic pipe, 6,215 feet of 6-inch G. I. pipe, 14 valves, 7 tees, 2 nipples, and one 16-inch by 12-inch reducer. Anchor for 16-inch line was constructed, and 10 cubic yards of concrete for pipe support pillars were placed. Work is 95 per cent completed.

Work on a number of improvement projects in the Canal Zone and in the cities of Colon and Panama was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 698,885,000 gallons.

DREDGING DIVISION.

The movement of West Culebra slide on the 450-foot base line showed an average of 16.9 feet toward the Canal between stations 1770 plus 00 and 1794 plus 00 W., and an average of 4.3 feet toward the south between stations 1772 plus 00 and 1779 plus 00 W. The reference points on this slide also showed some movement during the month. Dredging equipment removed a total of 61,550 cubic yards from this slide, of which 49,200 cubic yards were rock, and 12,350 cubic yards earth.

The East Culebra slide extension showed only a slight movement, full channel width and depth having been maintained throughout the month. The total excavation to date from this slide is 1,143,800 cubic yards.

Heavy rains during the month caused slight surface movements on the following slides: Cucaracha, South Cucaracha, Cucaracha Signal Station, Cartagena, West Lirio, East Empire, Division Office, Southwest La Pita, and West Whitehouse.

There was no interference with shipping on account of slides during the month. The total excavation during November, 1932, was 430,420 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
East and West Culebra slides (excluding extension).....	12,350	49,200	61,550
East Culebra slide extension.....	3,200	12,800	16,000
Project No. 5.....	8,350	16,800	25,150
Project No. 9.....	13,900	52,900	66,800
Maintenance.....	26,950	17,900	44,850
Canal prism, Miraflores Lake—			
Project No. 6.....	6,300	15,500	21,800
Maintenance.....	128,200		128,200
Balboa inner harbor—			
Maintenance.....	63,000		63,000
Plant excavation:			
Dredging sand at Chame.....	3,070		3,070
Total.....	265,320	165,100	430,420

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 30 days during the month. A total of 1,446 single trips were made, and 707 Panama Canal, 207 U. S. Army, and 9,380 other vehicles, a total of 10,294, were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and the contractors for November was 261 gold and 813 silver employees.

Comparatively little excavation was performed during the month except in the power house site. The removal of rock for this structure was practically completed with the exception of the apron below the draft tubes, the site of which is occupied by one of the skid derricks.

Heavy rains which began on November 27, resulted in a flood reaching a maximum flow of 111,400 c. f. s., which topped the cofferdam and flooded the pit for the laying of concrete. In order to reduce the damage the contractors flooded the pit when it became practically certain that the water would rise high enough to flow over the top of the cofferdam. The most important damage occurred in the contractor's gravel loading plant and cable tramway. Three of the tramway towers were washed away and the tramway cable between the gravel loading plant and the mid-way tower on the hill was broken. The railroad track leading from the gravel loading tower to the gravel bed was overturned and part of its foundation washed away. The contractor's operations will be delayed several weeks due to this flood.

Considerable concrete was placed during the month, principally in blocks 11 and 12, and the spillway apron. On the 21st the surface of a portion of block 12-D was removed on account of damage by rain; it was replaced on the 24th. The total concrete placed during November aggregated 27,588.07 cubic yards, making a total to the end of November, 1932, of 48,718.64 cubic yards.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on November 30, 1932, was 24,166, composed of 8,190 Americans, 2,801 of whom were men, 2,578 women, and 2,811 children; 184 Europeans, 75 of whom were men, 28 women, and 81 children; and 15,792 West Indians and other nationalities, 4,191 of whom were men, 2,841 women, and 8,760 children. The total number of persons in quarters on November 30, 1931, was 24,287.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of November 16, 1932, with a comparison of the working force for the preceding month and for November, 1931.

	Total employees.		As of November 16, 1932.		
	November, 1931.	October, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	98	98	54	46	100
Electrical.....	424	329	150	184	334
Municipal Engineering.....	859	735	76	674	750
Lock Operation.....	922	908	231	676	907
Dredging.....	1,176	1,006	169	798	967
Madden Dam.....	347	183	51	145	196
Mechanical.....	1,199	1,164	428	697	1,125
Marine.....	642	691	180	476	656
Fortifications.....	131	79	13	84	97
Total.....	5,798	5,193	1,352	3,780	5,132
Supply Department:					
Quartermaster.....	1,709	1,693	194	1,484	1,678
Commissary.....	1,517	1,464	226	1,262	1,483
Cattle Industry—Plantations.....	99	100	2	98	100
Hotel Tivoli.....	112	100	8	93	101
Hotel Washington.....	95	86	7	81	88
Transportation.....	285	298	74	224	298
Total.....	3,817	3,741	511	3,242	3,753
Accounting Department.....	207	195	190	5	195
Health Department.....	1,103	1,111	274	844	1,118
Executive Department.....	935	925	566	361	927
Total.....	2,245	2,231	1,030	1,210	2,240
Panama Railroad Company:					
General Manager.....	104	80	23	52	75
Transportation.....	347	297	67	237	304
Receiving and Forwarding Agency.....	929	614	98	533	631
Coaling Stations.....	158				
Total.....	1,538	991	188	822	1,010
Grand total, November, 1931.....	13,398				
Grand total, October, 1932.....		12,156			
Grand total, November, 1932.....			3,081	9,054	12,135

Additions to the gold force on the Isthmus in November were as follows: Employed in the United States, 1; reemployed in the United States, 1; employed on the Isthmus, 1; reemployed on the Isthmus, 6; total, 9. Separations from the gold force totaled 13, as follows: Resigned, 2; discharged, 2; retired, 8; died, 1. At the end of the month there were on file 900 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 235 and separations from service, 182; the number seeking employment was estimated at approximately 3,000.

VITAL STATISTICS.

A total of 135 deaths occurred during the month of November, 1932, among the population of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon

(30,000), total population 149,570, which is equivalent to an annual death rate of 10.83 per thousand population. The leading causes of death were: Tuberculosis (various organs), 19; pneumonia (broncho and lobar), 11; diarrhea and enteritis, 11; organic diseases of the heart, 9; cancer, 8; and nephritis (acute and chronic), 6. There were 3 deaths from syphilis and one each from measles and diphtheria. There were 25 deaths among nonresidents, which are not included in the above statistics.

There were 344 live births and 9 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 28.32. Deaths among children under one year of age numbered 40, giving an infant mortality rate, based on the number of live births reported, of 116.28.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 123, of whom 15 were employees (4 white and 11 colored), 12 were members of employees' families (3 white and 9 colored), 3 were Madden Dam contractor's employees, 5 were Canal Zone agriculturists, 40 were other civilian nonemployees, and 48 were Army and Navy personnel. Of the 27 employees and members of employees' families, all but 2 were probably infected outside our sanitaried areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were no deaths from malaria among residents.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$239,203.90, of which \$219,293.64 was for the Department of Operation and Maintenance, and \$19,910.26 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$27,102.50.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenue and expenditures for the month of October, 1932, as compared with October, 1931, with the figures for the first four months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of November at the time of writing this report, since all charges, etc., involved in the accounting have not been completed.

	October, 1931.	October, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,823,695.14	\$1,714,817.11	\$7,263,356.15	\$6,222,748.86
Other receipts.....	264,132.33	248,800.75	1,033,562.24	953,622.67
Total transit revenues.....	2,087,827.47	1,963,617.86	8,296,918.39	7,176,371.53
Total transit expenses.....	1,076,956.55	917,151.92	4,236,496.64	3,574,857.19
Net transit revenues.....	1,010,870.92	1,046,465.94	4,060,421.75	3,601,514.34
Three per cent fixed capital charge	1,266,478.26	1,272,757.12	5,053,078.86	5,078,695.01
Surplus or (deficit).....	(255,607.34)	(226,291.18)	(992,657.11)	(1,477,180.67)
Business revenues.....	1,403,433.48	1,219,971.50	5,593,244.15	4,899,486.32
Business expenses.....	1,363,471.84	1,179,849.44	5,350,908.66	4,695,297.65
Net business revenues.....	39,961.64	40,122.06	242,335.49	204,188.67
Three per cent fixed capital charge..	59,719.95	60,007.90	251,713.98	252,365.07
Surplus or (deficit).....	(19,758.31)	(19,885.84)	(9,378.49)	(48,176.40)
Combined revenues.....	3,491,260.95	3,183,589.36	13,890,162.54	12,075,857.85
Combined expenses.....	2,440,428.39	2,097,001.36	9,587,405.30	8,270,154.84
Net revenues.....	1,050,832.56	1,086,588.00	4,302,757.24	3,805,703.01
Three per cent fixed capital charge..	1,326,198.21	1,332,765.02	5,304,792.84	5,331,060.08
Surplus or (deficit).....	(275,365.65)	(246,177.02)	(1,002,035.60)	(1,525,357.07)

() Indicates deficit.

Respectfully,

C. S. RIDLEY,
Acting Governor.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, December 24, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Sirius ¹	17	7 10	18	6 00	18	13 40	20	1 25	American	U. S. Navy.	390 0	54 0	22 5	Norfolk, Va.	San Diego, Calif.	General	3,946	
Cal.	16	16 35	18	6 05	18	13 45	18	15 31	German	North German Lloyd	216 0	32 9	14 4	Cristobal, C. Z.	Guayaquil, Ecuador	General	1,105	698
Pacific Trader ²	18	6 50	18	7 20	18	14 14	18	15 31	British	Furness, Withly & Co.	420 0	58 0	18 0	Manchester, Eng.	Vancouver, B. C.	General	379	5,916
Irishbank ³	18	7 35	18	8 15	18	15 08	18	16 24	British	Bank Line, Ltd.	426 9	57 6	20 1	Philadelphia, Pa.	Shanghai, China.	General	2,617	5,330
Nuevo Panama ⁴	17	17 35	18	9 45	18	17 06	18	18 30	Panamanian	Hans Eliot.	108 0	20 0	6 2	Cristobal, C. Z.	Buenaventura, Col.	General	100	7,226
Brandanger ⁵	18	8 35	18	10 00	18	16 14	18	17 30	Norwegian	Westfal, Larsen & Co.	381 6	53 6	14 0	Buenos Aires, Arg.	Seattle, Wash.	General	775	6,289
Santa Teresa.	17	11 50	18	10 15	18	17 00	18	21 50	American	Panama Mail S. S. Co.	360 2	51 6	24 2	New York, N. Y.	San Francisco, Cal.	Coffee, general	2,447	4,722
Covina	18	12 20	18	12 30	18	19 20	19	00 04	American	Hammond Lumber Co.	253 4	43 7	23 0	New Orleans, La.	San Francisco, Cal.	General	3,600	2,876
Yakiko Maru ¹	18	13 15	18	13 35	18	20 42	18	22 15	Japanese	Mitsui & Co.	417 0	54 5	23 6	New York, N. Y.	Iwata, Japan.	Nitrate soda	6,537	8,932
Real ²	16	20 40	18	6 15	18	14 15	18	16 24	Panamanian	Hans Eliot.	62 0	17 0		Cristobal, C. Z.	Pedregal, R. P.	General	8	46
Dagred ²	18	21 20	19	6 30	19	13 20	19	15 25	Norwegian	W. I. Handelskompagni.	385 2	54 8	19 6	Aalborg, Denmark.	Buenaventura, Col.	Cement, cattle.	2,500	6,599
Point Caleta.	19	1 50	19	7 25	19	14 15	19	15 25	American	Gulf Pacific Line	381 0	52 0	22 0	Houston, Tex.	Seattle, Wash.	Lumber, general.	4,902	5,708
Ronanby ¹	19	9 10	19	9 20	19	16 17	19	18 00	British	Sir. R. Romper & Co.	390 0	55 5	15 0	Kingston, Jamaica.	Vancouver, B. C.	Ballast.	5,910	4,242
Penelope ¹	19	16 40	19	18 10	20	10 24	20	11 40	Danish	Anglo-American Oil Co.	470 0	63 0	20 6	Bowling, England.	Los Angeles, Calif.	Ballast.	9,184	6,359
Lisbon Maru.	19	20 50	20	6 15	20	13 00	20	14 20	Japanese	Nippon Yusen Kaisha	445 0	58 0	22 5	New York, N. Y.	Yawata, Japan.	Ballast.	15,829	5,849
Carmenby ¹	20	1 20	20	7 05	20	14 30	20	15 55	British	Sir R. Romper & Co.	405 0	53 0	16 4	Port Royal, Jam.	Vancouver, B. C.	Ballast.	8,075	4,265
Antares ¹	20	8 15	20	8 30	20	15 29	21	23 58	American	U. S. Navy.	390 0	54 0	18 2	Hampton Rds., Va.	San Diego, Calif.	Ballast.	1,887	7,750
Wilkeno.	20	1 40	20	8 35	20	15 55	20	15 10	American	Williams S. S. Line	415 0	56 0	16 3	Baltimore, Md.	Seattle, Wash.	General	3,650	6,475
Nyboru	20	8 35	20	9 40	20	16 41	20	18 00	Norwegian	Canadian Transp. Co.	381 2	54 0	20 0	Cornier Brook, N.F.	Seattle, Wash.	Newsprint	7,555	4,899
Movera ²	20	21 45	20	11 45	20	18 04	20	19 35	British	Donaldson Line.	385 6	52 0	18 8	Glasgow, Scotland	Vancouver, B. C.	General	1,511	6,724
Mexican.	20	12 50	20	14 05	20	21 07	20	22 35	American	Amor-Hawatan Line.	472 3	57 2	16 7	Boston, Mass.	Tacoma, Wash.	General	9,033	6,944
K. R. Kingsbury ¹	20	20 40	21	6 15	21	13 07	21	14 20	American	Union Oil Co.	440 0	58 2	16 6	Tiverton, R. I.	Los Angeles, Calif.	Ballast.		5,938
Gertrude Maersk ²	20	21 35	21	7 15	21	14 58	21	16 00	Danish	A. P. Moller	418 9	54 7	22 0	New York, N. Y.	Cebu, P. I.	General	5,640	7,385
Frieda.	20	23 50	21	8 35	21	16 02	21	17 20	American	Freeport Sulphur Co.	348 7	45 1	22 5	Freeport, Tex.	San Francisco, Cal.	Sulphur	4,552	3,894
Emilie Maersk.	21	1 30	21	8 40	21	16 21	21	17 20	Danish	Maersk Line.	276 0	41 0	13 3	Norfolk, Va.	Arica, Peru	Ballast.	2,458	1,645
Empire Star.	21	00 35	21	9 30	21	17 05	21	18 05	British	Blue Star Line	423 4	56 0	16 9	Tyne, England	Vancouver, B. C.	Ballast.	7,744	5,621
F. J. Lockenbach.	21	00 50	21	11 05	21	18 38	21	19 55	American	Lukenbach Line	446 0	57 0	18 6	Boston, Mass.	Tacoma, Wash.	General	2,033	6,508
San Marcos.	21	12 45	21	18 20	21	18 01	22	12 25	American	Quaker S. S. Line.	410 5	54 2	16 5	Albany, N. Y.	Seattle, Wash.	General	1,064	6,755
Port Said Maru.	21	20 20	22	6 15	22	13 00	22	14 20	Japanese	Kokusai Kisen Kaisha.	385 0	51 0	23 0	Calveston, Tex.	Nagasaki, Japan.	Cotton, zinc	3,702	4,399
David	21	23 50	22	8 25	22	15 05	22	16 15	American	Tidewater Oil Co.	430 0	59 2	22 0	Leith, N. Y.	Los Angeles, Calif.	Ballast.	7,629	5,325
Nordho ¹	22	00 25	22	7 25	22	15 32	22	16 35	Danish	Canadian Transp. Co.	380 0	54 0	23 9	Albany, N. Y.	Vancouver, B. C.	Coal	6,600	4,569
Chickasaw City	22	7 30	22	9 15	22	16 20	22	17 30	American	Ischman S. S. Lines	395 5	55 0	19 3	New York, N. Y.	Honolulu, T. H.	Steel, general	3,246	5,237
Pulkasian.	22	10 45	22	11 05	22	18 20	22	20 00	British	Hayward & Boebling	440 5	57 5	17 3	Newcastle, Eng.	Vancouver, B. C.	Ballast	7,679	5,828
Melon ¹	22	13 00	22	13 15	22	20 50	22	22 18	American	Shell Eastern Pet. Co.	425 8	57 0	19 6	Perth Amboy, N. J.	Los Angeles, Calif.	Ballast.	7,484	5,212

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
S-15 ¹⁰ .	23	6.40	23	13.45	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
S-17 ¹⁰ .	23	6.30	23	13.45	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
S-14 ¹⁰ .	23	6.32	23	13.45	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
S-16 ¹⁰ .	23	6.32	23	13.45	23	13.45	23	13.45	American.	U. S. Navy.	231.0	20.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
San Clemente.	22	17.35	23	6.47	23	14.45	23	14.45	American.	Quaker Line.	410.0	54.4	23.5	Portland, Oreg.	Philadelphia, Pa.	Lumber, general.	7,058	6,476	4,682
Launch.	23	7.00	23	14.45	23	14.45	23	14.45	American.	U. S. Navy.	...	...	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
Chevink.	23	7.00	23	14.45	23	14.45	23	14.45	American.	U. S. Navy.	180.0	35.6	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
No. 39 ¹¹ .	23	6.41	23	16.10	24	11.00	24	11.00	Panamanian.	A. Valdez.	57.8	19.7	...	Bayano, R. P.	Cristobal, C. Z.	Bananas.	55	57	29
A. B. Abarrio ¹¹ .	23	7.25	23	15.30	23	15.30	23	15.30	American.	U. S. Navy.	231.0	20.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
S-11 ¹⁰ .	23	7.28	23	15.30	23	15.30	23	15.30	American.	U. S. Navy.	240.0	21.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
S-48 ¹⁰ .	23	7.30	23	16.10	23	17.40	23	17.40	British.	Canadian Transp. Co.	419.6	53.9	27.0	Vancouver, B. C.	Avonmouth, Eng.	Grain, lumber.	8,250	7,097	5,022
Forrestbank ¹¹ .	23	6.30	23	8.04	23	19.55	23	6.20	Norwegian.	Panama Mail S. S. Co.	221.6	32.2	11.3	Champerico, Guat.	Cristobal, C. Z.	...	438	980	579
Solund.	22	20.40	23	8.04	23	19.55	23	6.20	Norwegian.	Panama Mail S. S. Co.	221.6	32.2	11.3	Champerico, Guat.	Cristobal, C. Z.	...	438	980	579
Reina del Pacifico ¹¹ .	23	8.30	23	9.12	23	18.45	23	22.55	British.	Pacific Steam Nav. Co.	550.0	76.3	28.0	Talcahuano, Chile.	Liverpool, England	General.	4,787	18,871	13,099
Talisman ¹¹ .	23	10.05	23	10.50	23	19.50	23	19.50	Norwegian.	W. L. Comyn.	400.0	54.2	25.4	Vancouver, B. C.	Antwerp, Belgium.	General.	6,786	6,558	4,580
Gen. Wm. M. Graham ¹¹ .	23	6.35	23	13.45	23	13.45	23	13.45	American.	U. S. Army.	156.0	32.0	...	Balboa, C. Z.	Cristobal, C. Z.	...	...	...	...
Durazzo ¹² .	23	6.00	23	11.18	23	21.15	26	9.40	German.	Hamburg-American Line	227.5	34.4	14.4	Guayaquil, Ecuador	Cristobal, C. Z.	General.	980	1,632	1,041
Turra ¹² .	23	11.00	23	11.19	23	22.40	25	6.15	Panamanian.	Hans Elliot.	64.2	20.3	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	35	78	49
Real ¹² .	23	11.26	23	22.40	25	6.15	25	6.15	Panamanian.	Hans Elliot.	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	28	46	22
Santa Ana.	23	6.45	23	12.18	23	21.25	24	10.50	American.	Panama Mail S. S. Co.	360.2	51.6	24.3	San Francisco, Cal.	New York, N. Y.	Garbanzos, gen.	2,751	5,710	4,011
Nuevo.	23	12.05	23	12.37	23	22.40	24	14.25	Panamanian.	Hans Elliot.	108.5	20.6	9.2	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	217	226	101
Nueva.	23	13.10	23	22.40	25	6.15	25	6.15	Panamanian.	G. Tamm.	70.0	19.0	...	Darien, R. P.	Cristobal, C. Z.	Bananas.	38	81	47
Alfauza ¹² .	23	13.00	23	22.40	25	6.15	25	6.15	Panamanian.	Mitsui Bussan Kaisha.	385.0	51.0	26.0	Darien, Japan.	Gulport, Miss.	Silk, general.	6,351	6,242	4,440
Iboksan Maru.	24	4.40	24	11.29	24	20.05	24	22.00	Norwegian.	Seafaring Agencies.	256.3	38.2	14.0	High seas.	Kingsport, Jamaica.	Ballast.	2,033	1,466	...
Nidarod.	24	4.40	24	11.29	24	20.05	24	22.00	Norwegian.	Seafaring Agencies.	256.3	38.2	14.0	High seas.	Kingsport, Jamaica.	Ballast.	2,033	1,466	...
Northern.	24	4.40	24	11.29	24	20.05	24	22.00	Norwegian.	Seafaring Agencies.	256.3	38.2	14.0	High seas.	Kingsport, Jamaica.	Ballast.	2,033	1,466	...
Sun ¹³ .	24	10.15	24	11.38	24	18.50	24	18.50	American.	Sun Oil Co.	480.6	66.0	29.0	San Francisco, Cal.	Sewaren, N. J.	Gas, kerosene.	13,300	9,664	6,562
Murillo.	24	12.35	24	13.43	24	22.05	25	1.25	British.	Royal Mail Lines, Ltd.	440.0	56.2	22.0	Seattle, Wash.	Hamburg, Germany.	Fresh fruit.	2,728	7,490	4,645
Pearlmoor.	24	13.30	24	14.31	24	22.15	25	1.25	British.	Moor Line.	400.0	52.1	26.1	Salaverry, Peru.	Lands End, Eng.	Sugar.	7,858	6,040	4,357
Steel Trader.	24	13.50	24	14.49	25	00.05	25	9.05	American.	Ishtman S. S. Line.	424.2	56.2	26.0	Vancouver, B. C.	Avonmouth, Eng.	General.	7,580	7,611	5,395
Point Fernin.	22	21.00	24	18.12	25	11.15	25	11.15	American.	Swayne & Hoyt.	335.0	46.2	22.4	Seattle, Wash.	Lake Charles, La.	General.	3,031	3,984	2,614

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 18...	Dorelian.	Leyland S. S. Line.	Liverpool via wayports.	December 18...	Metapan.	United Fruit Co.	New York via wayports.
December 18...	No. 300-N ¹⁵ .	Pan American-Grace Airways.	Buenaventura, Colombia.	December 18...	Glenpool.	Standard Shipping Co.	Baytown, Texas.
December 18...	No. 9858 ¹⁵ .	Pan American Airways.	Pan Salvador via wayports.	December 18...	Dorelian.	Leyland S. S. Line.	Cienfuegos, Cuba.
December 18...	Barco.	United Fruit Co.	Port Limon, Costa Rica.	December 19...	No. 660-M ¹⁵ .	Pan American Airways.	Barranquilla, Colombia.
December 19...	Cuba.	French Line.	Have via wayports.	December 19...	Calamares.	United Fruit Co.	New York via wayports.
December 19...	Barco.	Colombian S. S. Line.	Medellin, Colombia.	December 19...	Cristobal.	Panama Railroad S. S. Line.	New York via Haiti.
December 19...	No. 145-M ¹⁵ .	U. S. Marine Corps.	Barranquilla, Colombia.	December 20...	Barco.	Colombian S. S. Line.	New York via Kingston.
December 20...	No. 607-M ¹⁵ .	Pan American-Grace Airways.	Managua, Nicaragua.	December 20...	No. 9858 ¹⁵ .	Pan American Airways.	Talara via wayports.
December 21...	No. 9673 ¹⁵ .	Pan American Airways.	Pan Salvador via wayports.	December 21...	Cuba.	French Line.	San Salvador via wayports.
December 21...	No. 945-M ¹⁵ .	Pan American-Grace Airways.	Pura via wayports.	December 21...	No. 660-M ¹⁵ .	Pan American Airways.	Have via wayports.
December 22...	No. 669-M ¹⁵ .	Pan American Airways.	Miami via wayports.	December 22...	No. 145-M ¹⁵ .	Uraba, Medellin & Cent. Airways	Miami via wayports.
December 23...	Buenaventura.	Panama Railroad S. S. Line.	New York via Haiti.	December 23...	No. 300-N ¹⁵ .	Pan American-Grace Airways.	Medellin, Colombia.
December 23...	Ulas.	United Fruit Co.	New Orleans via Habana.	December 24...	Ulas.	United Fruit Co.	Pura via wayports.
December 23...	Stella Lykes.	Standard Fruit & S. S. Co.	Medellin, Colombia.	December 24...	No. 9673 ¹⁵ .	Pan American Airways.	San Salvador via wayports.
December 23...	No. 145-M ¹⁵ .	Standard Fruit & S. S. Co.	New Orleans via Habana.	December 24...	No. 145-M ¹⁵ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
December 24...	Catalu.	Lykes Brothers S. S. Co.	Tampa via wayports.	December 24...	Catalu.	Standard Fruit & S. S. Co.	New Orleans via wayports.
December 24...	Colombia.	Colombian S. S. Line.	New York via wayports.	December 24...	Vegua.	United Fruit Co.	Port Limon, Costa Rica.
December 24...	Costa Rica.	Royal Netherlands S. S. Co.	Ausderdam via wayports.	December 24...	Buenaventura.	Panama Railroad S. S. Line.	New York, N. Y.
December 24...	Santa Marta.	United Fruit Co.	New York via Kingston.	December 24...	Annetta I. ¹⁶ .	P. W. Hamilton.	Colon, Rep. of Panama.
December 24...	Annetta I. ¹⁶ .	P. W. Hamilton.	Colon, Rep. of Panama.	December 24...	Inapaquina ¹⁶ .	A. Tagarapulos.	Colon, Rep. of Panama.
December 24...	Inapaquina ¹⁶ .	A. Tagarapulos.	Colon, Rep. of Panama.				

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 18...	Anigua.	United Fruit Co.	San Francisco, Calif.	December 18...	Anigua.	United Fruit Co.	San Francisco, Calif.
December 20...	Nora ¹⁷ .	Arrow Oil Co.	Los Angeles, Calif.	December 18...	Plus Ultra ¹² .	Cia. Equad. de Transp. Maritimus	Esmeraldas, Ecuador.
December 19...	Sambu ¹² .	Hans Elliot.	Panama Bay, R. P.	December 19...	Sambu ¹² .	Hans Elliot.	Panama Bay, R. P.
December 22...	Langlectarn. ¹² .	F. Carrick & Co.	High seas.	December 21...	Nora ¹⁷ .	Arrow Oil Co.	Los Angeles, Calif.
December 23...	Dos Hermanos ¹² .	A. Valdez.	Panama Bay, R. P.	December 24...	Langlectarn. ¹² .	F. Carrick & Co.	Vancouver, B. C.
December 23...	Anatina ¹⁷ .	M. Chr. Stray.	San Francisco, Calif.	December 23...	Dos Hermanos ¹² .	A. Valdez.	Panama Bay, R. P.

¹⁷ Tanker.
¹⁸ Coffee, hemp, and skins.

¹⁹ Submarine.

²⁰ Motor schooner.

²¹ Motor ship.

²² Mine planter.

²³ Air mail carrier.

²⁴ Motor boat.

²⁵ For orders.

* Other than ships passing through the Canal.

Pacific Locks Overhaul to Commence in January.

Work on the quadrennial overhaul of the Pacific Locks (Miraflores and Pedro Miguel) is to be commenced on January 3, 1933. It is estimated that it will take about 5 months to complete, and cost approximately \$835,000. As in past overhauls, one side of the locks will be overhauled at a time, leaving the other side to take care of Canal traffic. During the progress of the work on Miraflores Locks, traffic will be put through Miraflores Locks on a 24-hour basis, and Gatun and Pedro Miguel Locks on a 16-hour basis, upon completion of which and during the overhaul of Pedro Miguel Locks it will be on the regular 16-hour basis of operation.

In addition to the routine overhaul the program calls for the inspection and repair of 12 miter gate leaves. The first overhaul of lock gates since the Canal was placed in operation occurred four years ago when one pair of leaves was overhauled at Pedro Miguel Locks. At Gatun Locks two years ago four pairs of leaves were overhauled.

The repairs consist of renewal of all vertical bearing plates, replacement of yoke pins and bushings, and replacement of pintles and bushings. Also the installation of pintle lubricating devices is included. The process requires that each leaf be raised approximately 16 inches to clear the pintle and the leaf rolled approximately four feet from the wall to provide access to the quoin end bearings.

The coming overhaul will require a force of 110 gold and about 600 silver employees. The former are to be recruited from various Canal divisions so far as possible, while the silver men for the most part are to be selected from former employees now seeking work.

"Constitution" Makes Canal Transit.

The United States Navy frigate *Constitution*, launched in 1797 and famed in the history of the United States as "Old Ironsides," arrived at Cristobal in the evening of December 22, 1932, from Washington, D. C., via Guantanamo. After a four-day stay at Cristobal the vessel made transit of the Canal on December 27, 1932, and tied up at Balboa for public inspection.

The *Constitution* is to go in dry dock at Balboa, then will proceed to visit the western part of the United States.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending December 24, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Salvador.....	Pacific Steam Navigation Co.....	December 18	December 18	300	
Antigua.....	United Fruit Co.....	December 18	December 18	614	126
Santa Teresa.....	Panama Mail S. S. Co.....	December 18	December 18	150	2
Sveajarl.....	Knut Knutsen S. S. Line.....	December 20	December 21	130	
Nora.....	Grace Line.....	December 20	December 21	13,352	
Santa Maria.....	Grace Line.....	December 20	December 21	159	182
Point Fermin.....	Swayne & Hoyt.....	December 22	December 25	1,417	
President Polk.....	Dollar Line.....	December 23	December 23	3	
Santa Ana.....	Panama Mail S. S. Co.....	December 23	December 23	128	7
Santa Clara.....	Grace Line.....	December 23	December 23	73	12
Obateau Thierry.....	U. S. Army.....	December 23	December 27	890	
Anatina.....	M. Chr. Stray.....	December 23	December 25	6,267	
Este.....	Hamburg-American Line.....	December 23	December 23	203	
Durazzo.....	Hamburg-American Line.....	December 23	December 23		203

Heavy Wheat Tonnage Through Canal in November, 1932.

Shipments of wheat through the Panama Canal from the Pacific to the Atlantic during the past month, aggregating 253,246 long tons, constituted the largest movement in a month for this commodity for almost four years. The previous heaviest tonnage of this grain occurred in February, 1929, when 261,273 tons passed through from the Pacific to the Atlantic. In comparison with November, 1931, wheat tonnage routed via the Canal Atlantic-bound made an increase of 135,174 tons, or about 115 per cent.

Of the total tonnage, 253,246, passing through Atlantic-bound in November, 1932, all but 604 tons were reported as originating on the west coast of Canada. Of the balance, 601 tons came from the United States, and 3 tons from South America. Europe absorbed nearly all of this wheat, taking 252,606 tons. The balance of 640 tons was destined to the United States and the east coast of South America.

Wheat comprises one of the heaviest single items of cargo routed from the Pacific to the Atlantic. In the past four fiscal years it has ranked third on two different occasions, fourth once, and fifth once.

The following tabulation shows the wheat tonnage passing through from the Pacific to the Atlantic during the first 11 months of the current calendar year, the average tonnage per month, and the average per month for the preceding four calendar years:

	Long tons.
<i>Pacific to Atlantic.</i>	
1932.	
January.....	210,553
February.....	195,678
March.....	159,241
April.....	185,670
May.....	209,624
June.....	158,000
July.....	133,232
August.....	121,736
September.....	107,653
October.....	194,269
November.....	253,246
Total.....	1,928,902
Average per month, 1932 (11 months).....	175,355
Average per month, 1931.....	129,440
Average per month, 1930.....	153,320
Average per month, 1929.....	158,430
Average per month, 1928.....	235,035

As will be noted from the above, the monthly average thus far this year is the highest since 1928, which was the calendar year of the highest wheat tonnage since the opening of the Canal. In 1928 a total of 2,820,425 tons passed through Atlantic-bound. Of the total wheat tonnage passing through in the past 4 years and 11 months, 81.8 per cent came from Canada, 17.7 per cent from the United States, and the balance, 0.5 of 1 per cent, from other areas. Almost 99 per cent of the total was destined to Europe. In 1928, wheat tonnage comprised 13.9 per cent of the total Atlantic-bound tonnage through the Canal; in 1929, 8.9 per cent; in 1930, 9.3 per cent; in 1931, 9.7 per cent; and in 1932 (11 months), 16.1 per cent.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending December 24, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo —	
				Discharged	Laded.
				Tons.	Tons.
Cerigo.	Hamburg-American Line		December 11		472
Sixtoia.	United Fruit Co.		December 11		157
Carl Legien.	Hamburg-American Line		December 11		208
President Jackson.	Dollar Line	December 11	December 11	618	13
Bodegraven.	Royal Netherlands S. S. Co.	December 11	December 12	5	73
Nuevo Panama.	Hans Elliot.	December 11	December 12	219	92
Ulva.	United Fruit Co.	December 12	December 12	6	2
Quirigua.	United Fruit Co.	December 12	December 12	19	486
Martinique.	Colombian S. S. Line.	December 12	December 12	236	285
San Antonio.	French Line.	December 12	December 12	117	228
San Francisco.	Hamburg-American Line	December 12	December 13	163	219
Velma Lykes.	Lykes Brothers.		December 13		32
Lochmonar.	Royal Mail Lines, Ltd.	December 13	December 14	140	(²)
Kreta.	Hamburg-American Line		December 14		437
Venezuela.	Royal Netherlands S. S. Co.	December 13	December 17	286	330
Pearl Marie.	R. Feuillebois		December 14		14
Magdalena.	Hamburg-American Line	December 14	December 14	61	11
Canadian Challenger.	Canadian National Steamships	December 14	December 15	5	532
Teapa.	Standard Fruit & S. S. Co.	December 14	December 15	(¹)	353
Marques de Comillas.	Spanish Line.	December 14	December 16	1	291
Manizales.	Grace Line.	December 14	December 17	779	334
Cristobal.	Panama R. R. S. S. Line.	December 14		2,168	
President Hoover.	Dollar Line	December 15	December 16	3	(²)
Magallanes.	Spanish Line.	December 15	December 16	147	9
Justin.	North German Lloyd.	December 15	December 16	13	(²)
Lobos.	Pacific Steam Navigation Co.	December 15	December 16	11½	247
Calamares.	United Fruit Co.	December 16	December 16	261	92
Tolosa.	United Fruit Co.	December 16	December 16	567	34
Glenpool.	Standard Shipping Co.	December 16		1,336	
Cali.	North German Lloyd.	December 16		890	
Helder.	Royal Netherlands S. S. Co.	December 16	December 16	66	½
Contessa.	Standard Fruit & S. S. Co.	December 16	December 17	249	331
Nuevo Panama.	Hans Elliot.	December 17		222	
Metapan.	United Fruit Co.	December 17		384	
Santa Teresa.	Panama Mail S. S. Co.	December 17		253	
West Camargo.	McCormick S. S. Line.	December 17		154	
Cali.	North German Lloyd.		December 18		236
Nuevo Panama.	Hans Elliot.		December 18		104
Metapan.	United Fruit Co.		December 18		235
Santa Teresa.	Panama Mail S. S. Co.		December 18		514
West Camargo.	McCormick S. S. Co.		December 18		20
Dorelian.	Leyland S. S. Line.	December 18	December 18	227	(²)
Salvador.	Pacific Steam Navigation Co.	December 18	December 24	541	476
Cristobal.	Panama R. R. S. S. Line.		December 19		511
Calamares.	United Fruit Co.	December 19	December 19	3	391½
Baracoa.	Colombian S. S. Line.	December 19	December 19	75	207
Cuba.	French Line.	December 19	December 21	110	366
Portland.	Hamburg-American Line	December 20	December 21	271	200
San Marcos.	Quaker Line.	December 21	December 21	173	(²)
Santa Maria.	Grace Line.	December 21	December 21	1,008	48½
Sveajarl.	Knutson S. S. Line.	December 21	December 21	49	(²)
Dinteldijk.	Holland-America Line.	December 21	December 22	(¹)	583
Santa Clara.	Grace Line.	December 22	December 23	183	876
Buenaventura.	Panama R. R. S. S. Line.	December 22	December 24	903	276
Este.	North German Lloyd.	December 22	December 23	48	251
Annie Johnson.	Johnson S. S. Line.	December 22	December 23	137	163
Virgilio.	Italian Line.	December 22	December 23	11	600
Santa Ana.	Panama Mail S. S. Co.	December 23	December 24	280	176
Ulva.	United Fruit Co.	December 23	December 23	834	347
Reina del Pacifico.	Pacific Steam Navigation Co.	December 23	December 23	2	31
Veragua.	United Fruit Co.	December 23	December 24	208	32
Nuevo Panama.	Hans Elliot.	December 23	December 24	237	61
Cefalu.	Standard Fruit & S. S. Co.	December 23	December 24	250	689
Real.	Hans Elliot.	December 23	December 24	20	104
Alda.	North German Lloyd.	December 23	December 24	93	342
Durazzo.	Hamburg-American Line.	December 23		799	
Sollund.	Panama Mail S. S. Co.	December 23		482	
Costa Rica.	Royal Netherlands S. S. Co.	December 24		177	
Stella Lykes.	Lykes Brothers.	December 24		3,109	
Colombia.	Colombian S. S. Line.	December 24		44	
Santa Marta.	United Fruit Co.	December 24		265	

¹ No cargo discharged.² No cargo laded.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., January 4, 1933. No. 23.

Canal Traffic During December, 1932.

During the month of December, 1932, 431 commercial vessels and 3 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,781,940.03, and on the launches, \$7.50, or a total tolls collection of \$1,781,947.53.

The daily average of transits of commercial vessels was 13.90, and the daily average tolls collection was \$57,481.94, as compared with an average of 12.93 commercial transits and \$58,562.19 in tolls for the previous month, and an average of 12.48 transits and \$56,705.47 in tolls for December, 1931. The average amount of tolls paid by each of the commercial vessels was \$4,134.43, as compared with \$4,542.30 for the month of December, 1931. Last month's traffic was the highest of any month since April, 1931, when 453 vessels were passed through; tolls collected were the highest since October, 1931, when \$1,823,650.74 was collected on 390 commercial ships. Last month's traffic in comparison with December, 1931, showed an increase of 11.4 per cent in transits and 1.4 per cent in tolls collected.

Canal Traffic During Calendar Year 1932.

The number of commercial vessels transiting the Canal during the calendar year ended December 31, 1932, aggregated 4,367, and the total tolls collection was \$19,685,671.81. Commercial traffic for the calendar year just ended was the lowest calendar year's traffic since 1922, when 2,997 commercial vessels, paying \$12,573,407.77 in tolls, were passed through. In comparison with the calendar year 1931 it showed a decrease of 605 transits and \$2,845,149.03 in tolls, losses of 12.2 per cent and 12.6 per cent, respectively. In comparison with 1930 there occurred a decrease of 1,518 transits and \$6,460,353.15 in tolls, losses of 25.8 per cent and 24.7 per cent, respectively.

The daily average of commercial vessels during the past year was 11.93 in comparison with 13.62 in the calendar year 1931, and 16.12 in 1930. The daily average tolls collection of commercial vessels during the year was \$53,785.99, in comparison with \$61,728.28 in 1931, and \$71,632.95 in 1930.

Commercial traffic remained fairly uniform during the first six months of the year, varying between an average of 11.20 transits in June and 12.34 transits in February. From April to August there occurred four successive decreases, the low point of the year's traffic being reached in the latter month. In September, traffic showed a substantial increase and it increased successively each month until the end of the year, the month of December showing the highest traffic for the year. This gain was due almost wholly to an increase in the trade between Europe and the west coast of North America over

which route considerable extra tonnage was used to take care of the movement of grain, fruit, etc., from the western part of the United States and Canada, the Pacific northwest.

The last six months of the year showed a slight increase in the number of transits in comparison with the first six months, while in the amount of tolls a decrease occurred. This was due to the fact that a larger proportion of the traffic in the latter period transited in ballast, and also that the average tonnage per vessel was smaller during the last six months.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the calendar year 1932, with the daily averages of transits and tolls, and with comparative totals for the calendar years 1931 and 1930, and the fiscal year ended June 30, 1932:

Month.	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
January.....	377	\$1,770,250.68	12.16	\$57,104.30
February.....	358	1,647,797.06	12.34	56,820.59
March.....	363	1,645,366.81	11.71	53,076.35
April.....	370	1,608,634.67	12.33	53,621.16
May.....	357	1,717,401.26	11.52	55,400.04
June.....	336	1,534,793.19	11.20	51,159.77
Total, first 6 months.....	2,161	9,924,243.67	11.87	54,528.81
July.....	326	1,468,728.36	10.52	47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
December.....	431	1,781,940.03	13.90	57,481.94
Total, last 6 months.....	2,206	9,761,428.14	11.99	53,051.24
Total, calendar year, 1932.....	4,367	19,685,671.81	11.93	53,785.99
Total, calendar year, 1931.....	4,972	22,530,820.84	13.62	61,728.28
Total, calendar year, 1930.....	5,885	26,146,024.96	16.12	71,632.95
Total, fiscal year, 1932.....	4,506	20,707,377.05	12.31	56,577.53

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., November 17, 1932.

No. 1231.

Panama Canal, Miraflores Lake, information concerning aids:

1. Gas buoy No. M-5, Miraflores Lake, was moved 500 feet south, effective November 16, 1932.
2. Spar buoy No. 7, Miraflores Lake, was reestablished, effective November 16, 1932.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., November 28, 1932.

No. 1234.

Colombia, Buenaventura, light buoy established. The following message was received by the Captain of the Port at Cristobal from the Captain of the Port at Buenaventura, Colombia:

On November 22, 1932, there was established a white light buoy, flashing every 5 seconds, located over a sand bar in 4 fathoms of water.

Position, latitude 3° 47' 55" N., longitude 77° 13' 15" W.

This buoy should bear to the left on entering port.

C. S. RIDLEY,
Acting Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 30, 1932.

No. 1251.

Central America, west coast, Salvador, Amapala Point Light extinguished. The following is quoted from Notice to Mariners No. 51, dated Washington, D. C., December 17, 1932:

Information has been received from the government of the Republic of Salvador that Amapala Point Light has not functioned for several years due to the fact that the metallic tower, 100 feet high, is so rusted as to be in danger of collapse.

Approximate position, 13° 09' 12" N., 87° 54' 10" W.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending December 31, 1932.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Tai Yin.....	Barber S. S. Line.....	December 25	December 25	233	
Virginia.....	Panama-Pacific Line.....	December 26	December 27	7	212
Henderson.....	U. S. Government.....	December 26	December 26		
Meigs.....	U. S. Government.....	December 27	December 27	697	
Tosca.....	Knute Knudsen.....	December 27	December 27	3	
Nuevo Panama.....	Hans Elliot.....	December 28	December 29	235	
Republic.....	U. S. Government.....	December 29	December 30	55	4
Manizales.....	Panama Mail S. S. Co.....	December 29	December 29	1	
La Brea.....	Union Oil Co.....	December 29	December 30	10,350	
Utacarbon.....	Union Oil Co.....	December 29	December 30	215	
Cerigo.....	Hamburg-American Line.....	December 30	December 30	200	
California.....	Panama-Pacific Line.....	December 30	December 30	75	
Iocoma.....	International Petroleum Co.....	December 30	December 31		738
Solana.....	Associated Oil Co.....	December 31	January 1	2,024	

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective January 3, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.33
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, December 31, 1932.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Sollund	23	19.55	25	6.20	25	14.31	25	15.40	Norwegian	Panama Mail S. S. Co.	221.6	32.2	10.1	Cristobal, C. Z.	Acapulco, Salvador	Ballast	.....	980	579
Nueva Alianza	23	22.40	25	6.15	25	14.31	25	15.30	Panamanian	G. Tamm	70.0	19.0	6.0	Cristobal, C. Z.	Bahoa, C. Z.	Ballast	.....	81	47
City of Windsor	25	1.30	25	8.40	25	15.15	25	16.20	British	Ellerman & Bucknall	447.6	57.6	20.3	New York, N. Y.	Shanghai, China	Tobacco, general	2,271	8,691	6,536
City of Baghdad	25	13.20	25	13.25	25	20.45	25	23.40	British	City Line, Ltd.	470.0	58.0	18.6	New York, N. Y.	New Zealand	General	1,568	8,499	5,937
Mathew Luckenbach	25	14.15	25	15.04	25	21.53	25	23.40	American	Luckenbach Line	434.3	57.7	23.6	New Orleans, La.	Tacoma, Wash.	General	5,295	7,977	5,796
Tuira	23	22.40	25	6.15	25	14.35	25	15.30	Panamanian	A. Valdez	64.0	20.0	.....	Cristobal, C. Z.	Podagral, R. P.	General	19	78	49
Real	23	22.40	25	6.15	25	14.35	25	15.30	Panamanian	Hans Elliot	62.0	17.0	.....	Cristobal, C. Z.	Podagral, R. P.	General	40	46	22
Taranger	25	15.40	25	19.13	26	9.50	26	11.00	Norwegian	Intercean Steam Corp.	338.0	54.0	15.2	Rotterdam, Holland	Vancouver, B. C.	Ballast	.....	6,858	5,308
Henderson	25	21.20	26	0.00	26	12.34	27	1.50	American	U. S. Navy	460.0	61.0	22.4	Hampton Rds., Va.	Corinto, Nicaragua	General	9	.....	.....
Aradine	20	17.35	26	8.35	26	16.16	26	19.25	American	U. S. Navy	110.0	26.0	15.8	Curacao, D. W. I.	Los Angeles, Calif.	Ballast	.....	255	129
Dirazzo	23	21.15	26	9.40	26	17.30	26	18.45	German	Hamburg-American Line	227.5	34.0	13.6	Cristobal, C. Z.	Guayaquil, Ecuador	General	305	1,633	1,041
Point Lobos	26	15.15	26	15.30	27	11.13	27	12.40	American	Gulf Pacific Line	380.0	53.0	19.7	Beaumont, Tex.	Vancouver, B. C.	General	2,717	5,083	4,260
Tosa	26	16.15	26	16.45	27	12.38	27	14.35	Norwegian	Knutte Knutsen Line	375.8	52.0	18.9	Oslo, Norway	Valparaiso, Chile	General	2,958	5,088	3,930
Constitution	22	21.25	27	6.10	27	15.33	27	16.35	American	U. S. Navy	175.0	43.0	21.1	Washington, D. C.	San Diego, Calif.	Ballast	.....	.....	.....
Grebe	22	21.25	27	5.45	27	15.37	27	16.35	American	U. S. Navy	187.0	35.0	.....	Washington, D. C.	San Diego, Calif.	Ballast	.....	.....	.....
Delft	26	16.05	27	7.10	27	14.01	27	15.20	Dutch	N. Pacific Coast Line	490.0	64.0	20.2	Rotterdam, Holland	Vancouver, B. C.	General	2,835	11,724	8,266
Cape Horn	26	20.25	27	8.05	27	16.27	27	17.30	British	Lyle Shipping Co., Ltd.	435.0	56.0	17.6	Marseille, France	Vancouver, B. C.	Ballast	6,813	4,864	.....
Felix Taussig	26	21.40	27	8.40	27	17.53	27	18.50	American	McCorrick S. S. Co.	395.0	55.0	17.6	Philadelphia, Pa.	Seattle, Wash.	General	2,382	7,056	4,908
Kurama Maru	27	00.50	27	9.45	27	18.45	27	19.50	Japanese	Kokusai Kisen Kaisha	435.0	58.0	23.4	New York, N. Y.	Yokohama, Japan	Cotton, general	6,713	8,252	5,969
Cornwall	27	8.35	27	10.45	27	20.13	28	1.28	British	Federal Steam Nav. Co.	495.0	63.0	29.0	Liverpool, England	Pi. Chalmers, N. Z.	General	7,653	12,286	8,218
Lastek	27	12.20	27	12.45	27	20.48	27	21.50	German	Knorr & Burchard	282.0	44.0	11.8	Norfolk, Va.	Yavros, Mexico	Ballast	.....	2,571	1,837
Trondanger	27	13.35	27	14.15	27	21.43	28	7.08	Norwegian	Intercean Line	486.0	61.0	18.0	Rotterdam, Holland	Los Angeles, Calif.	Ballast	.....	9,345	6,968
Henry S. Grove	27	19.40	28	6.15	28	15.09	28	16.25	American	Argonaut S. S. Line	404.6	54.0	18.1	Baltimore, Md.	Seattle, Wash.	General	1,563	6,755	4,795
Dakota	27	19.55	28	7.10	28	15.54	28	16.55	American	Amer-Hawaiian Line	407.7	53.7	.....	Boston, Mass.	Seattle, Wash.	General	1,451	7,156	5,094
Edward Luckenbach	28	6.30	28	8.15	28	17.50	28	18.58	American	Luckenbach Line	436.0	57.0	19.1	Boston, Mass.	Seattle, Wash.	General	2,608	8,543	6,427
Comet	28	13.15	28	13.20	28	19.54	28	21.00	American	Standard Vacuum Corp.	480.5	66.0	21.0	New York, N. Y.	Los Angeles, Calif.	Ballast	.....	9,820	6,736
Sun	28	13.55	28	14.05	28	21.14	28	22.00	American	Shell Oil Co.	386.6	66.0	21.6	Baltimore, Md.	San Francisco, Cal.	Ballast	.....	9,620	6,476
American Star	28	2.30	28	15.00	28	22.12	28	23.00	American	Nelson Line	386.8	52.2	16.0	Philadelphia, Pa.	Seattle, Wash.	General	1,608	5,699	4,167
Tacoma Star	28	15.55	28	19.20	29	10.21	29	11.29	British	Blue Star Line	450.0	58.0	21.0	N. Shields, Eng.	Vancouver, B. C.	Ballast	.....	8,240	5,395
George Washington	28	18.55	29	6.10	29	13.25	29	14.50	Norwegian	Fred Olsen & Co.	425.5	55.3	16.7	Antwerp, Belgium	Vancouver, B. C.	General	3,131	7,553	5,673
Abraham Lincoln	28	20.45	29	6.10	29	14.25	29	15.30	Norwegian	Fred Olsen & Co.	435.9	56.2	17.3	Oslo, Norway	Vancouver, B. C.	General	2,233	8,005	5,891
Mercury	28	21.45	29	7.25	29	15.15	29	16.15	American	Shell Oil Co.	480.5	60.0	24.6	Perth Amboy, N. J.	Los Angeles, Calif.	Ballast	.....	9,713	6,536
Sun	29	8.35	29	8.45	29	16.58	30	15.30	American	Union Oil Co.	435.0	56.2	26.0	Aruba, D. W. I.	Los Angeles, Calif.	Fuel oil	10,345	7,150	4,895

28	9 35	29	9 30	29	17 15	30 11 42	American.	U. S. Army	599 0	68 0	30 0	Brooklyn, N. Y.	Honolulu, H. C.	General.	1,021
29	6 29	9 30	29 17	30 18	54	British	Hain S. S. Co.	409 0	55 0	14 11	Cardiff, Wales	Vancouver, B. C.	Balist.	6,376	4,466
29	10 05	29 10	25 18	29 19	39	American.	Isfahan S. S. Lines	424 0	56 2	17 0	Seattle, Wash.	Seattle, Wash.	General.	2,420	7,611
29	7 20	29 12	30 19	15 29	30	Danish	East Asiatic Co.	465 0	62 0	18 1	Copenhagen, Den.	Vancouver, B. C.	General.	3,360	11,226
29	10 50	29 13	05 21	05 29	32	British.	Readon South Line	400 0	54 0	92 0	Panama, Fla.	Shanghai, China.	(-)	5,200	6,964
29	11 30	29 13	50 21	58 29	33	American.	Roosevelt S. S. Co. S. B.	395 5	53 0	20 4	New York, N. Y.	Harpung, China.	General.	3,580	7,329
29		29		8 29		American.	U. S. Navy				Cristobal, C. Z.	Gatun, C. Z.	Balist.	3,580	5,233
29	14 15	30 6	20 13	37 30	21	American.	Dollar Line	517 0	72 2	25 6	New York, N. Y.	Los Angeles, Calif.	General.	1,713	15,296
29	5 40	30 7	10 14	30 31	05	American.	Panama-Pacific Line.	574 4	80 3	27 0	New York, N. Y.	San Francisco, Cal.	General.	1,718	24,506
29	19 23	30 8	15 16	23 30	17	Norwegian.	R. Waage & J. Stenersen	408 3	53 3	26 0	Gothenburg, Swed	San Francisco, Calif.	Balist.	6,449	4,517
		30 8	20 30	17 51		American.	U. S. Navy	180 0	35 1		Cristobal, C. Z.	Balboa, C. Z.	Balist.		
		30 8	20 30	17 51		American.	U. S. Navy	231 0	21 0		Cristobal, C. Z.	Balboa, C. Z.	Balist.		
		29 21	40 30	9 35	30 17	Norwegian.	Knut Knutsen	375 0	52 0	14 0	St. John, N. B.	Vancouver, B. C.	Balist.	6,077	4,586
		30 8	40 30	10 18	38 30	British.	R. Chapman & Son	413 0	52 3	16 0	S. Shields, Eng	Vancouver, B. C.	Balist.	5,885	4,124
		30 12	50 30	13 05	30 20	01	Hammond Lumber Co.	362 3	51 2	20 6	New York, N. Y.	Los Angeles, Calif.	Balist.	4,947	3,374
		30		30 14	30	American.	U. S. Army				Cristobal, C. Z.	Balboa, C. Z.	Balist.		
		30 14	40 31	6 20	31 15	23	Quaker Line.	410 0	54 3	18 0	New York, N. Y.	Seattle, Wash.	General.	1,544	6,872
		30 18	00 31	11 10	17 28	31	Hamburg-American Line	433 0	59 0	20 1	Hamburg, Germany	Vancouver, B. C.	General.	2,886	8,510
		29 20	30 31	14 50	31 22	45	Grace Line.	216 5	32 9	19 2	Cristobal, C. Z.	Guayaquil, Ecuador	General.	1,232	741
		31 14	50 31	15 00	31 22	35	Sudden & Christenson.	409 5	54 2	12 0	Jacksonville, Fla.	Seattle, Wash.	General.	4,552	6,604
		30 19	00 31	7 00	31 15	30	A. Valdez.	57 8	19 7		Balboa, C. Z.	Balboa, C. Z.	Balist.	57	29
		30 22	35 31		31 17	30	A. Valdez.	64 0	20 0		Cristobal, C. Z.	Balboa, C. Z.	Balist.	78	49
		30 21	10 31	14 10	31 22	25	Hans Elliot.	62 0	17 0		Cristobal, C. Z.	Podregal, R. P.	General.	8	22
		30 21	10 31	14 10	31 23	15	Panamaniau								46

THROUGH THE CANAL--PACIFIC TO ATLANTIC.

California ¹ ...	24	20	54	25	6	29	25	13	25	25	17	30	American...	Amer.-Hawaiian Line...	445	1	59	8	20	0	Portland, Oreg...	Boston, Mass...	General	4, 630	8, 567	6, 020
President													American...	Dollar Line...	416	5	72	2	26	0	San Francisco, Cal...	Boston, Mass...	General	3, 558	15, 286	10, 580
McKney	25	6	00	25	7	08	5	14	40	25	21	15	American...	Continental Grain Co.	421	2	54	2	25	4	San Francisco, Cal...	New York, N. Y.	General	8, 470	6, 352	4, 628
Somersby	24	23	26	25	8	12	25	15	35	25	15	35	British...	J. Rountree & Co.	384	7	50	0	25	0	Vancouver, B. C.	Falmouth, Eng.	Wheat	3, 256	6, 755	4, 750
Santiago	25	4	00	25	8	50	25	17	00	25	17	45	Chilean...	Argonaut S. S. Line...	404	6	53	9	20	5	Arica, Chile...	New York, N. Y.	Gold, ore, copper	7, 783	9, 997	7, 063
Charles H.														Barber S. S. Lines	461	4	60	6	27	0	Seattle, Wash...	Baltimore, Md	General	3, 256	6, 755	4, 750
Cramp	25	3	00	25	9	50	25	18	05	25	11	00	American...	Canadian Transp. Co.	387	8	54	7	26	0	Davao, P. I.	Boston, Mass	General	7, 961	6, 580	4, 828
Tai Yin	25	11	55	25	12	33	25	20	20	25	20	20	Norwegian...	Nippon Yusen Kaisha	445	0	58	0	26	0	Vancouver, B. C.	London, England	Wheat, general	6, 168	7, 955	5, 081
Stanford	25	16	45	25	17	32	26	11	25	26	14	10	Norwegian...	Kokusai Kisen Kaisha	443	6	60	0	24	0	Keelung, Japan	Baltimore, Md	Sugar, general	6, 800	8, 820	6, 408
Rayama Maru	26	8	00	26	8	46	26	15	40	26	19	05	Japanese...	Blue Star Line...	473	8	60	0	27	0	Manila, P. I.	New York, N. Y.	General	5, 774	10, 405	7, 401
Katsuragi	26	8	50	26	9	42	26	17	30	27	00	05	British...	Kerr, Gifford & Co.	400	4	53	1	25	3	N. Westminster, B. C.	Newcastle, Eng.	Frozen, general	7, 821	6, 146	4, 460
Manu	26	12	40	26	13	30	26	20	30	27	00	05	British...	R. Chapman & Son	409	6	54	0	25	3	Vancouver, B. C.	Falmouth, Eng.	Wheat	8, 324	5, 761	4, 129
Trojan Star	26	12	45	26	13	35	26	21	35	27	00	05	British...	Panama-Pacific Line	586	4	55	6	25	0	Vancouver, B. C.	London, England	Wheat	8, 723	6, 641	4, 182
Reveries	26	12	57	26	14	10	27	12	05	27	12	25	British...	Anglo-Chinese Shipping Co.	586	4	55	6	25	0	Hull, England	New York, N. Y.	General	5, 317	25, 254	18, 170
Seepool	26	12	08	27	6	21	27	14	00	27	14	25	American...	Westfal, Larsen & Co	398	0	55	0	25	4	Vancouver, B. C.	Haere, France	Wheat, general	7, 065	6, 854	5, 287
Virginia	26	22	30	27	7	28	27	15	15	27	16	25	Norwegian...	R. Chapman & Son	400	0	52	4	25	0	Vancouver, B. C.	Avonmouth, Eng	Wheat, general	7, 470	5, 699	4, 126
Hindanger	26	3	45	27	8	13	27	16	35	27	16	35	British...	Common Brothers	420	0	54	0	25	0	Vancouver, B. C.	London, England	Grain	8, 672	6, 298	4, 576
Libertian	27	7	30	27	9	23	27	17	25	27	17	25	British...	Luckenbach Line...	445	0	58	0	26	0	Seattle, Wash	Boston, Mass	Lumber, general	7, 064	8, 695	6, 375
Robert Luck	27	10	00	27	10	57	27	18	00	27	18	00	American...	Transport...	445	0	58	0	26	0	Mine sweeper.	Boston, Mass	Grain	7, 064	8, 695	6, 375
enhach														Yacht.												
Tanker.														Motor ship.												
														Cargo to be discharged at Balboa.												
														Motor schooner.												
														Transport.												
														Cotton and carbon black.												
														Yacht.												
														For orders.												
														Crane.												
														Submarine.												
														Launch.												

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.		Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.				Nature.	Tons.				Gross.	Net.		
Chateau Thierry	23	20 14	27	14 45	27	21 30	28	11 00	American.	U. S. Army.	448.0	58.0	26.0	Balboa, C. Z.	New York, N. Y.	Army supplies.	8,414	6,172	4,509	
Rushpool	27	14 00	27	15 15	27	23 45	28	00 35	British.	Anglo-Canad. Ship. Co.	420.1	54.1	25.0	Vancouver, B. C.	Liverpool, England	Grain, general.	2,743			
Melges	27	3 42	28	6 25	28	13 30	28	14 35	American.	U. S. Army.	430.7	54.3	21.0	San Francisco, Cal.	Brooklyn, N. Y.	Army supplies.	2,110	7,032	5,128	
Bordeaux Maru	27	15 30	28	7 13	28	14 35	28	14 35	Japanese.	Kawasaki Kisen Kaisha	405.0	53.0	19.0	Kobe, Japan.	New York, N. Y.	Silk, general.	4,970			
Nebraska	27	15 29	28	8 14	28	15 25	28	15 25	American.	Amer.-Hawaiian Line.	471.1	59.1	22.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	5,112			
Point Salinas	27	18 45	28	8 52	28	17 40	28	17 40	American.	Swayne & Hoyt.	386.8	52.2	20.0	Portland, Ore.	Mobile, Ala.	General.	8,277	10,440	7,027	
Wyoming	28	5 00	28	10 07	28	19 09	29	2 45	French.	French Line.	470.3	61.2	28.0	Vancouver, B. C.	Havre, France.	Grain, general.	9,860	7,773	5,634	
Pat Doherty	28	6 00	28	11 14	28	19 35	29	3 35	American.	Shell Oil Co.	430.0	59.2	28.0	Los Angeles, Calif.	Fall River, Mass.	Kerosene.	9,947	9,407	7,777	
Kwanto Maru	28	8 10	28	12 22	28	20 55	29	8 00	Japanese.	Osaka Steamship Co.	461.7	61.6	24.0	Fusan, Korea.	New York, N. Y.	Sugar, general.	10,031	7,646	7,729	
Bidwell	28	13 50	28	15 07	28	23 05	29	23 05	American.	Suburban Fuel Oil Serv.	431.0	59.2	28.1	Los Angeles, Calif.	New York, N. Y.	Furnace oil.	10,031	7,646	7,729	
Kirsten Maersk	28	19 30	29	6 23	29	14 15	29	18 50	Danish.	A. P. Moller	284.9	49.3	20.0	Talara, Peru.	Carapito, Venez.	Pipe, couplings.	3,279	2,460	1,701	
Callina	28	21 45	29	6 49	29	15 30	29	21 07	Italian.	Nav. Libera-Tristina.	486.6	55.4	26.2	Vancouver, B. C.	Venice, Italy.	General.	9,058	7,809	6,024	
Japan Arrow	28	23 50	29	7 19	29	16 35	29	16 35	American.	Stand. Vac. Transp. Co.	468.3	62.7	29.0	Los Angeles, Calif.	New York, N. Y.	Fuel oil.	12,665	10,084	7,388	
Pacific Ranger ¹⁴	29	4 00	29	8 02	29	18 05	29	18 05	British.	Furness, Withy & Co.	436.4	60.3	28.0	Victoria, B. C.	Manchester, Eng.	General.	8,821	9,725	6,942	
Los Angeles	29	8 10	29	9 10	29	18 10	29	23 40	German.	North German Lloyd.	432.3	59.1	25.4	Vancouver, B. C.	Hamburg, Germany	General.	7,828	8,454	6,344	
Mabroun	29	8 30	29	10 51	29	19 10	29	19 10	British.	R. Dale & Co.	412.6	55.5	28.0	Vancouver, B. C.	London, England	Grain, general.	9,928	8,823	4,797	
Mauritania	29	10 05	29	11 20	29	20 30	31	14 50	German.	Grace Line.	216.5	32.5	15.5	Guayaquil, Ecuador	Cristobal, C. Z.	General.	1,083	1,132	741	
Forbes Haupt-	29	10 55	29	11 52	29	21 20	30	00 50	American.	McCormick S. S. Co.	409.8	54.2	24.0	Seattle, Wash.	New York, N. Y.	Lumber, general.	6,667	6,831	4,969	
West Mahwah.	29	12 10	29	13 04	29	22 30	29	22 30	American.	McCormick S. S. Co.	410.3	54.2	22.0	Powell River, B. C.	Buenos Aires, Arg.	Lumber, general.	4,854	6,588	5,049	
Victoria ¹⁴	29	15 25	29	16 30	30	11 50	30	11 50	British.	Imperial Oil Co.	510.2	68.2	30.0	Talara, Peru.	Hallifax, N. S.	Crude oil.	14,739	11,575	7,648	
Utacarbon ¹⁴	29	23 35	30	6 21	30	13 45	30	13 45	American.	Union Oil Co.	435.0	56.0	28.0	Los Angeles, Calif.	Tiverton, R. I.	Furnace oil.	10,000	7,475	5,209	
Peter Maersk ¹⁴	29	23 50	30	7 10	30	14 30	30	16 25	Danish.	Isbrandtsen Moller.	441.4	57.0	25.3	Cebu, P. I.	Savannah, Ga.	General.	7,000	7,723	5,904	
Acajutla	29	23 50	30	8 10	30	15 05	30	15 05	British.	Pacific Steam Nav. Co.	415.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	General.	448	1,273	706	
Yearby	30	5 00	30	9 03	30	16 30	30	16 30	British.	Ropner Shipping Co.	435.0	55.6	26.0	Vancouver, B. C.	Rotterdam, Holland	Wheat.	9,469	6,884	5,130	
York City	30	7 50	30	10 14	30	19 10	31	4 05	British.	Reardon Smith & Sons.	417.8	55.0	28.0	N. Westminster, B. C.	Manchester, Eng.	General.	8,900	7,038	5,231	
Cerigo	30	12 50	30	13 34	30	21 10	31	11 05	German.	Hamburg-American Line	227.2	34.4	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	973	1,572	1,011	
A. B. Obarrto ¹⁵	30	30	30	8 51	30	19 00	31	7 00	Panamanian	A. Valdez.	57.8	19.7		Darien, R. P.	Cristobal, C. Z.	Bananas.	25	57	29	
Real ¹⁵	30	30	30	10 44	30	21 10	31	14 10	Panamanian	Haus Elliot.	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	41	46	22	
Barbara ¹⁶	30	30	30	10 44	30	21 10	31	14 10	American.	G. W. Locher.	26.0	7.0		Balboa, C. Z.	Gatun, C. Z.	Ballast.	58	78	49	
Tulira	30	30	30	13 17	30	22 35	31		Panamanian	Leffargue Brothers.	64.2	20.3	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	6,367	6,003	4,932	
Edwin Criscenton.	31	1 35	31	6 17	31	13 35	31	13 35	American.	Sudden & Christenson.	410.0	54.2	22.4	Seattle, Wash.	New York, N. Y.	Lumber, general.	6,367	6,003	4,932	
S-10 ¹⁷	31	8 25	31	9 09	31	13 30	31	13 30	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.					
Agra	31	8 25	31	9 09	31	13 35	31	13 35	German.	North German Lloyd.	295.3	46.5	16.0	Champerico, Guat.	Bremen, Germany.	Coffee, hides.	1,061	3,041	1,967	
Malvina ¹⁴	31	8 35	31	9 50	31	17 50	31	17 50	Dutch.	Anglo-Saxon Pet. Co.	430.7	62.6	28.0	San Francisco, Cal.	Curacao, D. W. I.	Stove oil.	12,050	8,566	5,878	
Leusda ¹⁸	31	8 36	31	10 40	31	19 05	31	21 35	British.	Pacific Steam Nav. Co.	406.1	54.2	27.0	Valparaiso, Chile.	Liverpool, England	General.	8,393	7,221	4,844	
Laurits	31	11 00	31	11 47	31	19 55	1	12 05	Norwegian.	Fred Olsen Line.	480.0	56.0	27.0	Vancouver, B. C.	Oslo, Norway	General.	7,755	7,963	5,837	
Swenson ¹⁴	31	14 00	31	14 43	31	22 20	31	22 20	American.	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Gasoline.	13,653	9,619	6,456	

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridien.

PORT OF CRISTOBAL

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 25.	Reliance.	Hamburg-American Line.	New York via wayports.	December 25.	Santa Marta.	United Fruit Co.	New York via wayports.
December 25.	No. 144-M ¹⁸ .	Pan American Airways.	Talca via wayports.	December 25.	Colombia.	Colombian S. S. Line.	New York via Kingdon.
December 25.	No. 414-H ¹⁸ .	Pan American Airways.	San Salvador via wayp'ls.	December 26.	Reliance.	Hamburg-American Line.	New York via wayports.
December 26.	No. 145-M ¹⁸ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	December 26.	No. 669-M ¹⁸ .	Pan American Airways.	Barraquilla, Colombia.
December 26.	No. 669-M ¹⁸ .	Pan American Airways.	Port Limon, Costa Rica.	December 26.	Costa Rica.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
December 27.	Vragua.	United Fruit Co.	New York via wayports.	December 27.	No. 945-M ¹⁸ .	Pan American-Grace Airways.	Phura via wayports.
December 27.	Lafayette.	French Line.	Pto. Barrios via wayports.	December 27.	No. 414-H ¹⁸ .	Pan American Airways.	San Salvador via wayp'ls.
December 27.	Hamburg-American Line.	Societa Italia-Flotte Riunite.	New York via wayports.	December 27.	Overton.	United Fruit Co.	New York via wayports.
December 28.	Conte Grande.	Societa Italia-Flotte Riunite.	New York via wayports.	December 28.	Lafayette.	French Line.	Puerto Cabezas.
December 28.	Columbus.	North German Lloyd.	New York via wayports.	December 28.	Stella Lykes.	Lykes Brothers S. S. Co.	Sto. Domingo via wayp'ls.
December 28.	Ancon.	Panama R. R. S. S. Line.	New York via wayports.	December 28.	Magdalena.	Hamburg-American Line.	Europe via wayports.
December 29.	Contessa.	Pan American Airways.	Miami via wayports.	December 28.	Columbus.	North German Lloyd.	New York via wayports.
December 30.	Quirigua.	Standard Fruit & S. S. Co.	New Orleans via Habana.	December 29.	Rex.	Societa Italia-Flotte Riunite.	New York via wayports.
December 30.	Uruba.	United Fruit Co.	New York via wayports.	December 29.	No. 669-M ¹⁸ .	Pan American Airways.	Miami via wayports.
December 30.	No. 145-M ¹⁸ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	December 30.	Inapaquina ¹⁹ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.
December 30.	A. Tagaropulos.	A. Tagaropulos.	Colon, Rep. of Panama.	December 30.	Annetta I. ¹⁹ .	P. W. Hamilton.	Colon, Rep. of Panama.
December 30.	P. W. Hamilton.	Colombian S. S. Line.	Colon, Rep. of Panama.	December 30.	No. 144-M ¹⁸ .	Pan American-Grace Airways.	Chidaro via wayports.
December 31.	Haiti.	Colombian S. S. Line.	New York via wayports.	December 30.	Argitani.	Elkders & Fyffes, Ltd.	Avonmouth via wayp'ls.
December 31.	Tolca.	United Fruit Co.	New Orleans via Habana.	December 30.	Quirigua.	United Fruit Co.	Port Limon, Costa Rica.
December 31.	Costa Rica.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	December 31.	Anachucma ¹⁹ .	A. Tagaropulos.	Colon, Rep. of Panama.
December 31.	Sixado.	United Fruit Co.	New York via Kingdon.	December 31.	No. 9083 ¹⁹ .	Pan American Airways.	San Salvador via wayp'ls.
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.	December 31.	No. 145-M ¹⁸ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.	December 31.	Tolca.	Contessa.	New Orleans via wayp'ls.
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.	December 31.	Tolca.	United Fruit Co.	New Orleans via wayp'ls.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
December 25.	Reliance.	Hamburg-American Line.	New York via wayports.	December 25.	Anatina ¹ .	M. Chr. Stray.	Los Angeles, Calif.
December 25.	No. 144-M ¹⁸ .	Pan American Airways.	Talca via wayports.	December 28.	Nuevo Panama ¹⁴ .	Hans Elliot.	Buenaventura, Colombia.
December 25.	No. 414-H ¹⁸ .	Pan American Airways.	San Salvador via wayp'ls.	December 29.	Hayo Maru ¹⁴ .	Nippon Yusen Kaisha.	Hongkong, China.
December 26.	No. 145-M ¹⁸ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	December 31.	Jocona ¹ .	West India Oil Co.	Buenaventura, Colombia.
December 26.	No. 669-M ¹⁸ .	Pan American Airways.	Port Limon, Costa Rica.				
December 27.	Vragua.	United Fruit Co.	New York via wayports.				
December 27.	Lafayette.	French Line.	Pto. Barrios via wayports.				
December 27.	Hamburg-American Line.	Societa Italia-Flotte Riunite.	New York via wayports.				
December 28.	Conte Grande.	Societa Italia-Flotte Riunite.	New York via wayports.				
December 28.	Columbus.	North German Lloyd.	New York via wayports.				
December 28.	Ancon.	Panama R. R. S. S. Line.	New York via wayports.				
December 29.	Contessa.	Pan American Airways.	Miami via wayports.				
December 30.	Quirigua.	Standard Fruit & S. S. Co.	New Orleans via Habana.				
December 30.	Uruba.	United Fruit Co.	New York via wayports.				
December 30.	No. 145-M ¹⁸ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.				
December 30.	A. Tagaropulos.	A. Tagaropulos.	Colon, Rep. of Panama.				
December 30.	P. W. Hamilton.	Colombian S. S. Line.	Colon, Rep. of Panama.				
December 31.	Haiti.	Colombian S. S. Line.	New York via wayports.				
December 31.	Tolca.	United Fruit Co.	New Orleans via Habana.				
December 31.	Costa Rica.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.				
December 31.	Sixado.	United Fruit Co.	New York via Kingdon.				
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.				
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.				
December 31.	Contessa.	United Fruit Co.	New York via Kingdon.				

Motor boat.

Air mail carrier.

Submarine.

Launch.

Motor schooner.

Air mail carrier.

Submarine.

Launch.

Motor schooner.

Air mail carrier.

Submarine.

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Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1933 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M. *	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Cristobal</i>	January 4.....	January 9.....	January 12.....	January 15.....	January 18.....	January 23.....
<i>Ancon</i>	January 17.....	January 22.....	January 25.....	January 29.....	February 1.....	February 6.....
<i>Cristobal</i>	January 31.....	February 5.....	February 8.....	February 12.....	February 15.....	February 20.....
<i>Ancon</i>	February 15.....	February 20.....	February 23.....	February 26.....	March 1.....	March 6.....
<i>Cristobal</i>	February 28.....	March 5.....	March 8.....	March 12.....	March 15.....	March 20.....
<i>Ancon</i>	March 14.....	March 19.....	March 22.....	March 26.....	March 29.....	April 3.....
<i>Cristobal</i>	March 28.....	April 2.....	April 5.....	April 9.....	April 12.....	April 17.....
<i>Ancon</i>	April 11.....	April 16.....	April 19.....	April 23.....	April 26.....	May 1.....
<i>Cristobal</i>	April 25.....	April 30.....	May 3.....	May 7.....	May 10.....	May 15.....
<i>Ancon</i> ²	May 9.....	May 14.....	May 17.....	May 21.....	May 24.....	May 29.....
<i>Cristobal</i> ²	May 23.....	May 28.....	May 31.....	June 4.....	June 7.....	June 12.....
<i>Ancon</i> ²	June 6.....	June 11.....	June 14.....	June 18.....	June 21.....	June 26.....
<i>Cristobal</i> ²	June 20.....	June 25.....	June 28.....	July 2.....	July 5.....	July 10.....
<i>Ancon</i> ²	July 5.....	July 10.....	July 13.....	July 16.....	July 19.....	July 24.....
<i>Cristobal</i> ²	July 18.....	July 23.....	July 26.....	July 30.....	August 2.....	August 7.....
<i>Ancon</i> ²	August 1.....	August 6.....	August 9.....	August 13.....	August 16.....	August 21.....
<i>Cristobal</i> ²	August 15.....	August 20.....	August 23.....	August 28.....	August 31.....	September 5.....
<i>Ancon</i> ²	August 29.....	September 3.....	September 6.....	September 10.....	September 13.....	September 18.....
<i>Cristobal</i> ²	September 12.....	September 17.....	September 20.....	September 24.....	September 27.....	October 2.....
<i>Ancon</i> ²	September 26.....	October 1.....	October 4.....	October 8.....	October 11.....	October 16.....
<i>Cristobal</i>	October 10.....	October 15.....	October 18.....	October 22.....	October 25.....	October 30.....
<i>Ancon</i>	October 24.....	October 29.....	November 1.....	November 5.....	November 8.....	November 13.....
<i>Cristobal</i>	November 8.....	November 13.....	November 16.....	November 19.....	November 22.....	November 27.....
<i>Ancon</i>	November 21.....	November 26.....	November 29.....	December 3.....	December 6.....	December 11.....
<i>Cristobal</i>	December 5.....	December 10.....	December 13.....	December 18.....	December 21.....	December 26.....
<i>Ancon</i>	December 19.....	December 24.....	December 27.....	December 31.....	January 3.....	January 8.....

* Steamers sail at 4 p. m. from Pier 65, North River, foot of West 25th St., New York. Sailings are at 4 p. m., Eastern standard time, except in the period from May 1 to September 30, inclusive, when they are at 4 p. m., daylight saving time.

² Sailing from New York at 4 p. m., daylight saving time.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., January 11, 1933. No. 24.

Traffic by Nationality for December, 1932.

The following tabulation shows the commercial traffic through the Canal during the month of December, 1932, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for December, 1931 and 1930:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	56	308,365	220,923	363,078	221,039	\$247,596.26	120,426
Danish.....	7	34,092	23,281	38,924	24,228	26,799.79	16,765
Danzig.....	3	22,673	19,202	33,316	18,934	16,324.56	
Dutch.....	3	20,162	14,207	24,010	14,503	15,892.16	3,957
French.....	2	9,195	6,652	12,600	6,437	6,592.40	824
German.....	17	54,086	36,978	62,709	37,391	44,139.38	22,338
Italian.....	2	12,342	8,883	15,032	8,827	9,121.53	1,544
Japanese.....	8	42,979	34,792	54,475	34,409	41,148.05	38,537
Norwegian.....	26	120,022	81,014	134,824	81,473	88,285.18	24,428
Panamanian.....	24	7,975	4,653	8,392	4,809	5,580.10	2,181
Swedish.....	3	15,665	10,490	17,379	12,862	11,653.36	2,997
United States.....	78	477,815	354,835	582,697	353,261	411,888.46	157,090
Total, December, 1932.....	229	1,125,371	815,910	1,347,436	818,173	925,021.23	391,087
Total, December, 1931.....	216	1,111,646	799,282	1,338,513	804,359	921,776.33	501,408
Total, December, 1930.....	252	1,292,442	960,855	1,610,065	969,586	1,100,610.97	551,712

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$6,232.50	10,122
British.....	48	243,076	174,014	289,338	177,195	217,517.50	347,654
Chilean.....	2	8,217	7,031	10,926	6,824	8,788.75	11,828
Colombian.....	1	307	302	405	308	226.50	
Danish.....	5	24,132	15,366	26,456	16,167	19,207.50	34,107
Danzig.....	4	30,377	25,836	44,728	25,330	32,295.00	57,724
Dutch.....	4	23,353	16,009	26,809	16,145	20,011.25	35,135
French.....	2	14,495	8,247	15,768	8,886	10,308.75	17,565
German.....	16	46,945	30,858	53,052	31,424	38,572.50	62,530
Italian.....	3	25,209	16,742	30,749	18,532	20,927.50	20,960
Japanese.....	6	34,694	25,986	42,152	26,171	32,482.50	31,618
Norwegian.....	20	97,559	66,140	111,524	66,804	82,675.00	148,888
Panamanian.....	23	1,026	994	1,894	1,150	1,212.30	1,537
Swedish.....	3	13,555	8,381	13,855	10,545	10,476.25	21,242
United States.....	64	385,431	284,788	467,154	286,414	355,985.00	429,884
Total, December, 1932.....	202	954,698	685,680	1,142,626	697,653	856,918.80	1,230,494
Total, December, 1931.....	171	921,512	672,745	1,141,730	682,114	836,093.21	1,147,496
Total, December, 1930.....	243	1,181,184	874,024	1,450,326	878,898	1,091,972.88	1,615,172

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$6,232.50	10,122
British.....	104	551,441	394,937	652,416	398,234	465,113.76	468,080
Chilean.....	2	8,217	7,031	10,926	6,824	8,788.75	11,528
Colombian.....	1	307	302	405	308	226.50	.....
Danish.....	12	58,274	38,647	65,380	40,395	46,007.29	50,872
Danzig.....	7	53,050	45,038	78,044	44,264	48,619.56	57,724
Dutch.....	7	43,495	30,216	50,819	30,648	35,903.41	39,092
French.....	4	23,690	14,899	28,368	15,323	16,901.15	18,389
German.....	33	101,031	67,836	115,761	68,815	82,711.88	84,868
Italian.....	5	37,551	25,625	45,781	27,359	30,049.03	22,504
Japanese.....	14	77,673	60,778	96,627	60,570	73,630.55	70,155
Norwegian.....	46	217,581	147,154	246,348	148,277	170,960.18	173,316
Panamanian.....	47	9,001	5,647	10,286	5,959	6,792.40	3,718
Swedish.....	6	29,220	18,871	31,234	23,407	22,129.61	24,239
United States.....	142	863,246	639,623	1,049,851	639,675	767,873.46	586,974
Total, December, 1932....	431	2,080,069	1,501,590	2,490,062	1,515,826	1,781,940.03	1,621,581
Total, December, 1931....	387	2,033,158	1,472,027	2,450,243	1,486,473	1,757,869.54	1,648,904
Total, December, 1930....	495	2,473,626	1,834,879	3,060,391	1,848,484	2,192,583.85	2,166,894

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 4, 1933.

No. 3.

Panama, Panama Bay, floating survey signals established. The Commandant of the 15th Naval District is the authority of the following information:

The U. S. S. *Hannibal* has established a line of five floating signals on moored rafts about three and one-half miles off the beach. The first opposite Cerro Tigre, the last off San Carlos. They will remain about one week and then be shifted to new locations southwestward.

NOTE.—This is the section of the coast between Chame Point and San Carlos, approximately.

J. L. SCHLEY,
Governor.

Tanker Traffic Through the Panama Canal in December, 1932.

During the month of December, 1932, 59 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 355,034, on which tolls amounting to \$310,180.86 were paid. Cargo amounted to 337,416 tons, comprised of 330,816 tons of mineral oils, 5,250 tons of coconut oil and 1,350 tons of wood oil.

In point of net tonnage, tanker traffic increased 23.5 per cent in comparison with the corresponding month a year ago and cargo tonnage made a gain of 7.9 per cent.

Tank ships comprised 13.7 per cent of the total commercial transits through the Canal during the month; made up 17.1 per cent of the total Panama Canal net tonnage; were the source of 17.4 per cent of the tolls collected; and carried 20.8 per cent of the total cargo through the Canal.

The number, aggregate net tonnage (Panama Canal measurement), tolls, and cargo of tank ships transiting the Canal during the month of December, 1932, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for December, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British	2	11,819	\$8,509.68	.....
Danzig	3	22,673	16,324.56	.....
Dutch	1	5,878	4,232.16	.....
French	1	4,545	3,272.40	.....
Italian	1	6,299	4,535.28	.....
Norwegian	6	29,537	21,266.64	.....
United States	18	104,732	77,203.89	10,345
Total, December, 1932	32	185,483	135,344.61	10,345
Total, November, 1932	23	141,975	107,597.17	25,898
Total, October, 1932	28	157,341	119,911.76	23,011
Total, December, 1931	20	115,315	88,139.56	16,100
<i>Pacific to Atlantic.</i>				
British	1	7,648	7,988.75	14,739
Danzig	4	30,377	32,295.00	57,724
Dutch	1	5,878	6,098.75	12,050
Norwegian	5	29,948	31,847.50	55,919
United States	16	95,700	96,606.25	186,639
Total, December, 1932	27	169,551	174,836.25	327,071
Total, November, 1932	30	182,731	187,668.75	345,237
Total, October, 1932	26	141,180	146,286.88	261,710
Total, December, 1931	31	172,084	174,446.46	296,663

* Includes 5,250 tons of coconut oil and 1,350 tons of wood oil.

The following tabulation shows the tanker traffic through the Canal in December, 1932, classified according to trade routes:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal	16	91,218	\$65,676.96	.....
Canada to South America	1	6,772	4,875.84	.....
West Indies to United States	3	14,556	10,480.32	.....
West Indies to Balboa	1	4,895	5,321.25	10,345
Europe to United States	7	40,496	29,157.12	.....
Europe to South America	4	27,546	19,833.12	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal	15	91,913	92,681.25	180,039
United States to West Indies	1	5,878	6,098.75	12,050
United States to Europe	4	26,369	28,242.50	48,510
South America to Canada	1	7,648	7,988.75	14,739
South America to Europe	5	33,956	35,900.00	65,133
Far East to United States	1	3,787	3,925.00	* 6,600

* Comprises 5,250 tons of coconut oil and 1,350 tons of wood oil.

Of the tanker traffic passing through the Canal in December, 1932, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for December, 1931:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
December, 1932	20	114,812	\$82,664.64	.....
November, 1932	12	75,537	55,575.35	6,216
October, 1932	11	62,560	45,043.20	.....
December, 1931	10	54,169	40,466.58	5,700
<i>From Los Angeles.</i>				
December, 1932	16	98,456	100,018.75	191,554
November, 1932	18	109,608	112,335.00	209,064
October, 1932	16	89,713	93,648.75	174,141
December, 1931	16	91,583	95,478.75	171,026

MOVEMENTS OF OCEAN VESSELS. Week ending at midnight, January 7, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Net.
Remuera.	1	5.50	1	6.20	1	13.55	1	21.55	British.	N. Z. Shipping Co.	485.0	62.0	26.0	London, England.	Wellington, N. Z.	General	3,145	11,911
Missourian.	31	21.50	1	8.05	1	14.53	1	16.26	American.	Amer-Hawaiian Line.	445.0	59.0	18.0	Boston, Mass.	Portland, Oreg.	General	1,795	8,567
Simsburn.	31	18.20	1	8.25	1	16.05	1	17.30	British.	Common Brothers.	390.0	53.0	18.0	Tyne, England.	Vancouver, B. C.	Ballast.	5,625	6,020
Daylight.	31	23.15	1	8.55	1	16.11	1	17.30	American.	Stand. Vac. Transp. Co.	480.0	66.0	20.0	New York, N. Y.	San Francisco, Cal.	Ballast.	9,708	6,725
Wilcox.	31	23.25	1	9.20	1	16.45	1	17.55	American.	Roosevelt S. S. Co.	401.0	54.0	21.6	New York, N. Y.	Fremantle, Aus'la.	General.	1,826	7,097
Wilm. A. Riedemann.	1	3.20	1	10.00	1	17.42	1	18.50	Danish.	Anglo-American Oil Co.	525.0	66.0	19.0	Fawley, England.	Talara, Peru.	Ballast.	12,171	8,592
Bessener City.	1	6.25	1	11.00	1	18.35	1	19.50	American.	Isthmian S. S. Lines.	424.0	56.0	18.1	Baltimore, Md.	Seattle, Wash.	General, steel.	2,928	7,611
Cerro.	30	21.10	1	11.05	1	18.40	1	19.50	German.	Hamburg-American Line	427.0	54.0	13.11	Cristobal, C. Z.	Buenaventura, Col.	General.	386	1,011
Washington.	1	1.15	1	12.05	1	19.26	1	21.55	French.	French Line.	470.0	61.0	20.6	Havre, France.	Vancouver, B. C.	General.	2,186	10,334
Abdelduke.	1	6.30	1	12.30	1	20.25	1	21.55	British.	United Molasses Co.	475.0	63.0	19.2	Philadelphia, Pa.	Los Angeles, Calif.	Ballast.	9,589	6,416
Sanyo Maru.	1	7.45	1	13.35	1	22.10	1	23.17	Japanese.	Osaka Shosen Kaisha.	416.0	50.0	27.3	Cardiff, Wales.	Kobe, Japan.	Ballast.	7,944	8,942
Vardas.	1	7.55	1	14.10	1	23.06	2	00.04	Norwegian.	Anglo-Saxon Pet. Co.	459.0	59.0	19.0	New York, N. Y.	Los Angeles, Calif.	Ballast.	8,475	5,969
Santa Cecilia.	1	4.30	1	14.45	1	21.10	2	1.44	American.	Panama Mail S. S. Co.	360.0	51.0	22.3	New York, N. Y.	San Francisco, Cal.	General, coffee.	1,848	5,797
Oratio.	1	8.20	2	6.00	2	13.00	2	14.05	Italian.	Soc. Italia-Flotte Runito	482.0	61.0	25.3	Genoa, Italy.	Valparaiso, Chile.	General.	310	12,977
Harpoon.	2	1.00	2	7.15	2	15.31	2	16.40	American.	Shepard S. S. Co.	402.0	53.0	21.0	Boston, Mass.	Seattle, Wash.	General.	1,593	6,560
Southern Sun.	2	1.50	2	8.30	2	16.22	2	17.30	American.	Sun Oil Co.	480.0	66.0	21.0	Chester, Pa.	Los Angeles, Calif.	General.	9,716	6,544
Stensby.	2	6.50	2	9.40	2	17.21	2	18.30	Danish.	Mersy Paper Co.	350.0	50.0	17.6	Liverpool, England	Bluff, N. Z.	Newspaper print.	3,350	4,917
Standard.	2	6.45	2	8.50	2	16.28	2	17.50	American.	Stand. Vac. Transp. Co.	467.0	62.0	21.0	New York, N. Y.	Los Angeles, Calif.	Ballast.		9,698
Arrow.	2	6.45	2	8.50	2	16.27				U. S. Army.	156.0	32.0		New York, N. Y.	Los Angeles, Calif.	Ballast.		9,698
Gen. Wm. M.	3	6.20	3	6.20	3	13.51	3	14.45	American.	Stand. Fruit & S. S. Co.	105.0	15.3		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		92
Anacuetena.	3	4.05	3	6.30	3	14.01	3	15.20	Panamanian.	Gulf-Pacific Line.	381.0	52.2	21.1	Colon, R. P.	Balboa, C. Z.	Ballast.		92
Point Chico.	3	10.05	3	10.10	3	18.12	3	19.25	American.	Williams S. S. Line.	390.0	54.2	19.6	Houston, Tex.	Seattle, Wash.	Corn, general.	5,098	5,727
Willmotto.	3	9.50	3	10.20	3	17.07	3	18.15	British.	Alfred Holt & Co.	459.5	58.1	24.4	Baltimore, Md.	Seattle, Wash.	Coal, general.	2,200	6,162
Adragus.	3	9.50	3	10.20	3	17.07	3	18.15	British.	Alfred Holt & Co.	459.5	58.1	24.4	Philadelphia, Pa.	Yokohama, Japan.	General.	3,109	8,242
Rio de Janeiro.	3	6.25	3	12.20	3	19.15	3	20.25	Japanese.	Osaka Shosen Kaisha.	461.0	62.0	23.1	Montevideo, Uruguay.	Kobe, Japan.	General.	2,592	10,447
Maru.	3	6.25	3	12.20	3	19.15	3	20.25	Japanese.	Osaka Shosen Kaisha.	461.0	62.0	23.1	Montevideo, Uruguay.	Kobe, Japan.	General.	2,592	10,447
Canadian.	3	13.55	3	14.10	3	21.16	3	22.50	British.	Can. Nat. Steamships.	400.0	52.4	20.5	Halifax, N. S.	Bluff, N. Z.	General.	2,861	5,956
Victor.	2	20.25	4	6.10	4	16.00	4	16.00	German.	North German Lloyd.	315.7	46.8	16.1	Hamburg, Germany.	Champerico, Guat.	General.	989	3,512
Atika.	4	9.15	4	9.45	4	16.08	4	17.15	American.	Amer-Hawaiian Line.	404.6	53.9	18.3	Seattle, Wash.	Seattle, Wash.	General.	2,186	6,779
Kansan.	2	8.15	4	11.55	4	13.55	4	20.05	British.	U. S. Navy.	310.0	31.0		Bluefields, Nre.	Balboa, C. Z.	General.	6,961	4,921
Overton.	2	8.15	4	11.55	4	13.55	4	20.05	British.	Sir W. R. Smith & Sons.	400.2	54.0	13.3	Manchester, Eng.	Vancouver, B. C.	Ballast.	6,961	5,365
Bradtye.	4	11.45	4	11.55	4	13.55	4	20.05	British.	Sir W. R. Smith & Sons.	400.2	54.0	13.3	Manchester, Eng.	Vancouver, B. C.	Ballast.	6,961	5,365
Pacific.	4	11.40	4	14.30	4	21.42	4	22.50	British.	Furness, Withly & Co.	420.0	58.0	17.6	Glasgow, Scotland.	Vancouver, B. C.	General.	594	7,892
Shipper.	4	11.40	4	14.30	4	21.42	4	22.50	British.	Furness, Withly & Co.	420.0	58.0	17.6	Glasgow, Scotland.	Vancouver, B. C.	General.	594	7,892
Ariosa.	4	8.12	4	8.12	4	8.12	4	8.12	American.	Stand. Fruit & S. S. Co.				Cristobal, C. Z.	Gatun, C. Z.	(**)	8	8
No. 4067.	4	8.12	4	8.12	4	8.12	4	8.12	American.	Stand. Fruit & S. S. Co.				Cristobal, C. Z.	Gatun, C. Z.	Ballast.		13

Silverwahrt 2.	4	20.50	5	6.15	5	15.10	5	16.15	British.	Silver Line, Ltd.	456.3	62.0	22.6	New York, N. Y.	Manila, P. I.	5.506	9,576	6,610
Daylight 1.	4	21.40	5	6.30	5	16.05	5	17.15	Norwegian.	Cie. P. C. et R. de Berre	471.8	64.2	20.0	Las Palmas, Can. I.	Estero Bay, Calif.	5.461	9,459	6,730
Pegasus 1.	5	6.25	5	7.30	5	17.11	5	20.34	Swedish.	Stand. Vac. Transp. Co.	480.3	65.0	17.1	Cape Town, Africa.	San Francisco, Cal.	5.855	7,103	
Herborg 1.	5	6.35	5	7.40	5	18.15	5	19.40	Norwegian.	Anglo-Saxon Pet. Co.	487.2	59.7	21.6	Fredericia, Den.	Los Angeles, Calif.	8,214	5,719	
Derchoe 1.	5	6.45	5	8.45	5	20.30	5	21.45	American.	Union Oil Co.	435.0	65.0	20.0	Baltimore, Md.	San Francisco, Cal.	7,432	5,199	
Cerro Elcano 1.	5	7.30	5	9.55	5	21.50	5	23.00	American.	Standard Shipping Co.	480.5	66.0	20.0	Baltimore, Md.	San Francisco, Cal.	9,398	6,453	
Ocorro 1.	4	20.40	5	10.55	5	19.31	5	23.58	British.	Pacific Steam Nav. Co.	511.6	62.0	24.5	Liverpool, England	Valparaiso, Chile	1,831	12,417	8,305
No. 101 7.	5		5	8.38					American.	U. S. Army				Cristobal, C. Z.	Gatun, C. Z.			
Sancta Maria 7.	5	13.30	6	6.05	6	13.00	6	20.35	American.	Grace Line	466.0	64.0	24.5	New York, N. Y.	San Antonio, Chile	1,517	10,626	6,666
Ville de Verdun.	5	16.35	6	6.20	6	14.07	6	15.15	French.	Messageries Maritimes.	409.0	53.0	21.0	New York, N. Y.	Noumea, N. Calé.	1,200	7,603	5,628
Adams	6	1.00	6	7.20	6	15.09	6	18.44	American.	Dollar Line	502.0	62.2	26.1	Bombay, India.	Round the world.	2,881	12,512	9,178
Harden	5	13.00	6	7.12	6	16.50	6	21.30	Dutch.	Royal Neth. S. S. Co.	361.5	49.6	13.0	Hamburg, Germany	Round Chile	696	4,759	3,660
Margaret	5	15.50	6	8.15	6	17.56	6	19.00	Swedish.	Johnson Line	407.0	54.0	19.8	Stockholm, Sweden	Vancouver, B. C.	2,061	7,048	5,337
Trinidad 2.	5	20.40	6	8.40	6	19.05	6	20.14	British.	Bongre & Co.	400.0	53.0	16.8	Barry, Wales	Vancouver, B. C.	6,163	4,465	
Trident 1.	6	7.00	6	9.30	6	20.13	6	21.44	Norwegian.	W. L. Conyn & Sons	401.2	54.2	16.5	Southampton, Eng.	Seattle, Wash.	6,894	4,936	
Toba Maru.	6	7.00	6	9.45	6	21.10	6	22.30	Japanese.	Nippon Yusen Kaisha.	445.0	58.0	20.1	New York, N. Y.	Kobe, Japan	5,331	8,058	5,743
Tai Ping 1.	6	9.50	6	12.55	6	22.15	7	1.35	Norwegian.	Barber S. Line	461.9	60.0	19.5	New York, N. Y.	Manila, P. I.	2,185	9,894	6,829
Albatank 1.	6	12.40	6	10.55	6	23.36	7	7.00	British.	Andrew Weir & Co.	420.0	53.9	21.0	Mobile, Ala.	Hongkong, China.	5,115	7,093	5,002
Nuevo Panama 1.	5	6.00	6	13.10	6	20.05	6	21.44	Panamanian	Hans Elliot.	108.0	20.0	7.6	Poaca, R. P.	Buenaventura, Col.	50	226	101
Bushnell 1.	5	6.00	7	6.00	7	13.26	9	10.52	American.	C. S. Navy	300.0	45.8	15.0	Washington, D. C.	San Diego, Calif.	50	226	101
Acutula	30	15.05	7	6.10	7	13.41	7	14.55	British.	Pacific Steam Nav. Co.	215.7	34.0	15.0	Christobal, C. Z.	Champerico, Guat.	451	1,273	706
Paul Luckenbach.	7	00.15	7	6.20	7	15.55	7	16.50	American.	Luckenbach Line	471.0	59.2	22.6	Houston, Tex.	Seattle, Wash.	6,050	9,027	6,539
Gracia	7	2.45	7	7.25	7	17.02	7	18.20	British.	Donaldson Brothers.	415.5	54.2	19.1	Glasgow, Scotland	Vancouver, B. C.	3,347	6,809	4,842
Laborator.	7	3.20	7	7.35	7	18.10	7	19.40	Norwegian.	Lykes Bros. Ripley Co.	410.0	56.0	27.0	New Orleans, La.	Saigon, China.	6,342	8,204	6,219
Java 1.	7	7.10	7	8.45	7	19.15	7	20.17	American.	United Molasses Co.	471.4	62.5	20.0	New York, N. Y.	Los Angeles, Calif.	6,224	9,441	
K. I. Luckenbach.	7	13.20	7	13.35	7	21.42	7	22.50	American.	Luckenbach Line.	446.0	56.0	15.0	Boston, Mass.	Seattle, Wash.	8,562	6,236	
West Vis.	7	16.20	7	19.00	8	11.55	8	13.35	American.	McCormick S. S. Co.	410.0	54.0	17.7	Buenos Aires, Arg.	Seattle, Wash.	1,773	4,967	29
A. B. Obarrío 1.	6	18.50	7	6.30	7	15.57	7	17.06	Panamanian	A. Valdez.	57.8	19.0		Cristobal, C. Z.	Balboa, C. Z.	78	49	
Taira 1.	6	18.50	7	8.10	7	17.06	7	18.13	Panamanian	A. Valdez.	64.2	20.3		Cristobal, C. Z.	Balboa, C. Z.	78	49	
Real 1.	6	21.45	7	10.50	7	18.13	7	19.13	Panamanian	Hans Elliot.	62.0	17.0		Cristobal, C. Z.	Balboa, C. Z.	46	22	
Jeanne 7.			7	8.37					American.	A. M. Butcher				Cristobal, C. Z.	Gatun, C. Z.	1	1	1

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

[illegible]

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Santa Barbara ¹⁵	2	17.15	3	6.18	3	13.40	3	16.30	American.	Grace Line.	466.0	64.0	24.0	San Antonio, Chile.	New York, N. Y.	General.	2,575	10,087	6,633
Nuevo Panama ¹⁵	2	19.30	3	6.19	3	15.30	3	22.35	Panamanian	Hans Elliot.	108.5	20.6	10.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general.	197	226	101
Canadian Constructor.	3	3.15	3	7.14	3	15.30	4	00.40	British.	Can. Nat. Steamships	430.0	56.2	19.0	Auckland, N. Z.	Halifax, N. S.	General.	1,224	7,080	5,568
Horace Luckenbach.	3	8.25	3	9.58	3	17.35	3	17.35	American.	Luckenbach Line.	445.0	58.0	24.0	Seattle, Wash.	Boston, Mass.	General.	5,011	8,699	6,364
Florence Luckenbach.	4	4.10	4	6.12	4	13.05	4	13.05	American.	Luckenbach-Gulf Line.	401.8	52.2	23.0	Seattle, Wash.	Mobile, Ala.	General.	4,304	6,002	4,621
Taddei Maru ¹⁵	4	1.45	4	7.15	4	14.25	4	14.25	Japanese.	Mitsui & Co.	413.4	55.5	21.0	Dayao, P. I.	New York, N. Y.	Sugar, general.	5,778		
Askania.	4	9.05	4	10.02	4	18.00	5	1.20	German.	North German Lloyd	289.6	47.0	50.0	Coral, Chile.	Hammer Germany	General.	3,376	3,491	2,310
Doris Star.	4	9.00	4	10.52	4	19.30	4	23.35	British.	Blue Star Line.	439.8	64.0	99.0	N. Westminister, B. C.	Dublin, Ireland	General.	7,810	11,673	8,143
Hawaiian.	4	16.46	4	18.25	5	11.05	5	11.05	American.	Amer-Hawaiian Line.	439.8	53.9	25.0	Seattle, Wash.	Boston, Mass.	General.	5,503	6,766	4,768
Henderson.	5	4.30	5	5.48	5	11.05	7	10.00	American.	U. S. Navy	403.1	61.9	20.6	San Antonio, Chile.	Philadelphia, Pa.	Navy general.	407		
Lochkatrine ¹⁵	5	3.00	5	7.47	5	15.30	5	22.45	British.	Royal Mail Lines, Ltd.	435.4	62.3	28.7	Victoria, B. C.	Rotterdam, Holland.	General.	8,905	10,802	7,995
Santa Rosa.	5	19.45	6	6.28	6	13.35	7	00.15	American.	Grace Line.	434.4	55.7	23.6	Seattle, Wash.	New York, N. Y.	General.	7,135	13,948	9,217
Willboro.	5	19.00	6	7.12	6	15.20	7	15.20	American.	Amer-Hawaiian Line.	414.7	52.7	25.0	Seattle, Wash.	Bridgeport, Conn.	Lumber, general.	7,134	7,717	5,763
Charles Nelson	6	9.05	6	9.59	6	18.45	7	6.30	American.	Charles Nelson & Co.	330.4	53.1	23.0	Pt. Angeles, Wash.	New York, N. Y.	(17)	6,082	5,659	4,138
A. B. Obarrto.	6	8.12	6	9.44	6	18.50	7	8.10	Panamanian	A. Valdez.	57.8	19.7		Darien, R. P.	Cristobal, C. Z.	Bananas.	53	57	29
Taira ¹⁵ .	6	8.35	6	10.14	6	18.50	7	10.50	Panamanian	Hans Elliot.	64.2	20.3		Darien, R. P.	Cristobal, C. Z.	Bananas.	40	78	49
Real ¹⁵ .	6	10.34	6	14.05	6	21.45	7	10.50	Panamanian	Hans Elliot.	62.2	17.1		Darien, R. P.	Cristobal, C. Z.	Bananas.	30	46	22
Anchutema.	6	13.15	6	14.09	6	20.30	7	12.20	Panamanian	Hans Elliot.	105.0	15.0		Darien, R. P.	Cristobal, C. Z.	Bananas.	39	92	47
Corrientes.	6	11.20	6	23.02	7	12.20	7	12.20	British.	Donaldson S. Amer. Line	419.0	54.8	26.3	Victoria, B. C.	Glasgow, Scotland.	Fruit, general.	5,366	7,355	5,248
Call.	6	17.15	7	00.01	7	13.35	8	13.10	German.	North German Lloyd	216.5	32.9	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	990	1,105	698
Robert J. Hopkins.	6	21.45	7	7.09	7	14.50	7	14.50	American.	Tidewater Oil Co.	424.4	58.0	25.2	San Francisco, Cal.	New York, N. Y.	Gasoline.	8,992	7,333	5,182
Spencer Kellogg.	7	2.30	7	8.57	7	17.10	7	17.10	American.	Kellogg S. S. Corp.	391.8	51.3	25.0	Shanghai, China.	New York, N. Y.	(18)	6,151	5,601	3,902
Bonnington Court ¹⁵ .	7	11.40	7	12.28	7	20.10	7	20.10	British.	Canadian Transp. Co.	404.8	55.5	25.3	Vancouver, B. C.	London, England	Wheat, lumber.	8,715	7,042	5,208
Kafirstan.	7	17.25	7	18.24	8	11.45	8	11.45	British.	Dale & Co., Ltd.	300.0	53.4	24.1	Vancouver, B. C.	Hull, England	Grain, iron.	8,133	5,626	4,162
Indra.	7	11.05	7	20.17	8	13.00	8	13.00	Norwegian.	Scand. S. Pacific Line.	375.8	51.5	22.1	Valparaiso, Chile.	Oslo, Norway.	(19)	5,678	5,465	3,797

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
January 1.....	Camden.....	United Fruit Co.	Curacao, D. W. I.	January 1.....	Sixcoda.....	United Fruit Co.	New York via wayports.
January 1.....	No. 9673 ²⁰	Pan American Airways.	San Salvador via wayp'ts.	January 1.....	Costa Rica.....	Royal Netherlands S. S. Co.	Amsterdam via wayports.
January 1.....	No. 945-M ²⁰	Pan American-Grace Airways.	Chilelayo via wayports.	January 1.....	Arcón.....	Panama R. R. S. S. Line.	New York via Hali.
January 2.....	Quirigua.....	United Fruit Co.	Port Limon, Costa Rica.	January 1.....	Haiti.....	Colombian S. S. Line.	New York via wayports.
January 2.....	No. 145-M ²⁰	Uraba, Medellín & Cent. Airways	Medellin, Colombia.	January 2.....	No. 659-M ²⁰	Pan American Airways.	Barranquilla, Colombia.
January 2.....	No. 659-M ²⁰	Pan American Airways.	Barranquilla, Colombia.	January 2.....	Camden.....	United Fruit Co.	Curacao, D. W. I.
January 3.....	Darien.....	Leyland S. S. Line.	Liverpool via wayports.	January 2.....	Quirigua.....	United Fruit Co.	New York via Habana.
January 4.....	No. 9685 ²⁰	Pan American Airways.	San Salvador via wayp'ts.	January 3.....	No. 945-M ²⁰	Pan American-Grace Airways.	Chilelayo via wayports.
January 4.....	No. 144-M ²⁰	Pan American-Grace Airways.	Talara via wayports.	January 5.....	No. 145-M ²⁰	Uraba, Medellín & Cent. Airways	Medellin, Colombia.
January 5.....	No. 669-M ²⁰	Pan American Airways.	Miami via wayports.	January 5.....	No. 659-M ²⁰	Pan American Airways.	Miami via wayports.
January 6.....	Amassia.....	Hamburg-American Line.	Hamburg via wayports.	January 6.....	Amassia.....	Hamburg-American Line.	Tampico.
January 6.....	United Fruit Co.	United Fruit Co.	New York via wayports.	January 6.....	Calamares.....	United Fruit Co.	Port Limon, Costa Rica.
January 6.....	United Fruit Co.	United Fruit Co.	New Orleans via wayp'ts.	January 7.....	No. 144-M ²⁰	Pan American-Grace Airways.	Talara via wayports.
January 6.....	Cefalu.....	Standard Fruit & S. S. Co.	New Orleans via wayp'ts.	January 7.....	Tvives.....	United Fruit Co.	New Orleans via wayp'ts.
January 6.....	Guayacul.....	Panama R. R. S. S. Line.	New York via Hali.	January 7.....	Ruth Lykes.....	Lykes Brothers S. S. Co.	San Juan via wayports.
January 6.....	Ruth Lykes.....	Lykes Brothers S. S. Co.	Late Charles via wayp'ts.	January 7.....	Cefalu.....	Standard Fruit & S. S. Co.	New Orleans via wayp'ts.
January 6.....	No. 145-M ²⁰	Uraba, Medellín & Cent. Airways	Medellin, Colombia.	January 7.....	Annetta I. ²¹	P. W. Hamilton.	Colon, Rep. of Panama.
January 6.....	Inapacuma ²¹	A. Tagaropolos.	Colon, Rep. of Panama.				
January 6.....	Pastores.....	P. W. Hamilton.	Colon, Rep. of Panama.				
January 7.....	Metapan.....	Colombian S. S. Line.	New York via wayports.				
January 7.....		United Fruit Co.	New York via Kingston.				

PORT OF BALBOA.

January 1.....	Chiriqui.....	United Fruit Co.	San Francisco, Calif.	January 1.....	Chiriqui.....	United Fruit Co.	San Francisco, Calif.
January 4.....	Solund.....	Panama Mail S. S. Co.	Acajutla, Salvador.	January 5.....	Solund.....	Panama Mail S. S. Co.	Champetico, Guatemala.
January 5.....	Santa Monica ¹⁵	Panama Mail S. S. Co.	Sea.	January 6.....	Point Chico.....	Panama Mail S. S. Co.	San Francisco, Calif.
January 5.....	Point Chico.....	Gulf-Pacific Line.	Los Angeles, Calif.			Gulf-Pacific Line.	Seattle, Wash.
January 7.....	Stranger ²²	F. E. Lewis.					

¹ Tanker.
²⁰ Air mail carrier.

²⁶ Grain, lumber, fruit, and general.
²⁷ Motor ship.
²⁸ Motor boat.

¹⁷ Lumber, paper, pulp, and copper.
¹⁸ China wood and coco oil.
¹⁹ Sugar, nitrate, and general.

¹⁵ Sugar, nitrate, and general.

Commercial Traffic Through the Panama Canal in December, 1932, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of December, 1932, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for December, 1931 and 1930. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons. of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	61	354,423	265,993	434,513	265,588	\$304,402.79	109,478
Europe to Canada:							
British.....	19	102,258	75,523	119,872	73,723	76,066.99	2,788
Danish.....	3	21,180	14,421	24,245	15,193	16,611.92	6,960
Dutch.....	1	8,266	6,197	10,220	6,385	7,746.25	2,835
French.....	1	4,650	2,656	6,013	2,796	3,320.00	824
German.....	5	33,110	22,359	37,845	22,895	26,863.00	12,872
Italian.....	1	6,043	3,669	6,072	3,748	4,586.25	1,544
Norwegian.....	7	37,603	24,683	40,682	24,919	28,729.32	9,497
Swedish.....	3	15,665	10,490	17,379	12,862	11,653.36	2,997
Total.....	40	228,775	159,998	262,328	162,521	175,577.09	40,317
United States to Far East:							
British.....	13	68,080	45,200	73,391	45,318	56,500.00	54,530
Danish.....	1	4,066	3,142	5,177	3,199	3,927.50	4,165
Japanese.....	6	32,800	26,273	41,335	25,792	32,673.80	33,390
Norwegian.....	1	4,859	2,619	4,444	2,669	3,273.75	4,732
Panamanian.....	1	6,953	3,659	6,856	3,659	4,573.75	1,800
United States.....	2	10,687	7,303	11,923	7,323	9,128.75	6,248
Total.....	24	127,447	83,196	143,126	87,960	110,077.55	106,865
United States to Philippines:							
British.....	2	13,019	7,156	13,377	7,510	8,945.00	10,823
Danish.....	1	5,500	3,081	5,038	3,155	3,851.25	5,640
United States.....	4	47,010	34,194	56,003	33,251	42,742.50	9,222
Total.....	7	65,529	44,431	74,418	43,916	55,538.75	25,685
Europe to South America:							
British.....	1	4,756	3,987	6,479	3,997	4,983.75	4,423
Danzig.....	2	16,314	13,994	24,377	13,927	11,746.08	.....
Dutch.....	1	6,018	3,131	5,541	3,336	3,913.75	1,122
German.....	2	8,866	6,251	9,877	6,016	7,813.75	5,909
Norwegian.....	4	19,989	15,266	24,954	15,156	15,294.54	5,459
Total.....	10	55,943	42,629	71,228	42,432	43,751.87	16,913
Europe to Australasia:							
British.....	6	55,689	39,998	68,130	41,728	47,565.53	23,100
Europe to United States:							
Danzig.....	1	6,359	5,208	8,939	5,007	4,578.48	.....
Dutch.....	1	5,878	4,879	8,249	4,782	4,232.16	.....
French.....	1	4,545	3,996	6,587	3,641	3,272.40	.....
Italian.....	1	6,299	5,214	8,960	5,079	4,535.28	.....
Norwegian.....	4	20,294	14,094	23,766	14,450	14,505.62	.....
United States.....	1	8,619	7,026	11,265	6,954	6,205.68	.....
Total.....	9	51,994	40,417	67,766	39,913	37,329.62	.....
West Indies to United States:							
British.....	2	9,114	7,649	12,791	7,538	6,562.08	.....
Norwegian.....	3	14,190	10,459	17,483	10,460	9,966.48	.....
United States.....	1	129	109	250	123	92.88	.....
Total.....	6	23,433	18,217	30,530	18,121	16,621.44	.....
Around the world:							
United States.....	2	18,461	12,538	20,997	12,538	15,672.50	5,772
United States to South America:							
Danish.....	1	1,645	1,313	2,212	1,326	1,184.40	.....
United States.....	2	14,107	9,147	17,797	9,140	11,433.75	5,720
Total.....	3	15,752	10,460	20,009	10,466	12,618.15	5,720

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons. of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to Australasia:							
British.....	3	15,454	10,983	17,619	10,869	\$13,728.75	14,083
Canadian intercoastal:							
British.....	2	9,419	6,417	10,571	6,518	8,021.25	6,292
Norwegian.....	1	4,586	2,535	4,307	2,565	3,168.75	.....
Total.....	3	14,005	8,952	14,878	9,083	11,190.00	6,292
United States to Canada:							
Japanese.....	1	4,381	4,349	5,873	4,254	3,261.75	.....
Norwegian.....	1	4,375	2,427	4,138	2,336	3,033.75	.....
United States.....	1	4,260	3,072	4,757	2,991	3,840.00	2,717
Total.....	3	13,016	9,848	14,768	9,581	10,135.50	2,717
Canada to Australasia:							
British.....	2	9,657	7,673	12,626	7,749	9,591.25	3,260
West Indies to Canada:							
British.....	2	8,507	6,061	9,777	6,010	6,125.04	.....
United States to Central America:							
German.....	1	1,837	1,295	2,159	1,263	1,322.64	.....
United States.....	1	4,963	3,616	6,495	3,616	3,573.36	.....
Total.....	2	6,800	4,911	8,654	4,879	4,896.00	.....
Canada to South America:							
British.....	1	6,772	5,975	11,309	5,781	4,875.84	.....
Cristobal to South America:							
German.....	7	6,014	4,015	7,602	4,170	5,018.75	1,940
Panamanian.....	4	404	412	812	404	484.80	280
Total.....	11	6,418	4,427	8,414	4,574	5,503.55	2,220
South America to Far East:							
Japanese.....	1	5,798	4,170	7,267	4,363	5,212.50	3,147
United States to Hawaii:							
United States.....	1	5,237	3,849	6,196	3,849	4,811.25	3,246
South America to Canada:							
United States.....	1	5,024	3,731	5,835	3,730	4,663.75	4,342
Canada to United States:							
Norwegian.....	1	4,899	2,708	4,494	2,732	3,385.00	3,285
West Indies to Balboa:							
United States.....	1	4,895	4,257	6,666	4,158	5,321.25	10,345
South America to United States:							
Norwegian.....	1	4,722	2,728	4,624	2,765	3,410.00	775
Europe to Central America:							
German.....	2	4,259	3,058	5,226	3,047	3,121.24	1,617
Africa to Canada:							
British.....	1	4,199	3,015	4,838	2,994	3,023.28	.....
United States intercoastal— Foreign vessels in ballast:							
Norwegian.....	1	3,347	2,389	4,044	2,307	2,409.84	.....
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,127
Norwegian.....	2	1,158	1,106	1,882	1,114	1,108.13	680
Panamanian.....	5	137	145	180	176	164.40	101
Total.....	9	2,736	2,537	4,360	2,594	2,880.03	1,908
South American intercoastal:							
Danish.....	1	1,701	1,324	2,252	1,355	1,224.72	.....
Cristobal to Balboa:							
Panamanian.....	14	479	437	544	570	357.15	.....
Grand total, Dec., 1932..	229	1,125,371	815,910	1,347,436	818,173	925,021.23	391,087
Grand total, Dec., 1931..	216	1,111,646	799,282	1,338,513	804,359	921,776.33	501,408
Grand total, Dec., 1930..	252	1,292,442	960,855	1,610,065	969,586	1,100,610.97	551,712

PACIFIC TO ATLANTIC.

Canada to Europe:							
Belgian.....	1	6,292	4,986	7,816	5,758	\$6,232.50	10,122
British.....	34	166,378	117,297	190,553	117,461	146,621.25	269,090
Danish.....	3	16,517	10,877	18,865	11,461	43,596.25	23,828
Dutch.....	1	7,551	5,776	9,399	5,814	7,220.00	9,357
French.....	2	14,495	8,247	15,768	8,896	10,308.75	17,565

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons. of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Canada to Europe—Continued:							
German.....	4	25,552	16,442	27,738	16,833	\$20,552.50	34,542
Italian.....	2	15,880	11,566	19,031	11,782	14,457.50	18,551
Norwegian.....	10	53,374	32,610	54,800	33,282	40,762.50	78,124
Swedish.....	1	5,661	3,406	5,642	4,320	4,257.50	8,560
United States.....	1	5,395	3,428	5,687	3,450	4,285.00	7,580
Total.....	59	317,095	214,635	355,299	219,047	268,293.75	477,319
United States intercoastal:							
United States.....	49	297,212	221,631	360,528	223,390	277,038.75	371,001
South America to Europe:							
British.....	5	31,600	22,623	39,897	24,330	28,278.75	36,681
Danzig.....	3	22,724	19,220	33,333	18,968	24,025.00	42,859
Dutch.....	2	9,904	5,354	9,161	5,549	6,692.50	13,728
German.....	3	12,401	8,201	13,725	8,208	10,251.25	19,556
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	2,409
Norwegian.....	2	11,232	9,500	15,392	9,344	11,875.00	22,274
Swedish.....	1	3,985	2,281	3,858	2,859	2,851.25	6,539
Total.....	17	101,175	72,355	127,084	76,008	90,443.75	144,046
Philippines to United States:							
Danish.....	1	5,964	3,165	5,339	3,341	3,956.25	7,000
Japanese.....	1	6,408	3,539	5,835	3,503	4,423.75	6,800
Norwegian.....	2	11,613	6,209	11,342	6,414	7,761.25	13,960
United States.....	3	26,179	20,644	34,466	20,635	25,805.00	14,594
Total.....	7	50,164	33,557	56,982	33,893	41,946.25	42,354
United States to Europe:							
British.....	2	9,806	7,263	11,908	7,297	9,078.75	10,783
Danzig.....	1	7,653	6,616	11,395	6,362	8,270.00	14,865
Norwegian.....	3	18,716	15,978	26,787	15,916	19,972.50	33,645
Total.....	6	36,175	29,857	50,090	29,575	37,321.25	59,293
Far East to United States:							
Japanese.....	5	28,286	22,447	36,317	22,668	28,058.75	24,818
United States.....	1	3,787	3,140	5,065	3,105	3,925.00	6,600
Total.....	6	32,073	25,587	41,382	25,773	31,983.75	31,418
Australasia to Europe:							
British.....	2	21,143	15,243	26,663	16,569	19,053.75	12,721
Swedish.....	1	3,909	2,694	4,355	3,366	3,367.50	6,143
Total.....	3	25,052	17,937	31,018	19,935	22,421.25	18,864
South America to United States:							
Chilean.....	2	8,217	7,031	10,926	6,824	8,788.75	11,528
United States.....	2	14,154	9,142	17,793	9,135	11,427.50	6,117
Total.....	4	22,371	16,173	28,719	15,959	20,216.25	17,645
South America to Canada:							
British.....	1	7,648	6,391	11,410	6,250	7,988.75	14,739
Hawaii to United States:							
United States.....	2	10,900	6,930	11,374	6,900	8,662.50	3,271
Canada to South America:							
United States.....	2	9,891	6,971	11,069	6,998	8,713.75	11,709
South America to Cristobal:							
German.....	8	7,025	4,521	8,722	4,692	5,651.25	7,371
Panamanian.....	4	404	412	812	404	484.80	773
Total.....	12	7,429	4,933	9,534	5,096	6,136.05	8,144
United States to West Indies:							
Dutch.....	1	5,878	4,879	8,249	4,782	6,098.75	12,050
Norwegian.....	1	1,466	737	1,321	734	921.25	.....
Total.....	2	7,344	5,616	9,570	5,516	7,020.00	12,050
Australasia to United States:							
United States.....	1	5,241	3,748	5,881	3,666	4,685.00	142
United States to South America:							
United States.....	1	5,095	3,519	5,513	3,519	4,398.75	5,204
Central America to United States:							
United States.....	1	4,963	3,616	6,495	3,616	4,520.00	937
Australasia to Canada:							
British.....	1	4,354	3,273	5,439	3,330	4,091.25	2,313

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons. of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Central America to Balboa:							
British.....	3	2,147	1,924	3,468	1,958	\$2,405.00	1,327
Norwegian.....	2	1,158	1,106	1,882	1,114	1,382.50	885
Total.....	5	3,305	3,030	5,350	3,072	3,787.50	2,212
Canada to United States:							
United States.....	1	2,614	2,019	3,283	2,000	2,523.75	2,729
South American intercoastal:							
Colombian.....	1	307	302	405	308	226.50	.....
Danish.....	1	1,701	1,324	2,252	1,365	1,655.00	3,279
Total.....	2	2,008	1,626	2,657	1,673	1,881.50	3,279
Central America to Europe:							
German.....	1	1,967	1,694	2,867	1,691	2,117.50	1,061
Balboa to Cristobal:							
Panamanian.....	19	622	582	1,082	746	727.50	764
Grand total, Dec., 1932..	202	954,698	685,680	1,142,626	697,653	856,918.80	1,230,494
Grand total, Dec., 1931..	171	921,512	672,745	1,141,730	682,114	836,093.21	1,147,496
Grand total, Dec., 1930..	243	1,181,184	874,024	1,450,326	878,898	1,091,972.88	1,615,172

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending January 7, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Mataroa.....	Shaw, Savill & Albion.....	January 1	January 2	91	.....
Santa Cecilia.....	Panama Mail S. S. Co.	January 1	January 1	50	234
Chiriqui.....	United Fruit Co.	January 1	January 1	382	.....
Santa Barbara.....	Grace Line.....	January 2	January 3	62	139
Axel Johnson.....	Johnson Line.....	January 2	January 2	103	.....
Sollund.....	Panama Mail S. S. Co.	January 4	January 5	196	.....
Santa Monica.....	Panama Mail S. S. Co.	January 5	January 6	848	.....
Santa Rosa.....	Panama Mail S. S. Co.	January 5	January 6	44	314
Santa Maria.....	Grace Line.....	January 6	January 6	87	60
Indra.....	Knut Knudsen.....	January 7	January 7	112	.....

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective January 10, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.14
Oakum, Navy, unspun.....	Lb.	.18
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.29
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.10
Waste, cotton, white.....	Lb.	.10

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending January 7, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Murillo.....	Pacific Steam Navigation Co.....		December 25		73
Santa Marta.....	United Fruit Co.....		December 25		116
Colombia.....	Colombian S. S. Line.....		December 25		714
President McKinley.....	Dollar Line.....	December 25	December 25	473	(²)
Tai Yin.....	Barber S. S. Line.....	December 25	December 26	402	$\frac{3}{4}$
Costa Rica.....	Royal Netherlands S. S. Co.....		December 26		1
Durazzo.....	Hamburg-American Line.....		December 26		305
Tsuyama Maru.....	Nippon Yusen Kaisha.....	December 26	December 26	119	(²)
Katsuragi Maru.....	Kokusai S. S. Line.....	December 26	December 26	69	(²)
Delftdijk.....	Holland-America Line.....	December 26	December 27	207	18
Stella Lykes.....	Lykes Brothers.....		December 27		23
Veragua.....	United Fruit Co.....	December 27	December 27	29	230
Magdalena.....	Hamburg-American Line.....	December 27	December 28	1	754
American Star.....	Nelson Line.....	December 28	December 28	530	(²)
Kwanto Maru.....	Osaka Shosen Kaisha.....	December 28	December 29	147	(²)
Wyoming.....	French Line.....	December 28	December 29	29	161
Abraham Lincoln.....	Fred Olsen & Co.....	December 28	December 29	154	(²)
Ancon.....	Panama R. R. S. S. Line.....	December 29	December 29	1,483	
Europa.....	Danish-East Asiatic Line.....	December 29	December 29	4	(²)
Celina.....	Navigazione Libera-Triestina.....	December 29	December 29	(²)	116
Los Angeles.....	Hamburg-American Line.....	December 29	December 29	57	134
President Jackson.....	Dollar Line.....	December 29	December 30	(²)	11
Manizales.....	Grace Line.....	December 29	December 31	1,214	246
Ariguani.....	Elders & Fyffes, Ltd.....	December 30	December 30	3	(²)
Acajutla.....	Pacific Steam Navigation Co.....	December 30		411	
Peter Maersk.....	Isbrandtsen Moller Co.....	December 30	December 30	(²)	8
Quirigua.....	United Fruit Co.....	December 30	December 30	237	33
Oakland.....	Hamburg-American Line.....	December 30	December 31	130	121
Cerigo.....	Hamburg-American Line.....	December 30		973	
Contessa.....	Standard Fruit & S. S. Co.....	December 30	December 31	401	576
San Vincente.....	Quaker Line.....	December 30	December 31	30	(²)
Real.....	Hans Elliot.....	December 30	December 31	35	10
Agira.....	North German Lloyd.....	December 31	December 31	12	54
Costa Rica.....	Royal Netherlands S. S. Co.....	December 31		20	
Tolosa.....	United Fruit Co.....	December 31	December 31	782	307 $\frac{1}{2}$
Sixaoa.....	United Fruit Co.....	December 31		309	
Haiti.....	Colombian S. S. Line.....	December 31		280	
Ancon.....	Panama Railroad S. S. Line.....		January 1		356
Cerigo.....	Hamburg-American Line.....		January 1		279
Costa Rica.....	Royal Netherlands S. S. Co.....		January 1		309
Sixaoa.....	United Fruit Co.....		January 1		292
Haiti.....	Colombian S. S. Line.....		January 1		1,001 $\frac{1}{2}$
Laurits Swenson.....	Fred Olsen & Co.....		January 1		364
Santa Cecilia.....	Panama Mail S. S. Co.....	January 1	January 1	208	508
Washington.....	French Line.....	January 1	January 1	14	96
Orazio.....	Italian Line.....	January 1	January 2	138	(²)
Solana.....	Associated Oil Co.....	January 1	January 2	1,889	(²)
Camden.....	United Fruit Co.....	January 1	January 2	9,574	(²)
Bitterfeld.....	Hamburg-American Line.....	January 2	January 2	31	14
Quirigua.....	United Fruit Co.....	January 2	January 2	19	106 $\frac{1}{2}$
Axel Johnson.....	Johnson S. S. Line.....	January 2	January 3	(²)	196
Attika.....	North German Lloyd.....	January 2	January 4	56	210
Santa Barbara.....	Grace Line.....	January 3	January 3	291	51
Nuevo Panama.....	Hans Elliot.....	January 3	January 4	241	2
Canadian Constructor.....	Canadian National Steamships.....	January 3	January 4	156	354
Darian.....	Leyland S. S. Line.....	January 3		259	
Pacific Shipper.....	Furness, Withy & Co.....	January 4	January 4	(²)	45
Oreoma.....	Pacific Steam Navigation Co.....	January 4	January 5	55	118 $\frac{1}{2}$
Askania.....	North German Lloyd.....	January 4	January 5	69	10
Lochkatrine.....	Royal Mail Lines, Ltd.....	January 5	January 5	(²)	290
Haarlem.....	Royal Netherlands S. S. Co.....	January 5	January 6	(²)	120
Amassia.....	Hamburg-American Line.....	January 5	January 6	58	73
Margaret Johnson.....	Johnson S. S. Line.....	January 5	January 6	169	11
Santa Maria.....	Grace Line.....	January 5	January 6	175	234
Calamares.....	United Fruit Co.....	January 6	January 6	152	96
Nuevo Panama.....	Hans Elliot.....	January 6	January 6	148	297
Guayaquil.....	Panama Railroad S. S. Line.....	January 6		1,271	
Santa Rosa.....	Panama Mail S. S. Co.....	January 6	January 7	462	16
Ruth Lykes.....	Lykes Brothers.....	January 6		198	
Tivives.....	United Fruit Co.....	January 6	January 7	726	124
Cefalu.....	Standard Fruit & S. S. Co.....	January 6	January 7	126	655
Acajutla.....	Pacific Steam Navigation Co.....	January 7	January 7		465
Calif.....	North German Lloyd.....	January 7		989	
West Ivis.....	McCormick S. S. Co.....	January 7		32	
Pastores.....	United Fruit Co.....	January 7		164 $\frac{1}{2}$	
Metapan.....	United Fruit Co.....	January 7		226	

¹ No cargo discharged.² No cargo laded.

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Volume XXVI. Balboa Heights, C. Z., January 18, 1933. No. 25.

Cargo Through the Canal During December, 1932.

On pages 332 and 333 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in December, 1932. This cargo, segregated according to direction as compared with December, 1931, and the differences, are shown in the following tabulation:

	December, 1931.	December, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	501,408	391,087	-110,321
Pacific to Atlantic.....	1,147,496	1,230,494	+82,998
Total.....	1,648,904	1,621,581	-27,323

Total cargo through the Canal in the past month showed a decline of 27,323 tons, or 1.7 per cent, in comparison with December, 1931. The loss in tonnage moving from the Atlantic to the Pacific equalled 110,321 tons, or 22.0 per cent, which was partially offset by a gain of 82,998 tons, or 7.2 per cent, in the movement in the opposite direction. In comparison with the preceding month (November, 1932), total cargo tonnage made an increase of 90,072 tons, or 5.9 per cent. Increased shipments in both directions contributed to this gain, those from the Atlantic to the Pacific increasing 13.9 per cent, and from the Pacific to the Atlantic, 3.6 per cent.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the 391,087 tons of cargo originating in the Atlantic area, that coming from the United States amounted to 269,673 tons, or 69.0 per cent of the total moving from the Atlantic to the Pacific during the month. This was a decrease of 112,401 tons, or 29.5 per cent, in comparison with the amount coming from the east coast of the United States in December, 1931. Cargo from Europe, which amounted to 77,826 tons, or 19.9 per cent of the total moving from the Atlantic to the Pacific during the past month, made an increase of 18,201 tons, or 30.5 per cent, in comparison with December, 1931. Tonnage from the United States and Europe made up nearly 89 per cent of the total cargo moving from the Atlantic to the Pacific in December, 1932. Of the total tonnage, the proportion originating in the United States was considerably lower than in December, 1931, while Europe's percentage was substantially higher.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in December, 1932, was reported as follows: 163,404 tons, or 41.8 per cent, to the United States; 131,650

tons, or 33.7 per cent, to Asia; 24,658 tons, or 6.3 per cent, to South America; and 40,443 tons, or 10.3 per cent, to Australasia. With the exception of a small gain in the tonnage destined to Australasia, tonnage to the above-mentioned areas declined as follows in comparison with December, 1931: To the United States, 33,731 tons, or 17.1 per cent; to Asia, 60,832 tons, or 31.6 per cent; and to South America, 3,894 tons, or 13.6 per cent. Cargo tonnage to Australasia made a gain of 2,617 tons, or 6.9 per cent. The percentage of the total tonnage destined to the United States increased slightly in comparison with that passing through in December, 1931, as did that routed to South America and Australasia, while the proportion of the total destined to Asia made a decrease.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in December, 1932, 564,132 tons, or 45.9 per cent of the total, originated in the United States; 376,877 tons, or 30.6 per cent, in Canada; 187,853 tons, or 15.3 per cent, in South America; 68,957 tons, or 5.6 per cent, in Asia; and 21,319 tons, or 1.7 per cent, in Australasia. Cargo tonnage from Canada made a heavy increase in comparison with December, 1931, equalling 192,027 tons, or 103.9 per cent. There also was a slight increase in tonnage from Asia, amounting to 2,310 tons, or 3.5 per cent. Cargo tonnage from the other above-mentioned areas decreased as follows: From the United States, 16,453 tons, or 2.8 per cent; from South America, 72,082 tons, or 27.7 per cent; and from Australasia, 10,693 tons, or 33.4 per cent. With the exception of the cargo tonnage originating in Canada the percentages from all of the areas mentioned above were smaller than in December, 1931. The proportion coming from Canada increased from 16.1 per cent in December, 1931, to 30.6 per cent in the last month. This was due to heavy wheat shipments.

Destination.—Segregated according to destination, 465,711 tons, or 37.8 per cent, of the cargo moving from the Pacific to the Atlantic was destined to ports on the east coast of the United States, and 685,507 tons, or 55.7 per cent of the total, to Europe. These two areas absorbed 93.5 per cent of the total cargo moving in this direction. Cargo destined to the United States declined 131,802 tons, or 22.1 per cent, in comparison with December, 1931, while cargo to Europe increased 229,044 tons, or 50.2 per cent. Curtailment of shipments of mineral oils from California and of ores and nitrate from Chile was responsible for much of the decrease in cargo destined to eastern ports of the United States, while the largest contributing factor in the heavy increase to Europe was the wheat shipments from Canada.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify almost 92 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of December, 1932. The remaining 8 per cent consisted, for the most part, of manufactured articles in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 10,000 tons for December, 1931, or December, 1932, are listed in the following tabulation:

Commodity.	December, 1931.	December, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Canned goods (fish, fruit, vegetables, etc.)	11,467	7,303	-4,164
Chemicals	10,801	4,859	-5,942
Corn	2,899	13,377	+10,478
Cotton	101,510	81,087	-20,423
Iron and steel	68,365	46,328	-22,037
Tinplate	13,249	12,047	-1,202
Mineral oils	39,550	21,494	-18,056
Paper	18,493	18,644	+151
Phosphates	24,827	7,904	-16,923
Sulphur	17,220	15,158	-2,062

The above 10 commodity groups for December, 1932, comprise a little more than 58 per cent of the total cargo moving from the Atlantic to the Pacific. With the exception of a substantial gain the shipments of corn and a slight increase in paper tonnage, all of the above items showed decreases in comparison with December, 1931.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 per cent of the cargo moving from the Pacific to the Atlantic during December, 1932. Commodities which aggregated more than 10,000 tons either during the past month or December, 1931, are listed below:

Commodity.	December, 1931.	December, 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Beans	15,503	6,518	-8,985
Barley	6,194	17,046	+10,852
Canned goods (fish, fruit, vegetables, etc.)	74,909	45,106	-29,803
Coffee	7,926	13,641	+5,715
Cold storage (food products) *	20,518	10,336	-10,182
Flour	13,045	13,215	+170
Fruit, dried	31,390	23,114	-8,276
Fruit, fresh	19,980	28,056	+8,076
Lumber	159,651	135,674	-23,977
Metals (principally copper)	49,841	32,990	-16,851
Nitrates	54,902	1,169	-53,733
Oils, mineral	281,027	323,535	+42,508
Oils, vegetable	13,860	11,222	-2,638
Ores	52,469	10,255	-42,214
Rice	11,042	3,187	-7,855
Sugar	61,315	94,179	+32,864
Wheat	147,843	337,021	+189,178
Wood pulp	9,676	12,431	+2,755

* Does not include fresh fruit.

The above 18 commodity groups for December, 1932, comprise almost 91 per cent of the cargo tonnage moving from the Pacific to the Atlantic. Eight of the items showed increases and 10 decreases in comparison with December, 1931. The most outstanding gains were in shipments of wheat, mineral oils, and sugar, while important losses were registered in nitrates, ores, canned goods, lumber, and metals.

(Continued on next page.)

Standard Fruit and Steamship Co. Revises Schedule.

Effective January 25, 1933, the Standard Fruit & Steamship Co. will revise its schedule so that its steamers *Cefalu* and *Contessa* will sail from Cristobal for New Orleans, via Puerto Cabezas, Nicaragua, on Wednesdays at noon and arrive at New Orleans on Sunday or at daylight Monday. From New Orleans the sailings will be every Wednesday at noon for Habana and Cristobal, with arrival at Cristobal at daylight Tuesday.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, December, 1932.—Continued from page 331.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.				SOUTH AMERICA.				AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.			
	West coast of United States.	West coast of Canada.	West coast of Central America and Mexico.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Pern.	West coast of South America. *	Total, South America.	Australia.	New Zealand.	Australasia. *	Total, Australasia.			Philippine Islands.	China.	Japan.	Far East. *	Total, Asia.
NORTH AMERICA:																					
UNITED STATES—																					
North Atlantic ports.....	77,828			617	471,654	85,456	2,941	592	311,101			4,860	2,370	1,984		4,354	8,965	12,351	22,877	1,321	45,514
South Atlantic ports.....	4,134					4,134											135	293	5,093		5,511
Gulf ports.....	34,267					34,267											6,989	22	7,105	68,213	185
													1,801	5,188							78,588
																					119,844
																					30.7
Total, United States.....	116,229			617	471,654	123,857	2,941	592	311,101			4,860	4,171	7,172		11,343	9,122	19,809	96	176	129,613
East coast of Canada.																					
East coast of Central America and Mexico.	3,285	6,292				9,577							2,010	1,250		3,260					12,837
Cristobal, C. Z. *	1,018	282	682			3,728	651	1,531	353	563		3,720	2,740		2,740				1,500		1,500
West Indies.....	10,385	139		2		10,526														1	2
																					10,528
Total, North America.....	130,917	6,459	3,299	473	6,540	147,683	3,592	1,751	1,664	1,579		8,586	8,921	8,422		17,343	9,122	19,810	97	676	131,115
EUROPE:																					
British Isles.....	2,847	9,336				12,183	1,805	22	370	1,979		4,176				23,100					39,459
Belgium.....	7,069	216	1,226			8,511	917	153	61	409	743	2,283									10,704
Denmark.....	228	12				240		2,500				2,500									2,704
France.....	226	23	129			378															378
Germany.....	6,069	420	387			7,776	1,225	185	350	1,549	397	3,706									11,482
Holland.....	923	118				1,041	62	45	132	371	99	709									1,750
Italy.....	610	16	246			872															1,750
Norway.....	3,461	8	853	174		4,496	900	300	358	917		2,475									872
Spain and Portugal.....	423	116	21			566															6,971
Sweden.....	1,837	13	804			2,654															566
Europe *.....	39	5				44					116	116									2,654
																					160
Total, Europe.....	24,638	10,283	6,666	174		38,761	4,909	3,203	1,271	5,225	1,355	15,965		23,100		23,100					77,826
East coast of South America.																					
Asia.....	7,793	38				7,831	31	76			107								534		534
Egypt.....	56					56															56
																					1
Grand total.....	163,404	16,780	6,965	647	6,540	194,336	8,532	5,032	2,935	6,804	1,355	34,658	8,921	31,522		40,443	9,123	19,810	93	210	131,650
Per cent of total cargo:																					
December, 1932.....	41.8	4.3	1.8	0.2	1.6	49.7	2.2	1.3	0.8	1.7	0.3	6.3	2.3	8.0		10.3	2.3	5.1	25.1	1.2	33.7
December, 1931.....	39.3	3.8	1.9	2.1	2.0	48.4	2.3	0.6	0.7	1.9	0.2	5.7	2.5	4.8		7.5	1.7	13.2	22.2	1.3	38.4
December, 1930.....	47.2	3.8	3.3	0.3	1.2	55.8	6.3	1.0	1.5	1.2	3.1	13.1	5.6	6.4		12.0	2.7	3.9	7.1	5.4	19.1

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, December, 1932.

(Figures represent tons of 2,240 pounds.)

From—	North America.										Europe.										Grand total.	Per cent of total cargo.				
	United States.					Total, North America.					Europe.															
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.	East coast of Canada.	E. coast Gen. Am. and Mexico.	Cristobal, C. Z.*	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Greece.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.			Europe.†	Total, Europe.	East coast of South America.	Africa.
NORTH AMERICA:																										
West coast U. S.	339,518	4,501	29,839	373,858	195	698	33,244	407,985	52,491	6,008	711	20,810	18,668	10,747	3,425	1,372	31	1,188	31,094	148,545	7,565	27	584,132	45.9		
West coast Can.			455	455	233		2,102	2,790	198,822	30,121	1,826	1,062	12,741	7,570	24,073	2,036	300	935	92,042	371,580	2,507		376,877	30.6		
West coast C. A. and Mexico.	149		932	1,031		2,557	366	4,004	290	764			1,438						1,158	2,886	5		6,895	0.6		
Bahian, C. Z.	2,148		1,549	3,697		764		3,697															764			
Hawaiian Islands																							3,697	0.3		
Total, N. A.	341,815	4,501	32,775	373,091	233	195	4,019	85,712	419,251	603,361	2,527	21,872	32,847	7,570	34,822	7,461	1,672	31	2,173	124,294	523,011	10,077	952,365	77.4		
SOUTH AMERICA:																										
Chile	7,302	5,443		12,745			385	221	13,351	9,244	2,312	4	1,725	3,006		1,216	2,074	48	1,122	247	20,998	15	34,364	2.8		
Colombia	1,505			1,505			6,138		7,643					136							136		7,779	0.6		
Ecuador	158			158			2,679		2,837	4				71				59	9,463		9,755		12,582	1.1		
Peru	2,190			2,190	14,739		167	17,096	67,463	158	1,551	12,853	854	5		15,865	12	106	13,748	112,610	3,276		132,985	10.8		
West coast S. A.																					128	133		133		
Total, S. A.	11,155	5,443		16,598	14,739		9,369	221	40,927	76,711	2,470	1,555	14,578	4,072		17,081	2,244	107	10,691	14,123	143,632	3,294	187,853	15.3		
AUSTRALASIA:																										
Australia	1,129			1,129	424		10		1,563												1,500		3,063	0.2		
New Zealand	845			845	47				892	12,721											12,721		13,613	1.1		
Australasia †										82											4,561		4,643	0.4		
Total, Aust. sin	1,974			1,974	471		10		2,455	12,803											6,061		21,319	1.7		
ASIA:																										
Philippine Islands	43,897			44,997			1		44,998															44,998	3.7	
China	10,167			10,167			122	45	11,334															11,334	0.9	
Japan	8,800			8,800			490	170	9,460															9,511	0.8	
Far East †	2,502		582	3,084			15	15	3,114															3,114	0.2	
Total, Asia	65,366	582	2,100	68,048			628	230	68,906															68,957	5.6	
Grand total.	420,310	5,983	34,875	461,168	15,443	195	14,026	36,163	531,538	341,117	38,599	4,092	36,450	36,919	7,570	51,903	7,705	1,672	138	12,864	144,478	685,507	13,422	271,230	494	100.0
Per cent of total cargo:																										
December, 1932	34.1	0.9	2.8	37.8	1.3		1.2	2.9	43.2	27.7	3.2	0.3	3.0	3.0	0.6	4.2	0.8	0.1		1.0	11.8	55.7	1.1	100.0		
December, 1931	44.5	1.7	3.9	52.1	5.2		1.2	1.3	59.8	22.0	1.1	0.5	4.5	1.8		3.4	0.8	0.8			4.9	39.8	0.4	100.0		
December, 1930	46.4	1.6	2.5	50.5	2.5	0.2	0.8	1.6	55.6	18.7	1.1	0.3	1.1	3.2		0.8	0.5	0.2			18.1	44.0	0.4	100.0		
* General cargo not routed so as to allow segregation between definite ports.																										
† Includes both local and transit cargo.																										
‡ Includes Sweden.																										

Includes Sweden.

Includes both local and transit cargo.

Includes definite ports.

General cargo not routed so as to allow segregation between definite ports.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, January 14, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Montgomery	7	18.15	8	6.10	8	13.31	8	14.40	American.	Isthmian S. S. Lines.	424.2	56.2	19.4	Hopewell, N. J.	Singapore, Str. Set.	General.	2,873	7,611	5,450
S-48 ¹	8	6.20	8	16.35	8	17.30	8	17.30	American.	U. S. Navy.	240.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-17 ²	8	6.20	8	16.35	8	17.30	8	17.30	American.	U. S. Navy.	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Oregonian	7	20.10	8	6.20	8	16.35	8	17.30	American.	Amer-Hawaiian Line.	404.6	53.9	18.0	Boston, Mass.	Tacoma, Wash.	General.	2,504	6,754	4,800
Yankee Arrow ¹	7	22.55	8	7.30	8	19.45	8	20.00	American.	Standard Oil Co.	458.3	62.7	22.0	Quincy, Mass.	Los Angeles, Calif.	Ballast.		9,841	6,946
Canessa	8	0.30	8	7.40	8	19.45	8	20.00	British.	Shaw, Savill & Albion.	430.0	58.5	17.0	Glasgow, Scotland.	Wellington, N. Z.	Ballast.		8,956	6,562
Steel Voyager	8	3.30	8	8.45	8	20.53	8	22.00	American.	Isthmian S. S. Lines.	385.0	55.0	17.0	Baltimore, Md.	Seattle, Wash.	General.	1,890	7,330	5,249
Nordpal ²	8	7.55	8	9.40	8	22.00	8	23.10	Danish.	W. L. Conyn & Sons.	380.0	54.3	14.6	Philadelphia, Pa.	Vancouver, B. C.	General.		6,282	4,558
Fortmar	8	8.40	8	10.55	8	22.10	9	00.19	American.	Calmar Line.	409.8	54.2	19.0	Baltimore, Md.	Seattle, Wash.	Steel, general.	5,185	6,581	4,795
Charles R.	8	9.20	8	11.45	9	00.14	9	1.23	American.	McCormick S. S. Co.	401.0	53.0	17.0	Philadelphia, Pa.	Tacoma, Wash.	General.	1,702	7,082	5,167
Cydonia.	8	8.25	8	12.50	9	1.25	9	2.25	British.	Stag Line, Ltd.	356.3	48.9	12.7	Habana, Cuba.	Tooeplilla, Chile.	Ballast.		4,312	3,155
Cal.	7	13.35	8	13.10	9	1.27	9	2.25	German.	North German Lloyd.	216.5	32.9	13.3	Cristobal, C. Z.	Guayaquil, Ecuador.	General.	107	1,105	698
Rotorua.	8	22.45	9	6.15	9	14.20	9	23.48	British.	N. Z. Shipping Co.	526.4	61.4	24.4	London, England.	Bluff, N. Z.	General.	6,546	12,842	9,064
Herbert, No.	8	6.50	9	5.55	9	15.50			American.	U. S. Navy.	310.0	31.0		U. S. port.	Balboa, C. Z.	Ballast.			
Dickerson, No.	7	20.20	9	6.10	9	15.50			American.	U. S. Navy.	310.0	31.0		U. S. port.	Balboa, C. Z.	Ballast.			
Leary, No.	8	6.50	9	6.00	9	16.00			American.	U. S. Navy.	310.0	31.0		U. S. port.	Balboa, C. Z.	Ballast.			
Sheaf Crown.	8	20.10	9	7.25	9	16.57	9	20.50	British.	W. A. Souter & Co.	405.0	54.0	22.0	Galveston, Tex.	Yokohama, Japan.	Cotton.	5,266	7,128	5,506
Royal Star.	9	2.50	9	8.25	9	18.02	9	18.58	British.	Blue Star Line.	450.0	58.5	19.0	Newcastle, England.	N. Westminister, B. C.	Ballast.		8,561	5,815
San Rafael	9	2.50	9	9.15	9	19.25	9	20.30	American.	States S. S. Co.	410.0	54.0	16.9	Albany, N. Y.	Seattle, Wash.	General.	1,330	6,484	4,675
Albert Vogler	9	5.35	9	13.05	9	20.23	9	21.25	German.	Hamburg-American Line.	409.0	54.0	17.3	Hamburg, Germany.	Valparaiso, Chile.	General.	2,278	7,173	5,514
Phennix.	9	14.00	9	14.20	9	23.14	8	8.09	British.	Alfred Holt & Co.	439.0	56.0	22.0	Philadelphia, Pa.	Yokohama, Japan.	General.	3,557	8,367	5,884
Henry D.	9	16.40	9	16.50	10	00.29	10	2.05	American.	Dutton Lumber Corp.	356.0	51.6	26.0	Freeport, Tex.	Tacoma, Wash.	Solapur.	6,175	8,367	2,900
Wilton.	9	11.55	10	6.05	10	14.58	10	16.05	German.	Hamburg-American Line.	477.0	62.0	22.6	Hamburg, Germany.	Vancouver, B. C.	General.	3,080	10,267	7,252
Vancouver.	6	20.30	10	6.00	10	14.10	10	15.45	Panamanian.	Hans Eliott.	105.0	5.3	5.4	Cristobal, C. Z.	Balboa, C. Z.	Ballast.		32	47
Anaclewona ² .	9	18.00	10	7.25	10	17.11	10	18.20	British.	United Molasses Co.	526.0	68.0	18.0	Philadelphia, Pa.	San Francisco, Cal.	Ballast.		12,213	8,925
Nurturcron.	10	8.05	10	8.15	10	18.08	10	19.20	British.	R. Chapman & Son.	423.0	58.4	17.0	Newcastle, England.	Vancouver, B. C.	Ballast.		6,854	4,746
Schenck, No.	8	6.50	10	9.00	10	19.17			American.	U. S. Navy.	310.0	31.0		U. S. port.	Balboa, C. Z.	Ballast.			
Auditor.	10	17.05	11	6.20	11	17.41	11	22.30	British.	T. & J. Harrison.	410.0	52.3	16.1	Liverpool, England.	Vancouver, B. C.	Ballast.		6,235	4,245
Vilechi ⁶ .	7	20.20	11	6.15	11	17.45	11	19.57	American.	H. T. Horton.	72.3	19.2	11.8	San Diego, Calif.	San Diego, Calif.	Ballast.		54	37
Drechtidijk ² .	11	5.55	11	11.45	11	19.55	11	21.03	Dutch.	N. Pacific Coast Line.	485.5	62.3	19.11	Rotterdam, Holl'd.	Vancouver, B. C.	General.	1,493	10,793	7,619
Northern	11	9.55	11	13.20	11	21.05	11	22.30	American.	Sun Oil Co.	480.6	66.0	22.0	Baltimore, Md.	Los Angeles, Calif.	Ballast.		9,664	6,552

Heffron	11 16 20	11 16 25	11 23 46	12 1 05	American	Heffron S. S. Co.	440.0	56.0	17.0	Baltimore, Md	Everett, Wash.	Ballast.	8,312	6,097
Silveray	11 17 05	12 6 10	12 13 44	12 15 00	British	Canadian Transp. Co.	395.0	57.0	18.0	Hull, England.	Vancouver, B. C.	Coal	2,000	7,650
Constance	12 1 10	12 6 15	12 16 09	14 7 32	American	Arrow Line.	409.6	54.2	15.0	New York, N. Y.	Seattle, Wash.	General	1,228	6,621
Chandler	11 19 20	12 7 20	12 17 18	12 18 30	American	Lukenbach-Gulf Co.	425.0	57.3	20.0	Boston, Mass.	Seattle, Wash.	General	2,642	8,568
Edgar F.	12 3 40	12 7 35	12 18 25	12 19 45	British	Reardon Smith Line.	400.5	54.3	22.0	New Orleans, La.	Shanghai, China.	General	5,009	6,979
Vernon City	12 10 25	12 13 55	12 20 52	12 21 45	Swedish	Transatlantic Co.	312.3	45.6	13.5	Cristobal, Md	Los Angeles, Calif.	General	3,625	5,359
Hjelmar	12 10 25	12 7 45	12 16 15		American	U. S. Navy.	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	3,625	2,438
Lapwing	12 15 45	13 6 05	13 14 12	13 21 25	American	Dollar Line.	516.5	72.2	28.1	New York, N. Y.	Manila, P. I.	General	1,693	15,286
President McKinley	13 5 05	13 6 35	13 15 15	14 00 35	American	Panama-Pacific Line.	586.4	80.3	25.6	New York, N. Y.	San Francisco, Cal.	General	1,211	25,254
Virginia	13 6 25	13 7 20	13 16 33	13 21 10	British	Cunard Line.	600.7	73.8	29.0	New York, N. Y.	World cruise.	Ballast.	22,760	16,701
Carinthia	12 18 30	13 7 45	13 17 30	14 8 02	British	Sir R. Ropner & Co.	390.0	55.6	15.0	Cardiff, Wales.	Vancouver, B. C.	Ballast.	5,930	4,282
Swabian	12 18 40	13 8 45	13 18 35	13 19 55	British	Dale & Co.	409.6	54.0	17.2	Newcastle, England	Vancouver, B. C.	Ballast.	5,729	4,102
Brighton	12 19 20	13 8 55	13 19 32	13 20 36	Japanese	Kawasaki Dockyard Co.	405.0	53.0	14.0	New York, N. Y.	Kobe, Japan.	Ballast.	7,032	5,128
Bordeaux Maru	12 22 15	13 10 05	13 22 16	13 22 20	British	Canadian Transp. Co.	405.0	55.6	13.5	Avonmouth, Eng.	Vancouver, B. C.	Ballast	6,989	5,251
Adington	12 22 15	13 10 35	13 22 56	13 23 55	Norwegian	Pan-American Pet. Co.	491.3	67.3	19.0	New York, N. Y.	Talara, Peru	Ballast	10,424	7,214
Court	13 5 40	13 13 05	13 21 50	14 7 04	American	Panama Mail S. S. Co.	484.0	72.0	25.5	New York, N. Y.	San Francisco, Cal.	General	2,907	13,948
Pan-Seandia	14 2 35	14 6 10	14 13 29	14 14 48	British	Prince Line Ltd.	441.8	60.0	23.0	Boston, Mass.	Manila, P. I.	Cotton, etc.	5,561	9,240
Santa Paula	14 4 25	14 6 30	14 14 30	14 16 00	American	Swayze & Hoyt.	380.5	53.2	23.6	Houston, Tex.	Seattle, Wash.	General	4,317	5,659
Javanese	14 9 05	14 9 15	14 16 45	14 18 00	American	Stand. Vac. Transp. Co.	468.6	62.5	19.0	New York, N. Y.	Los Angeles, Calif.	General	10,084	7,383
S. A. Perkins	14 12 50	14 13 15	14 19 50	14 21 10	Norwegian	Westfal, Larsen & Co.	398.0	54.9	14 11	Rotterdam, Holland	Vancouver, B. C.	Coffee	100	6,869
Villager	13 16 10	14 14 45	14 22 45	15 3 02	German	Grace Line.	216.5	32.9	13.5	Cristobal, C. Z.	Guayaquil, Ecuador	General	417	1,132
Manizales	13 19 00	14 6 50	14 14 56	14 16 00	Panamanian	A. Valdez.	57.8	19.7		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	57	29
A. B. Obarrto	13 19 00	14 11 10	14 19 50	14 21 09	Panamanian	S. O. Barden	64.2	20.3		Cristobal, C. Z.	Balboa, C. Z.	General	30	78
Tuira	14 15 19	15 19 00			American	F. R. Sicklespool.	36.0	9.0		Cristobal, C. Z.	Balboa, C. Z.	(*)	7	7
Annie B.	14 15 19	15 19 00			British							Ballast.		10
Red Riding Hood	14 15 19	15 19 00			British							Ballast.		10

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

President Grant	8 3 15	8 7 10	8 15 12	8 22 15	American	Dollar Line.	517.0	72.2	29.0	Manila, P. I.	New York, N. Y.	Silk, general.	4,582	15,234
Bullmouth	8 6 50	8 8 20	8 16 55	8 19 15	British	Anglo-Saxon Pet. Co.	440.3	59.5	28.0	San Francisco, Cal.	Hamburg, Germany	Fuel oil	9,436	8,457
Mollere	8 11 25	8 12 13	8 19 40	8 19 40	British	Royal Mail Lines, Ltd.	440.0	56.3	22.6	N. Westm. cr, B. C.	Hamburg, Germany	General	1,915	7,089
Monkleigh	8 13 52	8 14 35	8 23 00	8 23 00	British	Anglo-Canadian Co.	420.7	55.3	25.0	Vancouver, B. C.	Hall, England	Wheat, lumber	8,918	6,886
Srka	8 16 45	9 6 54	9 14 00	9 22 15	German	Hamburg-American Line	309.3	44.8	17.0	Champerico, Guat.	Hamburg, Germany	General	1,024	3,350
Carlier	8 16 45	9 6 54	9 14 00	9 22 15	German	Cie. Maritime Belge.	471.1	60.8	25.0	Vancouver, B. C.	London, England	General	10,123	9,264
Grainco	9 4 00	9 7 50	9 16 00	9 17 00	British	R. Chapman & Son.	423.0	58.3	26.3	Vancouver, B. C.	London, England	Wheat	9,408	6,823
Tacoma	9 4 00	9 7 50	9 16 00	9 17 00	British	Hamburg-American Line	477.7	63.0	25.0	Vancouver, B. C.	Hamburg, Germany	General	7,463	10,277
N. 4820	9 7 31	10 10 25	9 21 29	10 1 40	German	Alexander Gordon	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	1	1
S. 7	10 10 25	10 10 25	10 12 30	10 12 30	American	U. S. Navy	240.0	21.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	1	1
S. 48	10 10 25	10 10 25	10 12 30	10 12 30	American	U. S. Navy	187.0	38.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	1	1
Mallard	9 9 52	10 6 33	10 14 15	10 14 40	American	Panama-Pacific Line.	586.4	80.3	29.0	Balboa, C. Z.	Cristobal, C. Z.	General	5,742	25,262
Pennsylvania	9 9 52	10 6 33	10 14 15	10 14 40	American	Panama-Pacific Line.	586.4	80.3	29.0	San Francisco, Cal.	New York, N. Y.	General	5,742	25,262

* Cayuco.

* Launch.

* Motor schooner.

* Mine sweeper.

* Yacht.

* Motor boat.

* Destroyer.

* Submarine.

* Towing Red Riding Hood.

* Motor ship.

* Tanker.

* Tug.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From— water draft.	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Wilhelm A. Riedemann ^{1, 2, 3}	10	1.45	10	7.22	10	16.00	10	16.00	Danzig	W. Tanksschiff Rhederei	525.5	54.4	29.3	Talara, Peru	Valloe, Norway	Crude oil	15,029	12,171
Sveadrott ^{1, 2}	9	22.30	10	8.12	10	17.05	10	17.05	Swedish	W. L. Comyn & Sons	392.1	66.7	26.0	Vancouver, B. C.	Antwerp, Belgium	General	6,567	7,011
Moix ^{1, 2}	10	1.30	10	9.41	10	18.15	10	18.15	French	Cie. Ind. de Petroleo	432.4	57.5	26.0	Espero Bay, Calif.	Sese, France	Crude oil	8,471	7,000
Paris City	10	7.00	10	10.43	10	19.35	10	19.35	British	Reardon Smith Line	412.2	55.0	27.0	Vancouver, B. C.	Europe	Wheat	9,090	6,673
Pacific	10	9.00	10	13.41	10	21.20	10	21.20	British	Furness, Withy & Co.	435.9	60.2	27.0	Vancouver, B. C.	London, England	General	8,195	9,633
Hakosone ^{1, 2}	10	14.50	10	17.41	11	10.25	11	10.35	Japanese	Mitsui Bussan Kaisha	435.0	56.5	23.0	Dairen, Manchuria	New Orleans, La.	Silk, general	4,600	7,414
Maru ^{1, 2}	10	4.30	10	19.03	11	12.05	11	12.05	Provision	E. V. Oberthier	180.0	30.3	14.0	Callao, Peru	Louise, Peru	General	800	666
Mystery ^{1, 2, 3}	9	15.00	10	18.08	11	14.00	11	14.00	American	R. V. Porter	38.0	9.0	4.0	Los Angeles, Calif.	Tampa, Fla.	Ballast	10	7
R. J. Hanna ^{1, 2}	10	23.30	11	00.15	11	13.10	11	13.10	American	James B. Berry Sons	435.0	56.2	29.0	San Francisco, Cal.	Tiverton, R. I.	Domestic fuel	10,647	7,639
Evagoras ^{1, 2}	10	23.40	11	1.30	11	14.05	11	15.20	British	Troodos Shipping Co.	405.0	52.4	24.0	Vancouver, B. C.	Hull, England	General	8,073	5,879
Rangitane ^{1, 2}	10	19.15	11	6.30	11	14.00	11	14.00	British	N. Z. Shipping Co.	531.0	70.0	30.0	Auckland, N. Z.	London, England	Frozen, general	7,576	18,205
Illinois ^{1, 2}	10	23.35	11	7.13	11	15.25	11	15.25	American	The Texas Co.	416.8	56.1	26.0	Los Angeles, Calif.	Providence, R. I.	Gasoline	7,689	6,945
Adolf von Baeyer	11	6.30	11	8.13	11	16.30	11	17.05	German	Hamburg-American Line	409.1	53.7	24.2	San Antonio, Chile	Hamburg, Germany	General	6,671	7,173
Ohioan	11	3.41	11	9.13	11	17.05	11	17.05	American	Amer-Hawaiian Line	407.1	53.7	24.0	Seattle, Wash.	Boston, Mass.	General	5,911	7,103
Point Brava	11	5.00	11	10.40	11	19.40	11	19.40	American	Swayne & Hoyt	336.8	52.2	22.0	Portland, Oreg.	Tampa, Fla.	Lumber, general	4,302	5,996
Kinai Maru ^{1, 2}	11	6.25	11	11.19	11	21.00	12	8.05	Japanese	Osaka Shosen Kaisha	446.0	60.5	22.0	Shanghai, China	Baltimore, Md.	General	3,018	8,982
Amberton	11	9.35	11	12.54	11	22.05	11	22.05	British	R. Chapman & Son	409.6	54.0	25.0	Vancouver, B. C.	London, England	Grain, general	8,104	5,756
Norie ^{1, 2}	11	10.15	11	13.48	11	23.10	11	23.10	Norwegian	Canadian Transp. Co.	350.7	50.8	25.0	Victoria, B. C.	Sharnpess, Eng.	Lumber, wheat	6,826	4,879
Yuri Maru	11	12.45	11	16.28	12	11.05	12	11.55	Japanese	Kokusai Kisen Kaisha	425.0	53.6	26.3	Iloilo, P. I.	U. S. No. Atl. ports	Sugar, cyanide	8,500	6,909
Mahana	11	19.00	11	20.13	12	11.55	12	12.15	British	Shaw, Savill & Albion	520.9	63.3	27.0	Wellington, N. Z.	London, England	Frozen, general	6,871	12,083
Silvernapple ^{1, 2}	11	15.30	12	6.25	12	13.15	12	13.15	British	S. E. Thompson	425.6	58.3	24.0	Calcutta, India	New Orleans, La.	General	4,214	8,216
Stranger ^{1, 2}	7	15.00	12	6.25	12	14.30	12	13.05	American	F. E. Lewis	143.4	22.8	10.0	Los Angeles, Calif.	Kingston, Jamaica	Ballast	233	137
Baarn	12	1.15	12	7.15	12	15.50	12	20.45	Dutch	Royal Neth. S. S. Co.	400.6	58.3	26.0	Talcahuano, Chile	Hamburg, Germany	General	8,193	7,819
San Felipe	12	4.00	12	8.25	12	17.30	12	17.30	American	Quaker Line	409.8	54.2	26.0	Philadelphia, Pa.	Leith, Scotland	(?)	8,079	6,821
Wilmington	12	9.00	12	9.58	12	18.45	12	18.45	British	Anglo-Can. Shipping Co	300.0	55.5	24.0	Vancouver, B. C.	New York, N. Y.	Grain, general	7,874	5,898
Santa Elena	12	6.15	12	12.38	12	20.05	13	11.45	Panamanian	Grace Line	380.3	51.7	23.4	San Francisco, Cal.		General	2,534	5,957
Nuevo	12	7.10	12	12.25	12	20.05	16	15.30	Panamanian	Hans Elliot	108.5	50.6	9.0	Buenaventura, Col.	Christobal, C. Z.	Coffee	173	226
Chr. Knudsen ^{1, 2}	12	22.30	13	6.21	13	13.55	13	13.55	Norwegian	Canadian Transp. Co.	381.2	54.7	24.0	Vancouver, B. C.	Velle, Denmark	Grain, lumber	8,000	6,083
Brinanger ^{1, 2}	13	3.00	13	7.29	13	14.45	13	19.10	Norwegian	Intercean S. S. Corp.	398.0	54.7	26.0	Vancouver, B. C.	Rotterdam, Holland	Wheat, general	7,890	6,868
Manizales	13	3.23	13	8.10	13	16.10	14	14.45	German	Grace Line	216.5	32.9	16.0	Guayaquil, Ecuador	Christobal, C. Z.	General	1,117	1,132
Durazzo	13	6.45	13	8.16	13	16.15	15	6.10	German	Hamburg-American Line	227.5	34.4	14.0	Guayaquil, Ecuador	Christobal, C. Z.	General	656	1,632
Benuech	13	5.00	13	9.45	13	19.00	13	19.00	British	Anglo-Can. S. S. Co.	420.1	54.0	28.0	Seattle, Wash.	London, England	(*)	8,871	6,425
A. B. Obarrto ^{1, 2}	13	1.00	13	9.23	13	19.00	14	7.38	Panamanian	A. Valdez	57.8	19.7	3.0	Darien, R. P.	Christobal, C. Z.	Bananas	33	57
Taura ^{1, 2}	13	1.00	13	9.34	13	19.00	14	12.26	Panamanian	Hans Elliot	64.2	20.3	6.0	Darien, R. P.	Christobal, C. Z.	Bananas	45	78
Easley City	13	5.52	13	10.27	13	20.05	13	20.05	American	Isthmian S. S. Lines	395.5	55.0	25.0	Everett, Wash.	Baltimore, Md.	Lumber	6,100	7,330

Anachnema ²¹ ...	13	10 07	13 19 00	16 12 10	Panamanian	Hans Elliot.	105 3	15 3	Darien, R. P.	Cristobal, C. Z.	40	62	47
Jeff Davis ²¹ ...	13	3 29	13 22 34	14 13 05	14 23 40	Rosevelt S. S. Co.	305 5	55 0	Honolulu, T. H.	New York, N. Y.	8,014	7,320	5,233
Salvador ²¹ ...	13	20 25	13 23 20	14 13 35		Pacific Steam Nav. Co.	215 0	33 5	Champerico, Guat.	Cristobal, C. Z.	329	1,270	735
K. R. Kingsbury ²¹ ...	13	22 00	14 6 32	14 14 30	14 30	Union Oil Co.	440 0	58 2	Los Angeles, Calif.	Tiverton, R. I.	11,430	9,033	5,938
Drakepool ²¹ ...	14	4 00	14 7 38	14 15 55	14 15 55	Sir R. Roper & Co.	390 5	55 2	Vancouver, B. C.	Avonmouth, Eng.	7,895	5,890	4,199
Fernwood ²¹ ...	14	7 10	14 8 46	14 17 10	14 17 10	Fearnley & Eger.	390 5	55 2	Manila, P. I.	Cape Hatteras	7,800	6,840	4,979

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
January 8	No. 144-M ¹⁹	Pan American-Grace Airways.	Calif. Colombia.	January 8	Metapan	United Fruit Co.	New York via wayports.
January 8	No. 945-M ¹⁹	Pan American-Grace Airways.	Talara via wayports.	January 8	Guayaquil	Panama R. S. S. Line.	New York.
January 8	No. 414-H ¹⁹	Pan American-Grace Airways.	San Salvador via waypts.	January 8	Pastors	Colombian S. S. Co.	New York via wayports.
January 9	Calamares	United Fruit Co.	Port Limon, Costa Rica.	January 9	Inapaquina ²⁰	A. Tagarapulos.	Colon, Rep. of Panama.
January 9	No. 669-M ¹⁹	Pan American Airways.	Barraquilla, Colombia.	January 9	Calamares	United Fruit Co.	New York via wayports.
January 9	No. 145-M ¹⁹	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	January 9	No. 669-M ¹⁹	Pan American Airways.	Barraquilla, Colombia.
January 10	Simon Bolivar	Royal Netherlands S. S. Co.	Amsterdam via waypts.	January 10	No. 144-M ¹⁹	Pan American-Grace Airways.	Talara via wayports.
January 11	No. 9688 ¹⁹	Pan American Airways.	San Salvador via waypts.	January 11	Simon Bolivar	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
January 11	No. 300-N ¹⁹	Pan American Airways.	Chelavo via wayports.	January 11	Darian	Leyland S. S. Line.	Kingston, Jamaica.
January 12	Carare	Elders & Fyffes, Ltd.	Avonmouth via wayports.	January 12	No. 669-M ¹⁹	Pan American Airways.	Miami via wayports.
January 12	Cristobal	Panama R. R. S. S. Line.	New York via Haiti.	January 12	No. 145-M ¹⁹	Uruba, Medellin & Cent. Airways	Medellin, Colombia.
January 12	Juan S. Elcano	Pan American Airways.	Batona via wayports.	January 13	No. 945-M ¹⁹	Elders & Fyffes, Ltd.	Chidayo via wayports.
January 12	No. 660-M ¹⁹	Pan American Airways.	Miami via wayports.	January 13	Carare	United Fruit Co.	Avonmouth via wayports.
January 13	Zacapa	Standard Fruit & S. S. Co.	New Orleans via Habana.	January 13	Vragata	United Fruit Co.	Port Limon, Costa Rica.
January 13	Confessa	United Fruit Co.	Brest via wayports.	January 13	Amelia I. ²⁰	P. W. Hamilton.	Colon, Rep. of Panama.
January 13	Confessa	United Fruit Co.	New York via wayports.	January 14	Confessa	Standard Fruit & S. S. Co.	New Orleans via waypts.
January 13	Amelia I. ²⁰	P. W. Hamilton.	Colon, Rep. of Panama.	January 14	Zacapa	J. Asmusen.	Bluefields, Nicaragua.
January 13	Mauretania.	Colon, Rep. of Panama.	New York via wayports.	January 14	Mauretania.	Chard S. S. Line.	Port Limon, Costa Rica.
January 14	Stacadian.	Colon, Rep. of Panama.	New York via wayports.	January 14	Colombie.	French Line.	Port Limon, Costa Rica.
January 14	Colombia.	Colon, Rep. of Panama.	New York via wayports.	January 14	Inapaquina ²⁰	A. Tagarapulos.	Colon, Rep. of Panama.
January 14	Santa Marta.	United Fruit Co.	New York via Kingstons.				
January 14	Simon Bolivar	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.				
January 14	J. Asmusen.	Colon, Rep. of Panama.	Colon, Rep. of Panama.				
January 14	Inapaquina ²⁰	A. Tagarapulos.	Colon, Rep. of Panama.				

PORT OF BALBOA.

January 10	Real ²⁵	Hans Elliot.	Darien, Rep. of Panama.	January 10	Real ²⁵	Hans Elliot.	Panama Bay, R. P.
January 11	Blue Fin ^{23 24}	W. A. Hase and C. G. Weber.	Los Angeles, Calif.	January 14	Real ²⁵	Hans Elliot.	Panama Bay, R. P.
January 13	Real ²⁵	Hans Elliot.	Panama Bay, R. P.				
January 13	Veleo III ^{23 24}	Capt. G. A. Hancock.	Los Angeles, Calif.				

²¹ Tanker. ¹⁹ Air mail carrier. ¹³ Motor ship. ²⁰ Motor boat. ²⁵ Motor schooner. ¹⁶ For orders. ¹⁷ Lumber, copper, and general. ¹⁸ Lumber, grain, and general.

Other than ships passing through the Canal.

Comparison of Canal Traffic in December, 1932, with December Traffic in Previous Years.

Commercial traffic through the Panama Canal during the month of December, 1932, showed an increase in comparison with December, 1931, with respect to the number of transits and net tonnage of vessels (Panama Canal measurement), although cargo tonnage registered a decrease. The increase in the number of transits was 44, or 11.4 per cent, and in net tonnage, 46,911 tons, or 2.3 per cent. The decrease in cargo tonnage was 27,323 tons, or 1.7 per cent. In comparison with December, 1930, the past month's traffic showed decreases in all the features considered above, as follows: In transits, 64, or 12.9 per cent; in net tonnage, 393,557 tons, or 15.9 per cent; and in cargo tonnage, 545,303 tons, or 25.2 per cent.

The peak month for December traffic with respect to the number of transits occurred in 1927 when 589 vessels were passed through. The peak month for net tonnage and cargo tonnage, however, occurred in December, 1928, these two features aggregating 2,698,140 and 2,714,987, respectively. In comparison with these high figures last months' traffic was lower by 26.8 per cent in transits, 22.9 per cent in net tonnage, and 40.3 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of December each year from 1914 to 1932, inclusive, and for comparison the monthly averages for the corresponding fiscal year ended on June 30 following:

Calendar year.	Month of December.			Fiscal year.	Average per month for fiscal year.		
	Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.		Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.
1914.....	* 98	341,993	452,779	1915.....	* 102	361,197	465,567
1915.....	7	8,594	12,218	1916.....	63	189,687	257,843
1916.....	151	467,923	539,847	1917.....	150	483,213	558,213
1917.....	152	482,816	563,192	1918.....	172	547,839	627,669
1918.....	168	533,992	629,961	1919.....	169	510,416	576,885
1919.....	260	927,726	924,479	1920.....	206	712,170	781,208
1920.....	265	1,027,918	1,076,539	1921.....	241	951,323	966,601
1921.....	239	1,017,244	953,053	1922.....	228	951,455	907,075
1922.....	304	1,375,263	1,535,102	1923.....	331	1,550,482	1,630,656
1923.....	506	2,516,491	2,494,634	1924.....	436	2,179,073	2,249,559
1924.....	407	1,989,196	2,265,687	1925.....	389	1,904,596	1,996,570
1925.....	462	2,257,409	2,358,170	1926.....	433	2,064,549	2,169,787
1926.....	458	2,135,002	2,310,270	1927.....	456	2,185,651	2,312,351
1927.....	589	2,616,728	2,573,828	1928.....	538	2,454,886	2,469,226
1928.....	579	2,698,140	2,714,987	1929.....	534	2,468,483	2,555,250
1929.....	522	2,548,771	2,524,934	1930.....	515	2,498,385	2,502,519
1930.....	495	2,473,626	2,166,884	1931.....	461	2,316,012	2,090,233
1931.....	387	2,033,158	1,648,904	1932.....	376	1,968,785	1,650,667
1932.....	431	2,080,069	1,621,581	(*)	364	1,886,345	1,508,328

* Canal opened August 15, 1914.

* Average for 10½ months.

* Average for calendar year 1932.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 13, 1933.

No. 7

Panama Canal, Pacific entrance, gas buoy temporarily discontinued.—Gas buoy No. "FB," on the east prism line of the Panama Canal, south of the Ferry Slip in the Pacific entrance, was temporarily discontinued on January 12, 1933, on account of dredging operations.

J. L. SCHLEY,
Governor.

Traffic by Commodities for December, 1932.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of December, 1932, 1931, and 1930. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. These figures represent tons of 2,240 pounds.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Agricultural implements.....	677		1,167	2
Alfalfa meal.....		690		690
Ammonium compounds.....	44		526	5,035
Animal foods ¹	552	602	552	851
Apparel, wearing (hats, shoes, clothing, etc.).....	179	1	186	42
Asbestos.....	27		120	
Asphalt and tar.....	99	44	5,465	687
Automobiles (and auto trucks).....	2,605	42	4,171	50
Automobile parts and accessories.....	303		1,842	1
Bananas.....				1,696
Bags and bagging, textile.....	59	3	355	613
Barks, miscellaneous.....		18		594
Barley.....				17,046
Beans, edible, dry.....	239	4,280	409	6,518
Beer.....			13	
Beverages, nonalcoholic.....	135	16	167	19
Blood and tankage.....			72	
Bones and bone meal.....			2,820	
Books and printed matter.....	116		116	
Borax.....		624		5,105
Bran and pollards.....			20	3,560
Bricks and tile.....	147		177	
Camphor, crude.....		9		847
Canned and preserved goods:				
Fish.....	242	3,769	571	6,000
Fruit.....	42	13,870	647	25,257
Meat.....			698	38
Milk.....	12	829	520	999
Soup.....	2,124		2,179	
Vegetables.....	935	1,980	1,136	2,005
Miscellaneous and unclassified.....	1,385	9,831	1,552	10,807
Carbon black.....	233		482	
Celite.....		242		279
Cement.....	434		7,377	
Chalk.....			227	
Charcoal.....	36		36	
Chemicals ¹	1,945	186	4,859	592
Clay, china and fire.....	147	96	195	96
Clay, filtering.....		42		42
Clorox.....		254		254
Coal.....	611		7,817	
Cocoa and cacao beans.....	136		631	464
Coconuts and products ¹	37	638	37	962
Coffee.....	145	111	5,717	13,641
Coke.....			317	
Cold storage and refrigerated products:				
Dairy products.....	69	3	235	8,093
Eggs.....		85		134
Fish.....			8	183
Lard.....	30		38	
Meats.....			2	1,863
Vegetables.....				20
Other and unclassified.....	441		463	43
Confectionery.....	834		853	
Copra.....	20		20	6,013
Copra meal and cake.....				771
Corn.....	13,357		13,377	
Cotton, raw.....	173	1,013	81,087	2,997
Drugs and medicines.....	1,031	5	1,293	13
Dyes.....			191	
Earthenware.....	92		254	
Eggs, dried.....		97		194

¹ Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Electrical apparatus and appliances.....	224	47	421	136
Explosives.....	25		39	
Extract, quebracho.....			512	
Fertilizers.....			205	
Fish, salted or dry cured.....				44
Fish meal.....				612
Floor coverings.....	514	255	514	990
Flour.....	312	7,665	2,900	13,215
Fruit, dried.....		10,324	272	23,114
Fruit, fresh.....	30	1,998	104	28,056
Furniture and household goods.....	239	27	341	35
General.....	14,922	5,387	32,648	17,059
Glass and glassware.....	2,015	65	2,818	455
Glue.....		108		128
Groceries.....	475	819	609	819
Guano.....				5,443
Gums.....		25		56
Hair, all kinds.....	23	32	39	23
Hay.....		624		1,059
Hemp, unmanufactured.....	54	194	57	987
Honey.....		213		311
Hops.....		25		25
Horns and hoofs.....				74
Infusorial earth.....		154		305
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	20,537	720	46,328	4,010
Ivory nuts.....				1,866
Jute, unmanufactured.....		49	238	49
Lard substitute.....	250		486	
Lime.....			535	
Liquors.....	134		1,375	232
Lumber (including manufactured mill products).....	704	91,613	1,128	135,674
Machinery (other than electrical).....	1,530	291	4,241	340
Malt.....	12		69	100
Manufactured goods.....	2,902	460	3,745	1,373
Marble and granite.....	49		167	
Matches.....	301	23	546	166
Metals:				
Copper.....	18	1,620	62	18,291
Gold and silver.....			91	8
Iron.....	154		913	502
Lead.....		900	3	8,607
Scrap.....	125	16	6,010	75
Tin.....	124	77	139	1,852
Zinc.....	77		849	3,641
Other and unclassified.....	119	86	2,782	89
Milk, powdered.....	7	277	63	438
Molasses and syrups.....	466		497	
Nitrates.....			6,242	1,169
Nuts, edible (including meats).....		175	40	418
Oats.....	21		35	7,720
Oils, mineral:				
Crude.....			210	62,493
Gas and fuel.....		103,827	10,345	116,187
Gasoline, benzine, and naphtha.....		60,184	526	118,912
Kerosene.....		16,035	560	25,881
Lubricating and greases.....	4,446	33	9,853	58
Other and unclassified.....				4
Oils, vegetable:				
Coconut.....			18	8,715
Cottonseed.....	36		49	
Linseed.....			195	
Olive.....			357	
Rapeseed.....			3	264
Wood.....	6	20	11	1,705
Other and unclassified.....	198	15	500	538
Oil, fish.....			4	954
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		358		1,115
Oilseed cake and meal.....				4,711
Ores:				
Antimony.....				294
Copper.....	130	300	130	3,435
Gold and silver.....				3,018
Iron.....		33	30	33
Lead.....				305
Magnesite.....		312		312
Manganese.....	24		107	
Tin.....			14	2,056
Zinc.....				725
Other and unclassified.....				77

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Paints and varnishes.....	355	3	765	10
Paper and paper products *.....	5,277	4,164	18,644	6,239
Paper scrap.....		473	1,480	473
Peanuts.....	327	75	327	81
Peas, dry.....		15	64	289
Peatmoss.....			865	
Phosphates.....	276		7,904	
Plaster.....	23		23	
Porcelainware.....		110	58	2,072
Potash.....		1,055	966	1,055
Pyrethrum flowers.....				97
Rags and waste.....	147	99	364	462
Railroad material.....	60		432	
Rice.....	488	454	513	3,187
Rope and twine.....	102		187	42
Rosin.....	1,031		3,252	
Rubber:				
Manufactured.....	663	60	1,109	60
Raw.....				57
Scrap.....				19
Salt.....	187		4,154	
Sand.....	520		2,325	
Seeds (except oilseeds).....	88	330	459	481
Sewer pipe (concrete and terra cotta).....	228		228	
Shells, oyster.....	2,028		2,028	
Silk, raw.....	46	386	62	1,814
Skins and hides.....		998	9	3,085
Slate.....	106		106	
Soaps and products.....	1,927	89	2,119	203
Soda and sodium compounds.....	740		2,267	46
Soy beans.....	338		486	
Sugar.....	49	7,377	294	94,179
Sulphur.....	10,753		15,158	501
Talc.....		90	10	501
Tallow.....		74		633
Tea.....	10	10	192	1,732
Textiles *.....	2,945	73	7,404	1,071
Tinplate.....	5,044		12,047	100
Tobacco and manufactures.....	787	40	4,124	74
Toilet preparations.....	300	40	359	88
Turpentine.....	28		43	
Vegetables, dry *.....	30	153	363	346
Wall board.....	115		115	227
Wax, paraffin.....	130	45	1,271	82
Wheat.....		50	55	337,021
Wines.....		414	250	1,420
Wood pulp.....	93	11,011	6,159	12,431
Wool.....	59	1,376	59	4,223
Total, December, 1932.....	116,229	373,853	391,087	1,230,494
Total, December, 1931.....	154,390	422,249	501,408	1,147,496
Total, December, 1930.....	204,134	591,400	551,712	1,615,172

* Except as otherwise classified.

* Cotton, silk, wool, rayon goods.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 9, 1933.

No. 6

Costa Rica, Pacific coast, Gulf of Nicoya, report of lights. The commanding officer of the U. S. S. *Memphis* reports the following relative to the lights in the Gulf of Nicoya:

Cano Islet Light.—On December 29, 1932, at 0400, Cana Islet Light was observed at a distance of 28 miles and showed a flashing white light with 10 seconds period; flash 1 second, eclipse 9 seconds.

Blanca Islet Light.—On the same date and time Blanca Islet Light was observed at a distance of 36 miles showing a flashing white light with 8 seconds period; flash 1 second, eclipse 7 seconds. Height of eye 55 feet.

For reference see Notice to Mariners, Balboa Heights, Nos. 1090, 1100, 1107, and 1250 (1932).

J. L. SCHLEY,
Governor.

**Report of Cargo Discharged and Laded by Vessels Entering and Clearing
from Port of Cristobal, C. Z., for Week Ending January 14, 1933.**

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				<i>Tons.</i>	<i>Tons.</i>
Guayaquil.....	Panama R. R. S. S. Line.....	January 8.....	January 8.....	8.....	413
Ruth Lykes.....	Lykes Brothers.....	January 8.....	January 8.....	8.....	174
Cali.....	North German Lloyd.....	January 8.....	January 8.....	8.....	107
Pastores.....	United Fruit Co.....	January 8.....	January 8.....	8.....	677
Metapan.....	United Fruit Co.....	January 8.....	January 8.....	8.....	153
President Grant.....	Dollar Line.....	January 8.....	January 8.....	667.....	(*)
Syra.....	Hamburg-American Line.....	January 9.....	January 9.....	510.....	353
Albert Voegler.....	Hamburg-American Line.....	January 9.....	January 9.....	29.....	241
Calamarcos.....	United Fruit Co.....	January 9.....	January 9.....	31.....	374
San Rafael.....	Quaker S. S. Line.....	January 9.....	January 9.....	22.....	(*)
Tacoma.....	Hamburg-American Line.....	January 9.....	January 10.....	34.....	219
Vancouver.....	Hamburg-American Line.....	January 9.....	January 10.....	207.....	181
Simon Bolivar.....	Royal Netherlands S. S. Co.....	January 10.....	January 11.....	116.....	(*)
Auditor.....	T. & J. Harrison.....	January 10.....	January 11.....	205.....	(*)
Drechtidijk.....	Holland-America Line.....	January 11.....	January 11.....	157.....	17
Kinai Maru.....	Osaka Shosen Kaisha.....	January 11.....	January 12.....	232.....	24
Baarn.....	Royal Netherlands S. S. Co.....	January 12.....	January 12.....	22½.....	1
Santa Elisa.....	Panama Mail S. S. Co.....	January 12.....	January 13.....	446.....	432
Nuevo Panama.....	Hans Elliot.....	January 12.....	January 13.....	193.....	138
Juan S. Eleano.....	Spanish S. S. Line.....	January 12.....	.....	207.....	.....
Cristobal.....	Panama R. R. S. S. Line.....	January 12.....	.....	1,333.....	.....
Veragua.....	United Fruit Co.....	January 13.....	January 13.....	176.....	226
Santa Paula.....	Panama Mail S. S. Co.....	January 13.....	January 13.....	255.....	204
Zacapa.....	United Fruit Co.....	January 13.....	January 14.....	950.....	387½
Contessa.....	Standard Fruit & S. S. Co.....	January 13.....	January 14.....	330.....	717
Colombie.....	French Line.....	January 13.....	January 14.....	13.....	438
Tuira.....	Hans Elliot.....	January 13.....	January 14.....	28.....	32
Manizales.....	Grace Line.....	January 13.....	January 14.....	1,210.....	418
Durazzo.....	Hamburg-American Line.....	January 13.....	.....	776.....	.....
Salvador.....	Pacific Steam Navigation Co.....	January 14.....	.....	529.....	.....
Esfuerozo.....	R. Feuillebois.....	January 14.....	January 14.....	(*).....	23
Santa Marta.....	United Fruit Co.....	January 14.....	.....	282.....	.....
Jeff Davis.....	Roosevelt S. S. Co.....	January 14.....	January 14.....	207.....	(*)
Colombia.....	Colombian S. S. Line.....	January 14.....	.....	275.....	.....
Simon Bolivar.....	Royal Netherlands S. S. Co.....	January 14.....	.....	9.....	.....

(*) No cargo discharged.

(*) No cargo laded.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Lubricating Oils.

The following is a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils with a statement of the purpose for which it is generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list:

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, M-2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, H-2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, EH-2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, UH-2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive and for tempering.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective January 18, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.13
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.26
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.29
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.07
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1933 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M. ¹	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
Ancon.....	January 17...	January 22...	January 25...	January 29...	February 1...	February 6.
Cristobal.....	January 31...	February 5...	February 8...	February 12...	February 15...	February 20.
Ancon.....	February 15...	February 20...	February 23...	February 26...	March 1...	March 6.
Cristobal.....	February 29...	March 5...	March 8...	March 12...	March 15...	March 20.
Ancon.....	March 14...	March 19...	March 22...	March 26...	March 29...	April 3.
Cristobal.....	March 28...	April 2...	April 5...	April 9...	April 12...	April 17.
Ancon.....	April 11...	April 16...	April 19...	April 23...	April 26...	May 1.
Cristobal.....	April 25...	April 30...	May 3...	May 7...	May 10...	May 15.
Ancon ²	May 9...	May 14...	May 17...	May 21...	May 24...	May 29.
Cristobal ²	May 23...	May 28...	May 31...	June 4...	June 7...	June 12.
Ancon ²	June 6...	June 11...	June 14...	June 18...	June 21...	June 26.
Cristobal ²	June 20...	June 25...	June 28...	July 2...	July 5...	July 10.
Ancon ²	July 5...	July 10...	July 13...	July 16...	July 19...	July 24.
Cristobal ²	July 18...	July 23...	July 26...	July 30...	August 2...	August 7.
Ancon ²	August 1...	August 6...	August 9...	August 13...	August 16...	August 21.
Cristobal ²	August 15...	August 20...	August 23...	August 28...	August 31...	September 5.
Ancon ²	August 29...	September 3...	September 6...	September 10...	September 13...	September 18.
Cristobal ²	September 12...	September 17...	September 20...	September 24...	September 27...	October 2.
Ancon ²	September 26...	October 1...	October 4...	October 8...	October 11...	October 16.
Cristobal.....	October 10...	October 15...	October 18...	October 22...	October 25...	October 30.
Ancon.....	October 24...	October 29...	November 1...	November 5...	November 8...	November 13.
Cristobal.....	November 8...	November 13...	November 16...	November 19...	November 22...	November 27.
Ancon.....	November 21...	November 26...	November 29...	December 3...	December 6...	December 11.
Cristobal.....	December 5...	December 10...	December 13...	December 18...	December 21...	December 26.
Ancon.....	December 19...	December 24...	December 27...	December 31...	January 3...	January 8.

¹ Steamers sail at 4 p. m. from Pier 65, North River, foot of West 25th St., New York. Sailings are at 4 p. m., Eastern standard time, except in the period from May 1 to September 30, inclusive, when they are at 4 p. m., daylight saving time.

² Sailing from New York at 4 p. m., daylight saving time.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal.

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 80 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Information from American Consuls.

The Consular officers of the United States at seaports all over the world are *ex officio* representatives of The Panama Canal for the purpose of furnishing information to shipping and allied interests as to conditions, charges, etc., at the Panama Canal affecting the operation of ships. The current publications of The Panama Canal of interest to shipping are furnished to the Consular officers and filed for reference.

It is not desired that inquiries of a general nature be addressed to the Consular officers, or that they be burdened with requests which should be made direct to The Panama Canal; but ships' operators who may not be sufficiently advised as to charges, supplies, facilities, etc., at the Canal will always save time by applying to the nearest American Consul.

Hours of Departure of Passenger Trains.

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sundays and holidays, 9.25 a. m., 12.30 p. m., 4.40 p. m.; Sundays and holidays, 9.25 a. m., 4.00 p. m.

From Panama: Daily except Sundays and holidays, 7.05 a. m., 12.35 p. m., 4.45 p. m.; Sundays and holidays, 7.05 a. m., 6.05 p. m.

The time required for passage from one terminal to the other is 1 hour and 35 minutes.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal, Washington, D. C.

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at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., January 25, 1933. No. 26.

Panama Canal Traffic During Calendar Year 1932, Segregated by Nationality of Vessels.

Vessels of 22 nationalities made up the commercial traffic through the Canal during the calendar year 1932. Thirty-eight and six-tenths (38.6) per cent of the total transits were vessels of the United States and 24.3 per cent were of British registry. These two nationalities made up 62.9 per cent of the total transits for the year. In order of net tonnage (Panama Canal measurement) the 10 leading nationalities were United States, British, Norwegian, German, Japanese, Dutch, Swedish, Danish, Italian, and French.

The following tabulation shows the commercial traffic through the Canal during the calendar year 1932, segregated according to nationality of vessels, together with corresponding totals for the calendar years 1931 and 1930. A similar table for the calendar year 1931 was published in THE PANAMA CANAL RECORD of January 27, 1932:

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons. of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	11	58,556	44,947	72,463	45,154	\$50,677.39	50,961
Brazilian.....	2	7,312	5,594	9,938	6,124	6,992.50	2,277
British.....	1,059	5,798,395	4,201,637	7,004,290	4,255,293	4,954,654.86	4,426,713
Chilean.....	4	8,765	7,519	11,878	7,570	9,291.03	11,768
Colombian.....	15	3,340	3,289	4,539	3,349	3,077.28	2,154
Danish.....	104	528,213	360,512	600,094	373,522	433,737.15	477,269
Danzig.....	44	330,618	277,613	471,705	267,530	291,699.50	318,345
Dutch.....	98	551,305	381,602	642,022	385,216	454,702.33	439,693
Finnish.....	1	4,460	4,498	4,568	2,760	5,352.00	5,660
French.....	269	396,326	255,461	462,793	263,626	319,382.15	283,229
German.....	323	1,056,479	702,023	1,201,747	713,754	871,529.54	854,742
Greek.....	9	33,973	23,590	35,962	22,332	27,931.95	40,722
Italian.....	61	445,869	300,936	563,063	335,738	367,324.56	195,259
Japanese.....	191	1,042,043	835,100	1,298,813	821,271	1,027,000.97	982,146
Norwegian.....	351	1,775,119	1,205,164	2,013,967	1,210,408	1,410,055.99	1,551,473
Panamanian.....	220	80,018	47,377	88,117	47,734	57,882.09	50,524
Peruvian.....	2	1,838	1,787	2,459	1,473	2,214.80	2,065
Russian.....	4	3,987	2,814	5,835	2,713	3,517.50	.....
Swedish.....	109	528,446	356,800	751,126	438,064	416,009.39	606,983
United States.....	1,686	9,968,001	7,384,961	12,072,377	7,360,438	8,961,902.36	7,777,255
Venezuelan.....	2	2,202	2,100	2,927	2,105	2,105.22	2,000
Yugoslav.....	2	10,876	6,905	11,403	6,869	8,631.25	18,700
Total, 1932.	4,367	22,636,141	16,412,229	27,331,295	16,573,865	19,685,671.81	18,099,938
Total, 1931.	4,972	25,560,252	18,726,592	31,232,070	18,921,461	22,530,820.84	22,048,197
Total, 1930.	5,885	29,260,873	21,916,511	36,300,847	22,068,067	26,146,024.96	27,847,941

* Includes 8 naval vessels aggregating 41,645 displacement tons (tolls \$20,822.50).

* Includes 1 naval vessel of 7,175 displacement tons (tolls \$3,587.50).

* Includes 1 naval vessel of 6,545 displacement tons (tolls \$3,272.50).

RELATION SHOWN BY PERCENTAGE.

The proportions of the traffic by vessels of the various nationalities are indicated in the following tabulation in which percentages of the

total are shown instead of the actual figures, for the calendar years 1931 and 1932. In this table percentages are shown only for those nationalities whose traffic aggregated more than 400,000 net tons (Panama Canal measurement) during 1931 or 1932:

Nationality.	No. of vessels.		Panama Canal net tonnage.		Tolls.		Tons of cargo.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
United States.....	44.1	38.6	45.6	44.0	47.0	45.5	46.9	43.0
British.....	23.7	24.3	25.7	25.6	25.2	25.2	22.6	24.5
Norwegian.....	6.7	8.0	6.2	7.8	5.7	7.2	7.1	8.6
German.....	7.1	7.4	5.5	4.7	5.3	4.4	5.5	4.7
Japanese.....	3.7	4.4	3.9	4.6	4.5	5.2	4.7	5.4
Dutch.....	2.5	2.2	2.2	2.4	2.0	2.3	2.0	2.4
Swedish.....	2.2	2.5	2.1	2.4	1.9	2.1	3.3	3.4
Danish.....	2.5	2.4	2.6	2.3	2.4	2.2	2.8	2.6
Italian.....	1.3	1.4	1.9	2.0	1.8	1.9	1.0	1.1
French.....	2.0	1.6	2.1	1.8	2.0	1.6	1.9	1.6
All other.....	4.2	7.2	2.2	2.4	2.2	2.4	2.2	2.7
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

During the calendar year 1932 vessels of the above listed 10 nationalities comprised 92.8 per cent of the total transits, 97.6 per cent of the total net tonnage (Panama Canal measurement), were the source of 97.6 per cent of the total tolls collected, and carried 97.3 per cent of the total cargo routed through the Canal. Of these 10 nationalities, all showed decreases in tons of cargo carried, and, with the exception of Norwegian and Japanese registry, all showed decreases in the number of transits in comparison with the previous year. Vessels flying the United States flag declined 505 transits, or 23 per cent. Other nationalities showing large percentage of decrease in transits were French which declined 28.9 per cent; Dutch, 21.6 per cent; and Danish, 15.4 per cent. The decline in British traffic was comparatively small, the number of vessels of this nationality decreasing 117, or 9.9 per cent. The gains registered by Norwegian and Japanese vessels equalled 5.7 per cent and 0.3 of 1 per cent, respectively. Swedish traffic remained practically the same with 109 transits in 1932 as against 110 in 1931.

Comparative figures are presented in the following tabulation:

Nationality.	Total transits.		Tons of cargo.		Decrease.		Per cent decrease.	
	1931.	1932.	1931.	1932.	Transits.	Cargo.	Transits.	Cargo.
United States.....	2,191	1,686	10,339,358	7,777,255	505	2,562,103	23.0	24.8
British.....	1,176	1,059	4,990,552	4,426,713	117	563,839	9.9	11.3
Norwegian.....	332	351	1,559,835	1,551,473	¹ 19	8,362	¹ 5.7	0.5
German.....	353	323	1,202,636	854,742	30	347,894	8.5	28.9
Japanese.....	186	191	1,029,413	982,146	¹ 5	47,267	¹ 0.3	4.6
Dutch.....	125	98	444,801	439,693	27	5,108	21.6	1.1
Swedish.....	110	109	726,385	606,983	1	119,402	1.0	16.4
Danish.....	123	104	623,013	477,269	19	145,744	15.4	23.4
Italian.....	66	61	227,926	195,259	5	32,667	7.6	14.3
French.....	97	69	417,872	283,229	28	134,643	28.9	32.2
All others.....	213	316	486,406	505,176	¹ 103	¹ 18,770	¹ 48.4	¹ 3.9
Total.....	4,972	4,367	22,048,197	18,099,938	605	3,948,259	12.2	17.9

¹ Indicates increase.

² The larger portion of the increase shown in transits of "all others," was due to a fleet of small banana schooners under Panamanian registry, plying between the west coast of the Republic of Panama and Cristobal.

For a ready comparison, there is given below a graph showing the tonnage (Panama Canal net), and the percentage of same to the total tonnage, of the 10 leading nationalities represented in the traffic passing through the Canal in the calendar year 1932:

Nationality.		Panama Canal net tonnage.	Per cent of total. 1
United States.....		9,968,001	44.0
British.....		5,798,395	25.6
Norwegian.....		1,775,119	7.8
German.....		1,056,479	4.7
Japanese.....		1,042,043	4.6
Dutch.....		551,305	2.4
Swedish.....		528,446	2.4
Danish.....		528,213	2.3
Italian.....		445,869	2.0
French.....		396,326	1.8
All other.....		545,945	2.4

CANAL WORK IN DECEMBER, 1932.

The following is the report of the Governor to the Secretary of War, of Canal work in the month of December, 1932.

BALBOA HEIGHTS, C. Z., January 18, 1933.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of December, 1932. In it have been incorporated summaries of the traffic through the Canal during the past calendar year.

TRAFFIC FOR CALENDAR YEAR 1932.

Commercial transits for the calendar year ended December 31, 1932, aggregated 4,367 as compared with 4,972 for the calendar year 1931 and 5,885 for the calendar year 1930. It was the lowest traffic for any calendar year since 1922, when 2,997 ships passed through. The daily average number of commercial transits for the past year was 11.93.

In addition to the 4,367 commercial transits, 84 small nonseagoing launches measuring under 20 tons, and 519 noncommercial vessels, principally of the United States Army and Navy, on which no tolls were paid, transited the Canal, making the total number of transits for the calendar year 4,970, a daily average on all traffic of 13.58.

Tolls on the 4,367 commercial vessels aggregated \$19,685,671.81, or a daily average of \$53,785.99.

In comparison with the calendar year 1931, traffic for 1932 declined 12.2 per cent in the number of commercial transits; 11.4 per cent in net tonnage (Panama Canal measurement); 17.9 per cent in cargo tonnage; and 12.8 per cent in tolls collected. In comparison with the calendar year 1930 there occurred a decrease of 25.8 per cent in the number of commercial transits; 22.6 per cent in net tonnage (Panama Canal measurement); 35.0 per cent in cargo tonnage; and 24.7 per cent in tolls collected.

In the first six months of the past year commercial traffic varied between a daily average of 11.20 transits in June and 12.34 in February, a difference of 1.14. The low point of the year's traffic was reached in August when the average dropped to 10.13 per day. From that month, however, traffic showed an uptrend, making four successive increases in daily averages and reaching the high point of the year in December, in which month the daily average was 13.90, a difference of 3.77 transits per day in comparison with the low in August. As has been pointed out in previous reports this increase was due principally to increased tonnage placed in the trade between Europe and the west coast of North America to take care of the heavy movement of cargo, particularly wheat, from the latter area.

The following tabulation gives a ready comparison of the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected from the commercial traffic passing through the Canal during the calendar years 1931 and 1932, by months:

**COMMERCIAL TRAFFIC THROUGH THE CANAL DURING THE CALENDAR YEARS
1931 AND 1932, BY MONTHS.¹**

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.
January...	476	377	2,380,871	2,022,275	2,106,937	1,593,585	\$2,108,140.42	\$1,770,250.68
February...	431	358	2,134,866	1,878,177	1,930,219	1,645,393	1,915,902.78	1,647,797.06
March...	439	363	2,211,934	1,864,896	1,915,507	1,643,952	1,964,434.22	1,645,366.81
April...	453	370	2,292,805	1,863,692	2,011,117	1,443,731	2,014,349.13	1,608,634.67
May...	428	357	2,184,959	1,956,958	1,925,452	1,676,790	1,923,452.18	1,717,401.26
June...	400	336	2,058,546	1,743,150	1,758,976	1,404,558	1,821,408.73	1,534,793.19
July...	406	326	2,110,701	1,676,492	1,866,803	1,259,981	1,848,638.45	1,468,728.36
August...	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September...	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October...	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November...	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December...	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
Total.	4,972	4,367	25,560,252	22,636,141	22,048,197	18,099,938	22,530,820.84	19,685,671.81

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

COMMERCIAL TRAFFIC BY CALENDAR YEARS, 1914 TO 1932.

The following statement is a summary of the traffic through the Canal by calendar years since its opening:

Calendar year.	No. of ships.	Panama Canal net tonnage.	United States net tonnage.	Registered.		Tolls.	Tons of cargo.
				Gross.	Net.		
1914.....	1,350	1,284,293	(²)	1,789,721	(²)	\$1,508,737.56	1,758,625
1915.....	1,154	3,902,512	(²)	(²)	(²)	4,297,467.11	4,893,422
1916.....	1,217	3,817,704	3,078,623	(²)	(²)	3,671,162.68	4,774,822
1917.....	1,960	6,217,054	5,116,001	(²)	(²)	6,107,696.63	7,443,610
1918.....	2,070	6,409,886	5,369,341	(²)	(²)	6,317,455.39	7,284,159
1919.....	2,130	6,932,984	5,828,118	7,719,306	4,919,189	6,973,095.30	7,463,151
1920.....	2,814	10,378,265	8,543,403	13,300,887	8,458,401	10,295,362.21	11,236,119
1921.....	2,783	11,435,811	9,303,687	14,451,830	9,225,519	11,261,098.80	10,707,005
1922.....	2,997	12,992,573	10,375,771	16,315,147	10,310,113	12,573,407.77	13,710,556
1923.....	5,037	24,737,437	19,979,628	31,058,095	19,931,570	22,966,838.18	25,160,545
1924.....	4,893	24,411,760	19,414,771	31,127,724	19,440,024	22,809,416.34	25,892,134
1925.....	4,774	22,958,158	18,141,695	29,368,840	18,228,704	21,380,759.70	23,701,277
1926.....	5,420	25,836,241	20,254,503	33,044,274	20,329,791	23,901,540.04	27,586,051
1927.....	6,085	28,610,984	22,360,998	36,381,124	22,353,512	26,231,022.94	29,102,538
1928.....	6,334	28,943,437	22,217,654	36,359,701	22,268,506	26,375,962.41	29,401,581
1929.....	6,430	30,353,189	23,138,682	38,061,989	23,241,639	27,592,715.84	31,450,493
1930.....	5,885	29,260,873	21,916,511	36,300,847	22,068,067	26,146,024.96	27,847,941
1931.....	4,972	25,560,252	18,726,592	31,232,070	18,921,461	22,530,820.84	22,048,197
1932.....	4,367	22,636,141	16,412,229	27,331,295	16,573,865	19,685,671.81	18,099,938
Total.....	71,672	326,679,554				302,626,256.51	329,562,164

¹ Canal opened to traffic August 15, 1914.

² Canal open to traffic for approximately 8½ months.

³ Indicates figures not available.

NUMBER OF VESSELS TRANSITING CANAL IN 1932.

The total number of vessels and craft of all kinds transiting the Canal during the calendar year 1932, by months, is shown in the following tabulation:

Month.	Commercial.		Noncommercial.			Total.
	Vessels.	Launches. ¹	United States Government.	For repairs.	Other.	
January.....	377	9	52	2		440
February.....	358	7	98			463
March.....	363	6	52			421
April.....	370	7	27			404
May.....	357	8	25			390
June.....	336	11	40			387
July.....	326	6	33	4		369
August.....	314	7	33			354
September.....	353	7	23		2	385
October.....	394	9	40			443
November.....	388	4	42			434
December.....	431	3	45		1	480
Total.....	4,367	84	510	6	3	4,970

¹ Miscellaneous small nonseagoing craft, which, although paying tolls, are excluded from the statements of commercial traffic.

COMMERCIAL TRAFFIC FOR DECEMBER, 1932.

During the month of December, 1932, 431 commercial vessels and 3 small nonsea-going launches transited the Canal. In addition to these, there were 45 vessels belonging to the United States Government, and 1 vessel belonging to the Colombian Government, on which no tolls were collected, making a total of 480 transits for the month, or a daily average on all traffic of 15.48.

Tolls on the commercial vessels amounted to \$1,781,940.03, and on the launches to \$7.50, a total of \$1,781,947.53, or a daily average on all traffic of \$57,482.18.

Compared with the previous month (November, 1932), commercial traffic for the past month made an increase of 11.1 per cent in transits and 1.4 per cent in tolls collected, and in comparison with the corresponding month in 1931, it made a gain of 11.4 per cent in transits and 1.4 per cent in tolls collected. The small increase in tolls in comparison with the increase of transits is due principally to the traffic of small Panamanian vessels carrying bananas from the Pacific coast of Panama to Cristobal. These vessels pay relatively slight tolls when laden, and usually make the transit in one direction at the lower ballast rate. In November there were 15 transits of the craft, with an average of 33 net tons, Panama Canal measurement, per transit, and in December, 38, averaging 32 net tons per transit.

The total numbers of craft of all kinds transiting the Canal during the month of December in the two preceding years and in 1932 are shown in the following tabulation:

	December, 1930.	December, 1931.	December, 1932.
Commercial vessels.....	495	387	431
Launches (under 20 tons).....	9	11	3
Noncommercial vessels:			
United States Government.....	31	22	45
Colombian Government.....			1
Vessels for repairs.....	2	1	
Total.....	537	421	480

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	5	6	11
Pedro Miguel.....	24	28	52
Miraflores.....	32	32	64
Total.....	61	66	127

The following is a summary of the commercial traffic for December in the years 1930, 1931, and 1932, and comparison with the monthly averages for the calendar year 1932:

	December, 1930.	December, 1931.	December, 1932.	Average per month for calendar year 1932.
Number of vessels.....	495	387	431	364
Panama Canal net tonnage.....	2,473,626	2,033,158	2,080,069	1,886,345
United States net tonnage.....	1,834,879	1,472,027	1,501,590	1,367,686
Registered gross tonnage.....	3,060,391	2,480,243	2,490,062	2,277,608
Registered net tonnage.....	1,848,484	1,486,473	1,515,826	1,381,155
Tolls.....	\$2,192,583.85	\$1,757,869.54	\$1,781,940.03	\$1,640,472.65
Tons of cargo carried.....	2,166,884	1,648,904	1,621,581	1,508,328

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for calendar year 1932.
	December, 1930.	December, 1931.	December, 1932.	
Number of transits.....	15.97	12.48	13.90	11.93
Panama Canal net tonnage.....	79,794	65,586	67,099	61,847
Tolls.....	\$70,728.51	\$56,705.47	\$57,481.94	\$53,785.99
Tons of cargo.....	69,899	53,191	52,309	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of December in 1930, 1931, and 1932, are shown in the following tabulation:

	Average per vessel.			Average per vessel for calendar year 1932.
	December, 1930.	December, 1931.	December, 1932.	
Panama Canal net tonnage.....	4,997	5,254	4,826	5,195
United States net tonnage.....	3,707	3,804	3,484	3,767
Registered gross tonnage.....	6,133	6,409	5,777	6,273
Registered net tonnage.....	3,734	3,841	3,517	3,804
Tolls.....	\$4,429.46	\$4,542.40	\$4,134.43	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,378	4,261	3,762	4,154
Tons of cargo (laden vessels only).....	5,209	5,185	4,741	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fifteen nationalities were represented in the commercial traffic through the Canal in December, 1932, in comparison with 14 in the previous month, and 17 in December, 1931. Vessels of United States registry, with 142, led in the number of transits in the past month, while those flying the British flag, with 104, were second. Vessels of these two nationalities made up 57 per cent of the total transits for the month. Vessels of Panamanian, Norwegian, and German registry were next in numerical importance with 47, 46, and 33, respectively. With respect to net tonnage (Panama Canal measurement), vessels of the United States with 863,246 tons, made up 41.5 per cent of the aggregate; British, with 551,441 tons, made up 26.5 per cent; Norwegian, with 217,581 tons, made up 10.5 per cent; and German, with 101,031 tons, made up 4.9 per cent.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of December, 1932, was 1,621,581 tons, a decrease of 27,323 tons, or 1.7 per cent, in comparison with December, 1931. Cargo from the Atlantic to the Pacific aggregated 391,087 tons, compared with 343,229 tons in the previous month and 501,408 tons in December, 1931. From the Pacific to the Atlantic cargo amounted to 1,230,494 tons, as compared with 1,188,280 tons in the previous month and 1,147,496 tons in December, 1931. The combined cargo movement in December, 1932, was greater by 90,072 tons, or 5.9 per cent, than that passing through in the previous month.

From the Atlantic to the Pacific, raw cotton comprised the leading commodity, with shipments totaling 81,087 tons, followed by manufactures of iron and steel with 46,328 tons, mineral oils with 21,494 tons, paper with 18,644 tons, sulphur with 15,158 tons, and corn with 13,377 tons. A heavy increase occurred in corn shipments, also a slight increase in the shipments of paper, while the balance of the items decreased in comparison with December, 1931.

From the Pacific to the Atlantic, wheat, totaling 337,021 tons, was the leading commodity, surpassing mineral oils which normally form the commodity of greatest tonnage in this direction. Mineral oils, with 323,535 tons, ranked second during the past month, followed by lumber with 135,674 tons, sugar with 94,179 tons, canned goods with 45,106 tons, and metals with 32,990 tons. Of these items wheat, mineral oils, and sugar made increases in comparison with December, 1931, while shipments in the other mentioned commodities declined. Wheat shipments through the Canal from the Pacific to the Atlantic in the past month were the highest since February, 1928.

There was a decrease of 110,321 tons, or 22.0 per cent, in the Atlantic to Pacific movement in comparison with December, 1931, while in the opposite direction an increase of 82,998 tons, or 7.2 per cent, was made.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.887 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.717 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of December, 1932, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian.....	\$6,232.50	\$6,292.00	\$59.50		.991	
British.....	465,113.76	505,630.20	40,516.44		.876	.718
Chilean.....	8,788.75	8,217.00		\$571.75	1.070	
Colombian.....	226.50	184.20		42.30		.738
Danish.....	46,007.29	53,601.20	7,593.91		.807	.720
Danzig.....	48,619.56	43,980.80	4,970.85	4,638.76	1.063	.720
Dutch.....	35,903.41	41,143.80	5,240.39		.842	.720
French.....	16,901.15	21,872.00	4,970.85		.712	.720
German.....	82,711.88	97,099.40	14,387.52		.829	.720
Italian.....	30,049.03	35,031.40	4,982.37		.816	.720
Japanese.....	73,630.55	75,920.60	2,290.05		.960	.745
Norwegian.....	170,960.18	185,479.40	14,519.22		.832	.707
Panamanian.....	6,792.40	8,809.40	2,017.00		.755	.746
Swedish.....	22,129.61	27,134.80	5,005.19		.765	.720
United States.....	767,873.46	819,924.80	52,051.34		.914	.720
Total.....	1,781,940.03	1,930,321.00	153,633.78	5,252.81	.887	.717
Net increase for all traffic.....			148,380.97			

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$32,356.66
United States foreign trade.....	19,694.68
Total.....	52,051.34

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in December, 1932, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
Belgian.....		1.61	1.61
British.....	.62	1.43	1.07
Chilean.....		1.40	1.40
Danish.....	.75	1.41	1.09
Danzig.....		1.90	1.90
Dutch.....	.28	1.51	1.04
French.....	.18	1.21	.96
German.....	.50	1.33	.93
Italian.....	.26	.83	.72
Japanese.....	1.00	.91	.96
Norwegian.....	.59	1.55	1.26
Panamanian.....	.29	1.50	.44
Swedish.....	.29	1.57	1.01
United States.....	.43	1.12	.78
Averages, December, 1932.....	.52	1.29	.95
Averages, December, 1931.....	.62	1.28	.96
Averages, December, 1930.....	.60	1.37	1.03

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of December, 1932, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tanks ships—						
Ballast.....	31	180,588	\$130,023.36			
Laden.....	1	4,895	5,321.25	27	169,551	\$174,836.25
All others—						
Ballast.....	55	191,880	137,186.69	2	1,773	1,147.75
Laden.....	141	747,879	652,397.05	173	783,374	680,934.80
Noncargo-carrying ships:						
Yachts.....	1	129	92.88			
Total.....	229	1,125,371	925,021.23	202	954,698	856,918.80
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	132	698,144	595,565.40	118	574,650	525,032.50
Motor.....	77	426,482	328,841.40	66	379,455	331,183.80
Motor schooner.....	19	616	521.55	18	593	702.50
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	1	129	92.88			
Total.....	229	1,125,371	925,021.23	202	954,698	856,918.80

Of the 250 steam driven vessels, 163 were oil burning, 83 coal burning, and 4 burned either oil or coal.

NONCOMMERCIAL TRAFFIC.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of December, 1932. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Auxiliaries.....	1	2 3,776	\$2,718.72			
Cargo ships.....	1	2 3,454	4,144.80	1	2 3,434	\$4,292.50
Crane boats.....	1	2 10	5.00			
Destroyers.....	1	2 1,215	607.50	5	2 6,071	3,035.50
Frigates.....	1	2 2,200	1,100.00			
Mine sweepers.....	3	2 2,850	1,425.00	3	2 2,850	1,425.00
Submarines.....	4	2 3,621	1,810.50	7	2 6,249	3,124.50
Submarine chasers.....	2	2 154	77.00			
Survey ships.....	2	2 4,815	2,407.50			
Tankers.....	1	2 5,063	6,328.75	1	2 5,063	6,328.75
Transports.....	1	2 3,992	4,990.00	1	2 3,992	4,990.00
U. S. Army vessels:						
Launches.....	1	2 10	7.50			
Mine planters.....	1	2 1,208	604.00	1	2 1,208	604.00
Transports.....	2	2 20,100	25,125.00	3	2 25,410	31,762.50
Tugs.....	1	2 15	11.25			
Total, U. S. Government.....	23		51,362.52	22		55,562.75
Colombian Government vessels:						
Tugs.....				1	2 240	180.00
Grand total.....	23		51,362.52	23		55,742.75

¹ Indicates displacement tonnage.

² Indicates Panama Canal net tonnage.

³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of December, 1932, carried cargo as follows: Atlantic to Pacific, 5,879 tons; Pacific to Atlantic, 3,265 tons; total, 9,144 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net) transiting the Canal during the month of December, 1932. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific	1	4	\$3.00
Pacific to Atlantic	2	6	4.50
Total	3	10	7.50

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of December, 1932, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	18,920	46,168	65,088
Local cargo shipped..... tons..	5,285	278	5,563
Cargo received for transshipment..... tons..	25,424	2,028	27,452
Cargo transhipped..... tons..	24,985	1,398	26,383
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	127	45	172
Number of releases issued.....	901	282	1,183
Tons received.....	810	203	1,013
Tons withdrawn.....	930	170	1,100
Packages received.....	8,704	2,964	11,668
Packages withdrawn.....	8,046	1,881	9,927
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	23		23
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,212		3,212
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	152	7	159
U. S. Army, including vessels..... tons..	56	1	57
Individuals and companies..... tons..	54		54
Transferred to Navy..... tons..	8		8
Total sales and issues..... tons..	3,482	8	3,490
Coal on hand, December, 1932..... tons..	28,448		28,448
Coal on hand January 1, 1933..... tons..	24,966		24,966
Coal received from Navy..... tons..		8	8
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls..	5,258.74	13,713.28	18,972.02
Panama Railroad Company..... bbls..	16,056.67	648.40	16,705.07
U. S. Army and Navy..... bbls..	1,010.00	108.30	1,118.30
Total sales and issues..... bbls..	22,325.41	14,469.98	36,795.39
Fuel on hand January 1, 1933..... bbls..	45,971.34	44,250.76	90,222.10
Diesel oil issued during December, 1932..... bbls..	248.19	2,274.25	2,522.44
Diesel oil on hand January 1, 1933..... bbls..	3,752.55	16,722.94	20,475.49
Miscellaneous transfers..... bbls..	12,976.76	1,095.72	14,072.48
Gasoline and kerosene pumped for The Panama Canal..... bbls..	2,594.61	6,353.33	8,947.94
Gasoline pumped for individuals and companies..... bbls..	6,574.10	21,123.70	27,697.80
Oil pumped for individuals and companies:			
Receipts..... bbls..	96,690.40	205,474.83	302,165.23
Issues..... bbls..	142,385.40	36,719.44	179,104.84
Oil pumped for U. S. Navy..... bbls..	1,336.00	71,165.30	72,501.30
Total fuel oil, gasoline, and kerosene handled..... bbls..	285,130.87	358,676.55	643,807.42
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	8	4	12
Measured for Panama Canal net tonnage.....		3	3
Remeasured for Panama Canal net tonnage.....	10	3	13
Panama Canal net tonnage corrected.....	10	5	15
U. S. equivalent tonnage corrected.....	12	10	22
Services of harbor equipment:			
Tugs, total operating hours.....	229½	126	355½
Launches, total operating hours.....	944½	1,073½	2,018

	Cristobal.	Balboa.	Total.
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$7,953.75	\$3,666.25	\$11,620.00
Pilotage.....	15,600.00	6,098.00	21,698.00
Seamen.....	9,928.00	8,688.00	18,616.00
Launch service.....	1,527.50	1,734.50	3,262.00
Wharfage.....	13,396.63	3,947.73	17,334.36
Ships measured.....		10.00	10.00
Miscellaneous.....	326.90	170.40	497.30
Clearances issued.....	233	231	464
Bills of health issued.....	239	237	476

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal..	465	3,116,231	1,881,936	436	2,678,333	1,645,964
Vessels entering port but not transiting Canal.	63	507,151	283,637	11	54,235	32,058
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	109	782,521	475,348	97	715,366	430,778
<i>Ships clearing.</i>						
All vessels, including those transiting Canal..	458	3,093,474	1,868,971	438	2,686,445	1,652,566
Vessels clearing port but not transiting Canal.	62	500,059	280,227	12	64,051	37,929
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	108	796,502	484,089	96	708,663	426,575

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:									
From Atlantic ports....	777	708	1,485	79	623	702	856	1,331	2,187
From Pacific ports.....	109	233	342	227	231	458	336	464	800
Total disembarking.....	886	941	1,827	306	854	1,160	1,192	1,795	2,987
Embarking:									
For Atlantic ports.....	598	808	1,406	74	399	473	672	1,207	1,879
For Pacific ports.....	119	174	293	171	269	440	290	443	733
Total embarking.....	717	982	1,699	245	668	913	962	1,650	2,612
Remaining on board:									
From Atlantic to Pacific ports.....	1,401	1,868	3,269				1,401	1,868	3,269
From Pacific to Atlantic ports.....				818	2,209	3,027	818	2,209	3,027
From Atlantic to Atlantic ports.....	3,403	223	3,626				3,403	223	3,626
From Pacific to Pacific ports.....				17	100	117	17	100	117
Total remaining on board.....	4,804	2,091	6,895	835	2,309	3,144	5,639	4,400	10,039
Total arriving on Canal Zone.	5,690	3,032	8,722	1,141	3,163	4,304	6,831	6,195	13,026
Total departing from Canal Zone.....	5,521	3,073	8,594	1,080	2,977	4,057	6,601	6,050	12,651

NOTE.—In passengers "remaining on board," those from the Atlantic to Pacific and Pacific to Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.....	229	65	28.4	4,264
Pacific to Atlantic.....	202	69	34.2	3,842
Total.....	431	134	31.1	8,106

In addition to the aforesaid, 54 passenger-carrying vessels called at the port of Cristobal and 6 at the port of Balboa without transiting the Canal, making a total of 194 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of December, 1932, 40 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa. A total of 101 passengers (45 from the north and 56 from the south) disembarked from the planes landing at Cristobal, and 95 passengers (45 for the north and 50 for the south) embarked. One through passenger was reported on the plane calling at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of December, 1932, together with the total sales in the corresponding month in 1931 and 1930:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$642.16	\$3,365.60	\$6,028.30	\$22.29	\$2,690.80	\$12,749.15
Government vessels.....	139.30	1,463.53	3,586.62	20.71	275.00	5,485.16
P. R. R. vessels.....		334.49	93.67	628.33	14.46	1,070.95
Total sales, December, 1932..	781.46	5,163.62	9,708.59	671.33	2,980.26	19,305.26
Total sales, December, 1931..	753.85	6,214.02	13,705.06	1,436.47	5,754.85	27,864.25
Total sales, December, 1930..	1,876.95	11,055.42	24,429.88	877.50	9,119.71	47,359.46
Sales at Balboa to:						
Commercial vessels.....	250.25	2,486.69	4,303.27	160.61	2,260.62	9,461.44
Government vessels.....	537.05	3,252.61	15,172.90	775.23	1,378.31	21,116.10
Total sales, December, 1932..	787.30	5,739.30	19,476.17	935.84	3,638.93	30,577.54
Total sales, December, 1931..	730.38	4,417.69	17,903.15	1,138.40	3,331.71	27,521.33
Total sales, December, 1930..	1,220.25	4,435.04	25,724.83	1,488.02	11,199.48	44,067.62

The aggregate sales to commercial vessels during the month were \$22,210.59; to Government vessels, \$26,601.26; and Panama Railroad vessels, \$1,070.95; making the total sales to all vessels, \$49,882.80. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of December, 1932, as compared with the corresponding month in 1931 and 1930:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial. †					
	North.	South.	Total.	North.	South.	Total.	Dec., 1930.	Dec., 1931.	Dec., 1932.
Gatun.....	182	202	384	9	11	20	486	395	404
Pedro Miguel.....	185	206	391	16	19	35	509	414	426
Miraflores.....	185	204	389	17	15	32	510	414	421
Number of vessels put through locks.									
Gatun.....	202	229	431	35	38	73	548	448	504
Pedro Miguel.....	202	229	431	50	58	108	562	489	539
Miraflores.....	202	229	431	59	62	121	561	492	552

* Includes tolls paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	59	53	53
Panama Canal equipment.....	11	52	64
Launches under 20 tons measurement.....	2	2	3
Colombian Government vessels.....	1	1	1

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in December, 1932, as compared with the preceding month and the corresponding month in 1931:

	Gatun.	Pedro Miguel.	Miraflores.
	<i>Cubic feet.</i>	<i>Cubic feet.</i>	<i>Cubic feet.</i>
Lockages.....	1,682,670,000	1,411,030,000	1,361,770,000
Leakage.....	30,000,000	75,000,000	40,000,000
Maintenance.....	39,020,000	.....	10,080,000
Total, December, 1932.....	1,751,690,000	1,486,030,000	1,411,850,000
Total, November, 1932.....	1,623,230,000	1,470,660,000	1,367,290,000
Total, December, 1931.....	1,695,050,000	1,434,880,000	1,285,290,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of December, 1932, are shown in comparative form in the following tabulation:

	December.		December—Years of record.		
	1931.	1932.	Maximum.	Minimum.	Mean.
Discharge of Chagres River at Alhajuela.....	<i>C. f. s.</i> 3,029	<i>C. f. s.</i> 4,663	<i>C. f. s.</i> 15,820	<i>C. f. s.</i> 1,391	<i>C. f. s.</i> 3,675
Maximum momentary discharge for the month.....	10,940	18,174	139,400	970	.....
Gatun Lake watershed, total yield.....	6,315	11,156	11,156	3,005	7,293
Gatun Lake watershed, net yield.....	5,686	10,623	10,623	2,158	6,660
Draft on Gatun Lake for lockages and power.....	2,717	2,878	.....	.....	² 2,722

¹ December 26, 1909.

² Ten-year average, 1921-1930.

The monthly mean discharge of the Chagres River at Alhajuela for December, 1932, was 4,663 c. f. s. which is 27 per cent above the 31-year average of 3,675 c. f. s. The maximum monthly mean discharge on record for December is 15,820 c. f. s. in 1909 and the minimum is 1,391 c. f. s. in 1911. The maximum momentary discharge for the month was 18,174 c. f. s. at elevation 99.92 feet on the 24th, and the minimum was 2,377 c. f. s. at elevation 93.17 feet on the 31st. The maximum momentary discharge on record for December is 139,400 c. f. s. at elevation 121.00 feet on December 26, 1909, and the minimum is 970 c. f. s. at elevation 92.16 feet on December 31, 1911.

Gatun Lake varied in elevation during December from a minimum of 86.33 feet on the 1st to a maximum of 87.11 feet on the 20th, and averaged 86.84 feet. The total yield of Gatun Lake watershed for the month was 11,156 c. f. s., which is 53 per cent above the 19-year December average of 7,293 c. f. s., and establishes a new maximum total yield on record for December. The previous maximum was 10,959 c. f. s. in 1928. The minimum on record for December is 3,005 c. f. s. in 1918.

Miraflores Lake varied between elevations 54.45 feet on the 5th and 52.22 feet on the 20th, averaged 53.57 feet, and ended the month at 53.89 feet.

SEISMOLOGY.

Three seismic disturbances were recorded during the month—on the 13th, 21st, and 25th. The one on the 13th was of local origin and those on the 21st and 25th of distant origin.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 6,070,200 kilowatt hours, and the computed water consumption was 4,574,394,758 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 21,100 kilowatt hours, and the fuel oil consumption was 47.56 barrels. Diesel units were on the bus 8 times during the month, 5 of which were for dry dock pump operations and 3 for test purposes.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 27 vessels during the month. There were 337 work orders issued during the month, as compared with 353 during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of December, 1932, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	7	29	32
United States Army and Navy.....	5	2	3
Other United States Government.....	1		1
Panama Canal equipment.....	1	3	1
At Balboa:			
Commercial.....	1	3	4
United States Army and Navy.....	3	5	4
Panama Canal equipment.....	2	5	5
Total.....	20	47	50
Vessels in dry dock.			
At Cristobal:			
Commercial.....		1	1
United States Army and Navy.....	1		1
At Balboa:			
Commercial.....		1	1
United States Army and Navy.....	1	2	2
Panama Canal equipment.....		2	1
Total.....	2	6	6

Work on the overhaul of the United States Navy submarine *S-12* was continued during the month. Work on the United States Navy cruiser *Memphis* was completed during the month. The United States frigate *Constitution* was at Balboa for dry docking and repairs. Work was carried forward on United States Navy mine sweeper *Mallard* and destroyer *Overton*.

MUNICIPAL ENGINEERING DIVISION.

In connection with the installation of oil lines to the coaling dock at Cristobal, 468 cubic yards were excavated for pipe line ditch; forces installed 504 feet of 16-inch pipe, 846 feet of 12-inch pipe, and 46 feet of 10-inch pipe; painted 16-inch line where exposed to salt water; made necessary alterations to manifold at the oil handling plant and connected two 16-inch lines to manifold. Work on this project is 98 per cent completed.

In the Cristobal dry dock about 60 per cent of the floor of the present dock was blasted to a depth of 7 feet and the north wall was blasted to a depth of 6 feet. About 1,500 cubic yards of earth and rock were removed by clamshell and hauled to make fills around Mechanical Division and Supply Department buildings, and for a road near the Mechanical Division office.

Work on a number of improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 744,764,250 gallons.

DREDGING DIVISION.

The movement of West Culebra slide on the 450-foot base line showed an average of 3.2 feet toward the Canal between stations 1770 plus 00 and 1794 plus 00 W., and an average of 2.6 feet toward the south between stations 1770 plus 00 and 1775 plus 00 W. The reference points on this slide showed no movement during the month. A dipper dredge worked 5½ days in this slide between stations 1763 plus 00 and 1770 plus 00 W., removing a total of 13,850 cubic yards of which 8,300 cubic yards were rock. There was no observed movement on any of the reference points on East Culebra slide during the month. A dipper dredge worked 17½ days in front of this slide between stations 1771 plus 00 and 1788 plus 50 E., removing a total of 70,350 cubic yards, of which 56,300 cubic yards were rock.

The East Culebra slide extension showed only a slight surface movement, full channel width and depth having been maintained throughout the month. A dipper dredge worked four days in front of this slide between stations 1761 plus 50 and 1763

plus 50 E., removing a total of 23,600 cubic yards, of which 17,700 cubic yards were earth, sluiced by the grader and 5,900 cubic yards were rock.

Slight surface movements occurred during the month at Cucaracha, South Cucaracha, Cucaracha Signal Station, Cartagena, West Lirio, East Empire, Division Office, Southwest La Pita, and West Whitehouse slides during the month.

There was no interference with shipping on account of slides during the month.

The total excavation during December, 1932, was 512,850 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
Project No. 9.....	7,500	42,600	50,100
West Culebra slide.....	5,550	8,300	13,850
East Culebra slide (excluding extension).....	14,050	56,300	70,350
East Culebra slide extension.....	17,700	5,900	23,600
Maintenance.....	13,950	31,400	45,350
Canal prism, Pacific entrance—			
Project No. 1.....		18,300	18,300
Maintenance.....	138,300		138,300
Balboa inner harbor—			
Maintenance.....	153,000		153,000
Total.....	350,050	162,800	512,850

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 31 days during the month. A total of 1,518 single trips were made, and 905 Panama Canal, 249 U. S. Army, and 10,267 other vehicles, a total of 11,421, were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and the contractors for December was 281 gold and 727 silver employees.

The final clean-up excavation was made for the power house, 12-B, and the aprons upstream from blocks 11, 13, 14, and 15. Near the end of the month, the removal of material was started on the power house tail race and for the apron paving below the draft tubes. A small amount of work was done on the right abutment and over the right training wall which consisted of removing earth and rock from the upper levels and letting it run down to the foot of the cliff. None of this has been removed.

The flood in the latter part of the month of November, 1932, left a deposit of sand and silt over practically the entire area within the levee. This averaged one foot in thickness with occasional depths up to five feet in low spots and holes. Block 11 at elevation 95 was covered one foot deep and block 12 at elevation 110 had considerable deposits on its surface. These deposits were removed where necessary to allow construction to proceed.

The concrete placing program was seriously delayed by the wrecking of the gravel conveying tramway in the flood. It was still out of commission at the end of the month and all aggregates produced have been hauled over the road to the screening and washing plant. Concrete placed during the month was as follows: Block No. 12, elevation 110 to 120; block 13, elevation 85 to 90; block 11-B-L, completed; block 12-B, completed; block 19, elevation 245 to 250; power plant to elevation 93, completed.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on December 31, 1932, was 24,140, composed of 8,183 Americans, 2,808 of whom were men, 2,579 women, and 2,796 children; 183 Europeans, 74 of whom were men, 28 women, and 81 children; and 15,774 West Indians and other nationalities, 4,155 of whom were men, 2,838 women, and 8,781 children. The total number of persons in quarters on December 31, 1931, was 24,366.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of December 21, 1932, with a comparison of the working force for the preceding month and for December, 1931:

	Total employees.		As of December 21, 1932.		
	December, 1931.	November, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	102	100	55	65	120
Electrical.....	380	334	150	235	385
Municipal Engineering.....	881	750	90	825	915
Lock Operation.....	930	907	240	731	971
Dredging.....	1,115	967	167	800	967
Madden Dam.....	294	196	53	146	199
Mechanical.....	1,177	1,125	422	808	1,230
Marine.....	734	656	178	489	667
Fortifications.....	248	97	13	73	86
Total.....	5,861	5,132	1,368	4,172	5,540
Supply Department:					
Quartermaster.....	1,726	1,678	194	1,515	1,709
Commissary.....	1,570	1,488	224	1,238	1,462
Cattle Industry—Plantations.....	107	100	2	98	100
Hotel Tivoli.....	109	101	7	91	98
Hotel Washington.....	93	88	8	83	91
Transportation.....	295	298	78	224	302
Total.....	3,900	3,753	513	3,249	3,762
Accounting Department.....	205	195	190	5	195
Health Department.....	1,091	1,118	274	843	1,117
Executive Department.....	925	927	567	363	930
Total.....	2,221	2,240	1,031	1,211	2,242
Panama Railroad Company:					
General Manager.....	104	75	23	56	79
Transportation.....	378	304	71	242	313
Receiving and Forwarding Agency.....	1,045	631	91	500	591
Coaling Stations.....	153				
Total.....	1,680	1,010	185	798	983
Grand total, December, 1931.....	13,662				
Grand total, November, 1932.....		12,135			
Grand total, December, 1932.....			3,097	9,430	12,527

Additions to the gold force on the Isthmus in December were as follows: Employed in the United States, 1; employed on the Isthmus 2; reemployed on the Isthmus, 27; total, 30. Separations from the gold force totaled 12, as follows: Resigned, 1; discharged, 3; retired, 5; died, 3. At the end of the month there were on file 900 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 717 and separations from service, 166; the number seeking employment was estimated at approximately 3,000.

VITAL STATISTICS.

A total of 190 deaths occurred during the month of December, 1932, among the residents of the Canal Zone (42,070) and the cities of Panama (77,500) and Colon (30,000), total population of 149,570, which is equivalent to an annual death rate of 15.24 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 29; pneumonia (broncho and lobar), 20; organic diseases of the heart, 10; diarrhea and enteritis, 10; chronic nephritis, 8; and cancer, 8. There were 6 deaths from syphilis, 4 from leprosy, and 1 from typhoid. There were 40 deaths among nonresidents, which are not included in the above statistics.

There were 373 live births and 11 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 30.81. Deaths among children under 1 year of age numbered 37, giving an infant mortality rate based on the number of live births reported, of 99.20.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 121, of whom 14 were employees (11 white and 3 colored), 13 were members of employees' families (2 white and 11 colored), 5 were employees of Madden Dam contractors (2 white and 3 colored), 11 were Canal Zone agriculturists, 54 were other civilian nonemployees, and 24 were Army and Navy personnel. Of the 27 employees and members of employees' families, 17 were probably infected outside our sanitized areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were 2 deaths from malaria among residents, both of Panama City, one of whom, a child, had been visiting in the interior where it is believed the infection was acquired.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$270,820.39, of which \$257,078.87 was for the Department of Operation and Maintenance, and \$13,741.52 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$31,855.45.

FINANCIAL STATEMENT.

The following statement shows in condensed form the aggregate revenue and expenditures for the month of November, 1932, as compared with November, 1931, with the figures for the first 5 months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of December at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	November, 1931.	November, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,762,086.34	1,756,880.99	\$9,025,442.47	\$7,979,629.85
Other receipts.....	260,418.07	238,016.30	1,293,980.32	1,191,638.97
Total transit revenues.....	2,022,504.41	1,994,897.29	10,319,422.79	9,171,268.82
Total transit expenses.....	1,063,098.78	960,317.08	5,299,595.42	4,535,174.27
Net transit revenues.....	959,405.63	1,034,580.21	5,019,827.37	4,636,094.55
3 % fixed capital charge.....	1,266,478.26	1,272,757.12	6,319,557.12	6,351,452.13
Deficit.....	(307,072.62)	(238,176.91)	(1,299,729.75)	(1,715,357.58)
Business revenues.....	1,550,549.44	1,163,982.00	7,143,793.59	6,063,468.32
Business expenses.....	1,514,784.69	1,087,004.58	6,685,693.35	5,782,302.23
Net business revenues.....	35,764.75	76,977.42	278,100.24	281,166.09
3 % fixed capital charge.....	59,719.95	60,007.90	311,433.93	312,372.97
Surplus or (deficit).....	(23,955.20)	16,969.52	(33,333.69)	(31,206.88)
Combined revenues.....	3,573,053.85	3,158,879.29	17,463,216.38	15,234,737.14
Combined expenses.....	2,577,883.47	2,047,321.66	12,165,288.77	10,317,476.50
Net revenues.....	995,170.38	1,111,557.63	5,297,927.61	4,917,260.64
3 % fixed capital charge.....	1,326,198.21	1,332,765.02	6,630,991.05	6,663,825.10
Deficit.....	(331,027.83)	(221,207.39)	(1,333,063.44)	(1,746,564.46)

() Indicates deficit.

Respectfully,

J. L. SCHLEY,
Governor.

Notice to Mariners and Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 21, 1933.

No. 12.

Panama Canal, Pacific entrance, Ancon Hill, steel triangulation tower removed. The Commandant of the 15th Naval District is the authority for the following information:

With reference to Notice to Mariners and Aviators No. 1241, dated Balboa Heights, C. Z., December 7, 1932, the Commanding Officer of the U. S. S. *Hannibal* has advised that the steel triangulation tower erected on Ancon Hill was removed January 16, 1933.

J. L. SCHLEY,
Governor.

Two East Asiatic Vessels to Call at Kingston.

The East Asiatic Company, operating a fleet of motor vessels in the trade between Europe and the west coast of North America, has announced through its Isthmian agents, that its motor liners *Amerika* and *Europa* will call at Kingston, Jamaica, on both outward and homeward voyages. This schedule becomes effective with the sailing on January 10, 1933, from Southampton, of the *Amerika*, and from Cristobal of the *Europa* on February 4, 1933.

Smallpox Vaccination.

THE PANAMA CANAL, HEALTH DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 19, 1933.

To all concerned:

(Amendment to Circular 205-1.)

Paragraph 17 of Circular No. 205-1, dated September 13, 1929, regarding smallpox vaccination is amended to read as follows:

* * * * *

FREQUENCY OF VACCINATIONS.

17. All persons arriving in a port of the Canal Zone with the intention of residing in the Canal Zone or in the cities of Colon or Panama, Republic of Panama, will be vaccinated against smallpox on shipboard by the quarantine officer, provided, that such vaccination will not be required if the individual can present evidence of a successful vaccination within a period of five years, as indicated by a certificate of vaccination acceptable to the Health Department or by the presence of a scar or other lesion which is considered by the Health Department to indicate immunity to smallpox.

Tourist passengers and others who are to remain on the Isthmus for a short period of time are exempted from the immediately preceding requirements except under the following circumstances:

The quarantine officer may require vaccination in the case of: (a) any person aboard a ship coming from geographical areas in which smallpox is known to prevail in epidemic form, (b) any person known to have been or suspected of having been exposed to smallpox during the immediately preceding 14 days, or (c) in any emergency in which such vaccination is deemed necessary for the protection of the health of the public.

APPROVED:

J. L. SCHLEY,
Governor.

J. F. SILER,
Chief Health Officer.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., January 20, 1933.

No. 11.

Central America, Gulf of Honduras, Utila Island, information concerning light. The second officer of the Honduran steamer *Tela* reports that the characteristic of the light at the northeast end of Utila Island is flashing white with 2 flashes every 25 seconds, flash 1 second, eclipse 5 seconds, flash 1 second, eclipse 18 seconds, and not as stated in the Light List.

Approximate position, 16° 06' 05" N., 86° 59' 50" W.

Colombia, Cartagena harbor entrance, Boca Chica channel, light buoy discontinued. The master of the steamer *Santa Ana* reports that the light buoy with flashing white light on the northern side of the western entrance to the dredged channel, northward of Fort San Jose, has been permanently discontinued.

Approximate position, 10° 19' 13" N., 75° 33' 56" W.

Bahama Islands, Great Bahamas Bank, Great Inagua Light, characteristic. The commanding officer of the U. S. S. *Kittery* reports that on the night of December 19, 1932, Great Inagua Island Light was observed to be showing group flashing white with 2 flashes every 10 seconds, flash 0.2 seconds, eclipse 1 second, flash 0.2 seconds, eclipse 8.6 seconds. The light was timed with a stop watch.

Approximate position, 20° 56' N., 73° 40' W.

Cuba, north coast, Old Bahama Channel, Great Bahama Bank, Mucaras Reef Tower removed. The commanding officer of the U. S. S. *Nokomis* reports under date of December 8, 1932, that the surveying tower erected on Mucaras Reef has been blown down by a hurricane.

Approximate position, 22° 11' N., 77° 17' W.

The above are quoted from Notice to Mariners No. 1, dated Washington, D. C., January 7, 1933.

J. L. SCHLEY,
Governor.

Retriever ¹	18	0 35	20	19 10 35	American	U. S. Navy	551 0	67 4	27 11	Cristobal, C. Z.	Gatun, C. Z.	Ballast	3 416 16 447	11 672
Akron	19 11 10	7 15	20 14 59	20 23 00	British	Shaw, Savill & Albion	486 0	64 0	24 3	London, England	Auckland, N. Z.	General	1 894 10 687	6 630
Santa Barbara	19 12 36	7 36	20 16 07	20 17 20	American	Grace Line	481 0	61 0	19 11	New York, N. Y.	San Antonio, Chile	General	3 379 9 267	6 834
Seattle ²					German	Hamburg-American Line				Hamburg, Germany	Vancouver, B. C.	General		
President						Dollar Line				New York, N. Y.	San Francisco, Cal.	General	1 812 12 618	9 251
Harrison	19 7 00	8 30	20 16 58	20 21 28	American	Donaldson Brothers	425 0	62 2	26 6	Glasgow, Scotland	Vancouver, B. C.	General	552 7 897	5 442
Gregalia	19 15 00	8 40	20 16 07	20 19 16	British	Knohr & Burehard	306 0	44 0	12 0	Cardiff, Wales	Peru	General	3 363	2 207
Lyaeta	19 23 40	9 45	20 19 15	20 20 30	British	Dunlop & Co.	300 0	45 0	13 0	Norfolk, Va.	Topolamp, Mex.	Ballast	3 299	2 222
Wandsbek	19 25 10	9 50	20 19 20	20 21 55	British	Ellerman & Bucknall	465 0	58 0	24 6	Pausboro, N. J.	Adelaide, Australia	General	3 443	9 516
City of Dieppe	19 1 25	20 9 50	20 20 30	20 23 00	British	Panama Mail S. S. Co.	221 0	32 2	11 3	Cristobal, C. Z.	Champerico, Guat.	Ballast	781	980
Sollund	19 18 00	11 45	20 21 35	20 23 00	Norwegian	Panama-Pacific Line	378 6	49 1	21 0	New York, N. Y.	Portland, Oreg.	General	5 454	3 603
Cartago	20 14 20	14 30	20 22 45	21 0 03	American	Stand Fruit & S. S. Co.	398 1	55 0	16 4	Cristobal, C. Z.	Gatun, C. Z.	Ballast	7	7
Vino Tinto ⁴	20 20 05	20	20 8 32	20 13 29	Norwegian	Westfal Larsen & Co.				Rotterdam, Holland	Vancouver, B. C.	Passengers only	6 864	5 260
Heranger ²						McCormick S. S. Co.	417 0	53 5	17 11	Philadelphia, Pa.	Tacoma, Wash.	Steel, pipe, gen.	1 173	7 082
Sidney M.	21 0 05	21 8 25	21 14 53	21 16 00	American	Blue Star Line	402 0	58 0	20 0	Newcastle, England	Vancouver, B. C.	Ballast	8 317	5 531
Hauptman	21 6 35	21 9 51	21 16 17	21 17 20	British	Royal Neth. S. S. Co.	401 0	58 3	17 5	Hamburg, Germany	Corral, Chile	General	754	8 315
Albionstar	21 6 20	21 10 55	21 18 21	21 19 30	Dutch	Pacific Steam Nav. Co.	213 0	33 5	16 6	Cristobal, C. Z.	Champerico, Guat.	General	1 100	1 270
Barnard	14 13 35	21 11 00	21 18 29	21 20 00	British	French Line	473 0	61 3	22 6	Bordeaux, France	Vancouver, B. C.	General	1 597	10 459
Salvador	21 3 10	21 13 05	21 19 26	21 21 15	French									
Wisconsin	21 14 05	21 14 10	21 21 30	21 23 00	American	Lukenbach Line	434 0	57 6	23 0	Mobile, Ala.	Seattle, Wash.	General	5 067	7 982
Jacob Lucken-	21 14 45	21 15 00	21 23 02	22 5 52	American	I. B. Berry Sons & Co.	400 8	54 3	21 0	Boston, Mass.	San Francisco, Cal.	Ballast	6 336	4 389
bach	21 8 40	21 16 20	22 00 10	22 1 10	German	Hamburg-American Line	450 0	57 0	19 5	Hamburg, Germany	Corral, Chile	General	2 231	7 684
Phoenix	21 17 00	21 18 40	22 13 26	22 14 35	American	Isthmian S. S. Lines	425 0	56 0	18 6	Baltimore, Md.	Seattle, Wash.	General	1 172	7 611
Poseidon	21 17 00	21 18 40	22 13 26	22 14 35	American	Hans Elliot	62 0	17 0		Cristobal, C. Z.	Balboa, C. Z.	Ballast	76	22
Memphis City	20 15 50	21 6 40	21 16 17	21 17 30	Panamanian	A. Valdez	64 2	20 3		Cristobal, C. Z.	Balboa, C. Z.	Ballast	78	49
Real	20 15 50	21 6 40	21 16 17	21 17 10	Panamanian		64 0	20 3		Cristobal, C. Z.	Balboa, C. Z.	Ballast	78	49
Tuira	20 15 50	21 6 40	21 16 17	21 17 10	Panamanian		64 0	20 3		Cristobal, C. Z.	Balboa, C. Z.	Ballast	78	49
Pire ⁵	20 15 50	21 6 40	21 16 17	21 17 10	Panamanian		64 0	20 3		Cristobal, C. Z.	Balboa, C. Z.	Ballast	78	49

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Annisson City	15 1 00	15 7 19	15 14 40	15 14 40	American	Isthmian S. S. Lines	424 2	56 2	26 0	Vancouver, B. C.	London, England	General	7 725	7 611
Frument	15 8 00	15 8 41	15 17 05	15 17 05	British	R. Chapman & Son	436 3	60 3	27 4	San Francisco, Cal.	London, England	Wheat, general	10 735	8 144
S. C. T. Doid	15 15 00	15 15 56	15 23 10	15 23 10	American	Shell Oil Co.	425 0	57 2	29 0	Vancouver, B. C.	Fall River, Mass.	Kerosene oil	10 735	8 144
San Eduardo	15 10 55	15 5 07	16 12 35	16 12 35	British	Anglo-Mexican Pet. Co.	420 0	54 0	18 0	San Antonio, Chile	Pro. Mexico, Mex.	Ballast	6 390	4 382
West Cape	15 19 10	16 5 58	16 14 20	16 14 40	American	McCormick S. S. Co.	409 5	54 2	25 0	Port Gamble, Wash.	New York, N. Y.	General	8 096	6 566
Holmwood	15 22 30	16 6 59	16 15 20	16 15 20	American	McCormick S. S. Co.	410 5	54 8	24 0	Powell River, Wash.	Buenos Aires, Arg.	General	4 522	6 582
Danversdijk	16 9 00	16 9 52	16 16 55	16 16 55	Dutch	Holland-America Line	490 8	64 0	37 0	Victoria, B. C.	Rotterdam, Holland	General	9 735	11 721
Tulagas	16 16 25	16 18 35	17 11 10	17 11 10	American	Associated Oil Co.	431 0	59 2	27 0	Tiverton, R. I.	Kerosene	General	9 554	7 817
India	16 18 30	16 19 10	17 12 40	17 14 35	Danish	East Asiatic Co.	470 3	63 5	29 5	San Francisco, Cal.	Copenhagen, Den.	Grain, general	11 998	11 157
J. L. Lucken-	16 23 00	17 5 46	17 14 10	17 14 10	American	Lukenbach Line	448 9	60 2	29 0	Vancouver, B. C.	Boston, Mass.	General, lumber	8 392	9 294
bach										Seattle, Wash.				6 861
Lena Lucken-	17 4 00	17 6 54	17 15 05	17 15 05	American	Lukenbach Line	425 0	53 8	21 0	Portland, Oreg.	Mobile, Ala.	Sugar, general	3 795	7 217
bach	17 6 25	17 7 57	17 16 50	17 16 50	American	Shell Eastern Pet. Co.	425 8	57 0	27 3	Los Angeles, Calif.	Port Anboy, N. J.	Kerosene	10 100	7 484
Meton	17 9 45	17 10 37	17 18 15	17 18 15	Swedish	Canadian Transport Co.	389 2	54 7	26 0	Vancouver, B. C.	Armonth, Eng.	Grain, general	7 714	6 775
Sunnawitz	17 10 05	17 11 18	17 19 23	17 19 23	Norwegian	Anglo-Saxon Pet. Co.	431 9	59 2	26 3	Los Angeles, Calif.	Lands End, Eng.	Gasoline	9 766	8 013
Brilleford	17 10 05	17 11 18	17 19 23	17 19 23	Norwegian	Anglo-Saxon Pet. Co.	431 9	59 2	26 3	Los Angeles, Calif.	Lands End, Eng.	General	6 250	6 777
American	17 10 05	17 11 18	17 19 23	17 19 23	American	Motor-Hawaiian Line	404 6	53 9	26 5	Portland, Oreg.	Boston, Mass.	General	9 766	8 013

¹ Spelter, cotton, and scrap iron.² Lead and copper concentrates.³ Crane.⁴ Launch.⁵ Motor schooner.⁶ For orders.⁷ Steel, wines, and general.⁸ Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Libe. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Parthenia.....	17	16.00	17	19.20	18	11.40	18	11.40	British	Donaldson Bros.	399.7	51.9	27.0	Victoria, B. C.	Glasgow, Scotland.	General.	6,218	5,831	
David McKelvy.....	17	18.30	18	5.53	18	13.45	18	13.45	American	Tidewater Oil Co.	430.0	59.2	24.2	Ventura, Calif.	New York, N. Y.	Gasoline.	8,208	7,629	5,325
Cheyenne.....	17	12.45	18	7.07	18	14.20	18	13.00	British	Anglo-American Oil Co.	477.0	63.8	28.0	Talara, Peru.	Amsterdam, Holland.	Gasoline.	11,850		
Pendope.....	16	20.40	18	8.28	18	16.25	18	16.25	Danzig	Anglo-American Oil Co.	470.1	63.2	27.0	Los Angeles, Calif.	London, England.	Gasoline.	11,492	9,184	6,359
Cerigo.....	18	7.00	18	9.14	18	17.30			German	Hamburg-American Line	227.2	34.4	13.3	Guayaquil, Ecuador	Cristobal, C. Z.	General	654	1,572	1,011
Santa Clara.....	18	5.23	18	10.25	18	18.40	18	23.00	American	Grace Line	483.3	63.9	24.3	San Antonio, Chile.	New York, N. Y.	General	3,570	1,680	7,474
Sage Brush.....	18	17.53	18	19.04	19	11.05	19	11.05	American	Shepard S. Co.	409.8	54.2	25.1	Seattle, Wash.	Oso, Norway.	Lumber, general.	7,207	6,697	4,941
Kuine Nelson.....	18	23.00	19	6.20	19	13.25	20	21.05	Norwegian.	Fred Olsen & Co.	436.0	56.2	26.0	Vancouver, B. C.	Glasgow, Scotland.	Grain, general.	7,794	8,016	5,834
Krishna Maru.....	19	0.05	19	7.17	19	15.10	19	20.00	Japanese.	Kokusa Kaisha.	443.1	60.0	28.3	New York, N. Y.	New York, N. Y.	General	7,185	8,912	6,504
Patrick Henry.....	19	2.40	19	8.48	19	17.05	19	21.05	American	Lykkes Bros. Ripley Co.	439.6	60.2	25.0	Cebu, P. I.	New Orleans, La.	General	11,332	8,978	6,662
Sollund.....	18	23.35	19	9.10	19	18.05	20	11.45	Norwegian.	Panama Mail S. S. Co.	221.6	32.2	13.3	Champerico, Guat.	New York, N. Y.	General	693	980	579
Nagasaki Maru.....	19	0.15	19	9.25	19	18.05	20	11.45	Japanese.	Miami & Co.	361.6	50.0	24.4	Idaho, P. I.	New York, N. Y.	Sugar, rope.	6,140	4,609	3,250
Hamilton, 141.....	19	6.30	19	10.17	19	19.35	22	23.55	American	U. S. Navy	310.0	30.1	10.0	San Diego, Calif.	Norfolk, Va.				
Brooks, 232.....	19	6.30	19	10.25	19	19.35	22	23.55	American	U. S. Navy	314.0	30.0	10.0	San Diego, Calif.	Norfolk, Va.				
Manley, 74.....	19	6.30	19	10.35	19	19.40	22	23.55	American	U. S. Navy	314.0	30.0	10.0	San Diego, Calif.	Norfolk, Va.				
Santa Cecilia.....	19	7.10	19	12.26	19	20.30	19	20.30	American	Argonaut S. S. Line.	404.6	53.9	17.0	Seattle, Wash.	Baltimore, Md.	General	2,812	6,745	4,662
Santa Teresa.....	19	7.16	19	13.24	19	21.55	21	8.05	American	Panama Mail S. S. Co.	360.2	51.6	23.0	San Francisco, Cal.	Philadelphia, Pa.	Coffee, general.	1,791	5,726	4,085
Eleanor Christenson.....	19	10.30	19	13.47	19	22.50	19	22.50	American	Arrow Line.	410.5	54.3	24.4	Seattle, Wash.	Baltimore, Md.	Lumber, general.	6,536	6,572	4,788
Donau.....	19	8.40	19	14.53	20	9.00	20	15.55	German	North German Lloyd	520.8	63.6	28.0	Vancouver, B. C.	Bremen, Germany	General	10,190	11,007	7,698
Comet.....	20	0.30	20	6.15	20	13.50	20	13.50	German	Standard Oil Co.	480.5	66.0	29.0	Los Angeles, Calif.	New York, N. Y.	Fuel oil.	13,545	9,820	6,750
Pierre.....	20	6.00	20	6.47	20	15.50	21	7.05	Panamanian	A. Valdez.	64.0	18.0	6.2	Bayamo, P. R.	Cristobal, C. Z.	Bananas	44	47	32
Real.....	20		20	6.48	20	15.50	21	6.40	Panamanian	Hans Elliot.	62.2	17.6		Darien, R. P.	Cristobal, C. Z.	Bananas	27	46	22
Angachuca.....	20		20	7.39	20	15.55	20	18.10	Panamanian	Hans Elliot.	110.0	15.0	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas	15	92	47
Tura.....	20		20	11.15	20	19.00	21	6.40	Panamanian	Hans Elliot.	64.2	20.3		Darien, R. P.	Cristobal, C. Z.	Bananas	45	78	49
Mercury Sun.....	20	11.00	21	6.25	21	13.55	21	16.00	American	Shell Oil Co.	480.5	66.0	29.0	Los Angeles, Calif.	Perth Amboy, N. J.	Gasoline.	13,448	9,713	6,530
Takaoka Maru.....	20	16.10	21	7.19	21	15.25	21	18.55	Japanese.	Nippon Yusen Kaisha.	445.0	58.0	26.2	Keelung, Japan	Boston, Mass.	Sugar, general.	8,403	7,989	5,850
Stassfurt.....	21	7.00	21	8.24	21	21.10	22	0.45	German	Hamburg-American Line	476.0	63.1	27.0	Vancouver, B. C.	Hamburg, Germany	Grain, general.	8,636	9,395	6,025

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	Vessel.		Line.		From—		Date.		Vessel.		Line.		For—	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.
January 15.....							January 15.....							
January 15.....							January 15.....							
January 15.....							January 15.....							
Reliance.....							Simon Bolivar.....						Royal Netherlands S. S. Co.	Amsterdam via wayports.
Pearl Marie.....							Juan S. Eleano.....						Spanish S. S. Line.	Barcelona via wayports.
Invercorrie.....							Santa Marta.....						United Fruit Co.	New York via wayports.

* ARRIVALS.

* DEPARTURES.

PORT OF CRISTOBAL.—Continued.

*ARRIVALS.

*DEPARTURES.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
January 15	No. 144-M ¹⁴	Pan American-Grace Airways	Buenaventura, Colombia.	January 15	Cristobal	Panama Railroad S. S. Line	New York via Haiti.
January 15	No. 9685 ¹⁴	Pan American Airways	San Salvador via waypts.	January 15	Statendam	Holland-American Line	New York via Kingston.
January 16	Kingsholm	Swedish-American Line	New York via waypts.	January 15	Reliance	Hamburg-American Line	New York via waypts.
January 16	Vega	United Fruit Co.	Port Limon, Costa Rica.	January 15	Colombia	Colombian S. S. Line	New York via waypts.
January 16	Colombie	French Line	High seas.	January 16	No. 660-M ¹⁴	Pan American Airways	Barranquilla, Colombia.
January 16	No. 145-M ¹⁴	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	January 16	Vega	United Fruit Co.	Havre via waypts.
January 16	No. 660-M ¹⁴	Pan American Airways	Barranquilla, Colombia.	January 16	Kingsholm	Swedish-American Line	New York via Habana.
January 16	No. 300-N ¹⁴	Pan American Airways	Talara via waypts.	January 17	No. 300-N ¹⁴	Pan American-Grace Airways	New York via waypts.
January 18	No. 9673 ¹⁴	Arnado Bruno Abercrombie	San Salvador via waypts.	January 18	Pearl Marie ¹²	G. I. Bryan	Talara via waypts.
January 19	Maranon	Pan American Airways	High seas.	January 19	No. 660-M ¹⁴	Uruba, Medellin & Cent. Airways	Bluefields, Nicaragua.
January 19	Delhian	Pan American Airways	Liverpool via waypts.	January 19	No. 145-M ¹⁴	Martinez	Miami via waypts.
January 19	No. 669-M ¹⁴	Hamburg-American Line	Miami via waypts.	January 19	Lizzie D. Peabody	Pan American Airways	Medellin, Colombia.
January 19	Kyphasia	Panama Railroad S. S. Line	Hamburg via waypts.	January 20	Kyphasia	Hamburg-American Line	Cartagena, Colombia.
January 19	Lizzie D. Peabody ¹²	Colon, Rep. of Panama.	New York via waypts.	January 20	No. 300-N ¹⁴	Pan American-Grace Airways	Talara via waypts.
January 19	Inapaquina ¹⁵	Colon, Rep. of Panama.	Colon, Rep. of Panama.	January 20	Buenaventura	United Fruit Co.	Port Limon, Costa Rica.
January 20	Annetta I. ¹⁵	A. Tagaropoulos	Colon, Rep. of Panama.	January 21	Quinga	Panama Railroad S. S. Line	New York, N. Y.
January 20	Cefalu	Standard Fruit & S. S. Co.	New Orleans via Habana.	January 21	No. 145-M ¹⁴	Uruba, Medellin & Cent. Airways	Brownsville, Tex.
January 20	Atenas	United Fruit Co.	New Orleans via Habana.	January 21	Delhian	Leyland S. S. Line	Medellin, Colombia.
January 20	No. 145-M ¹⁴	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	January 21	Velma Lykes	Standard Fruit & S. S. Co.	Savanna-La-Mar, Jamaica.
January 21	Haiti	Colombian Line	New York via waypts.	January 21	Atenas	Lykes Brothers S. S. Co.	Sao Domingo via waypts.
January 21	Sixola	United Fruit Co.	Port Arthur via waypts.	January 21	Inapaquina ¹⁵	United Fruit Co.	New Orleans via waypts.
January 21			New York via waypts.	January 21	Annetta I. ¹⁵	A. Tagaropoulos	Colon, Rep. of Panama.
January 21				January 21		P. W. Hamilton	Colon, Rep. of Panama.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
January 15	Talamanca	United Fruit Co.	San Francisco, Calif.	January 15	Velero III ^{10 16}	Capt. G. A. Hancock	Galapagos Islands.
January 16	Nora ¹	Arrow Oil Co.	Los Angeles, Calif.	January 15	Talamanca	United Fruit Co.	San Francisco, Calif.
January 18	Coya ¹	Grace Line	Tacoma Wash.	January 17	Nora ¹	Arrow Oil Co.	Los Angeles, Calif.
January 19	Iocoma ¹	International Petroleum Co.	Talara, Peru.	January 20	Coya ¹	Grace Line	San Antonio, Chile.
January 20				January 20	Iocoma ¹	International Petroleum Co.	Talara, Peru.

¹ Tanker. ¹⁰ Motor ship. ¹¹ Destroyer. ¹² Motor schooner. ¹³ For orders. ¹⁴ Air mail carrier. ¹⁵ Motor boat. ¹⁶ Yacht.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending January 21, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Juan S. Elcano.....	Spanish S. S. Line.....	January 15	January 15	.....	305
Cristobal.....	Panama Railroad S. S. Line.....	January 15	January 15	.....	992
Durazzo.....	Hamburg-American Line.....	January 15	January 15	.....	179
Santa Marta.....	United Fruit Co.....	January 15	January 15	.....	321
Colombia.....	Colombian S. S. Line.....	January 15	January 15	.....	523
Simon Bolivar.....	Royal Netherlands S. S. Co.....	January 15	January 15	.....	515
Invercorrie.....	Largo Petroleum Co.....	January 15	January 15	.....	(¹)
Nuevo Panama.....	H. Elliot.....	January 15	January 15	593	160
Pearl Marie.....	R. Feuillebois.....	January 15	January 16	200	15
Veragua.....	United Fruit Co.....	January 15	January 18	(¹)	317
Damsterdijk.....	Holland-America Line.....	January 16	January 16	78	149
India.....	Danish East Asiatic Line.....	January 17	January 17	(¹)	9
Feltre.....	Navigazione Libera-Triestina.....	January 17	January 18	66	(¹)
Santa Clara.....	Grace Line.....	January 18	January 18	104	(¹)
Cerigo.....	Hamburg-American Line.....	January 18	January 18	764	.....
Lautaro.....	Pacific Steam Navigation Co.....	January 18	January 19	260	53
Lizzie D. Peabody.....	M. P. Martinez.....	January 19	January 19	(¹)	73
Kirishima Maru.....	Kokusai Kisen Kaisha.....	January 19	January 19	143	(¹)
Kyphissia.....	Hamburg-American Line.....	January 19	January 20	42	24
Seattle.....	Hamburg-American Line.....	January 19	January 20	53	139
Santa Barbara.....	Grace Line.....	January 19	January 20	129	236
Sollund.....	Panama Mail S. S. Co.....	January 19	January 20	711	(¹)
Knute Nelson.....	Fred Olsen Line.....	January 19	January 20	(¹)	758
Lydia.....	Lyle Shipping Co.....	January 19	January 21	186	(¹)
Buenaventura.....	Panama Railroad S. S. Line.....	January 19	January 21	899	271
Santa Teresa.....	Panama Mail S. S. Co.....	January 19	January 21	315	102
Donau.....	North German Lloyd.....	January 20	January 20	74	327
Quirigua.....	United Fruit Co.....	January 20	January 20	160	217
Atenas.....	United Fruit Co.....	January 20	January 21	642	345½
Cefalu.....	Standard Fruit & S. S. Co.....	January 20	January 21	129	638
Salvador.....	Pacific Steam Navigation Co.....	January 21	January 21	.....	1,049
Takaoka Maru.....	Nippon Yusen Kaisha.....	January 21	January 21	35	(¹)
Stassfurt.....	Hamburg-American Line.....	January 21	January 22	29	95
Virginia.....	French Line.....	January 21	January 21	43	25
Barneveld.....	Royal Netherlands S. S. Co.....	January 21	January 21	6	45
Poseidon.....	Hamburg-American Line.....	January 21	January 21	26	198
Democracy.....	Nelson Line.....	January 21	January 21	768	.....
Velma Lykes.....	Lykes Brothers.....	January 21	January 21	300	64
Sixaola.....	United Fruit Co.....	January 21	January 21	252	.....
Haiti.....	Colombian S. S. Line.....	January 21	January 21	147½	.....

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending January 21, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Santa Elisa.....	Panama Mail S. S. Co.....	January 12	January 12	144	.....
Nuevo Panama.....	Hans Elliot.....	January 12	January 12	46	.....
Jeff Davis.....	Roosevelt S. S. Co.....	January 13	January 13	307	.....
Santa Paula.....	Panama Mail S. S. Co.....	January 13	January 13	91	.....
Virginia.....	Panama-Pacific Line.....	January 13	January 13	43	3
Manizales.....	Grace Line.....	January 14	January 14	.....	85
Durazzo.....	Hamburg-American Line.....	January 15	January 15	.....	1
Granville.....	Kravencs S. S. Line.....	January 15	January 15	11	.....
Talamanca.....	United Fruit Co.....	January 15	January 15	312	196
Nora.....	Grace Line.....	January 16	January 17	13,277	.....
Santa Clara.....	Grace Line.....	January 18	January 18	104	11
Coya.....	Grace Line.....	January 18	January 20	.....	140
Santa Teresa.....	Panama Mail S. S. Co.....	January 19	January 19	171	.....
Iocoma.....	International Oil Co.....	January 19	January 20	1,618	.....
Takaoka Maru.....	Osaka Shosen Kaisha.....	January 20	January 20	1	.....
Santa Barbara.....	Grace Line.....	January 20	January 20	308	77
President Harrison.....	Dollar Line.....	January 20	January 20	2	1

Postal Address of The Panama Canal.

The postal address is, "The Panama Canal, Balboa Heights, Canal Zone," or "The Panama Canal, Washington, D. C."

Mail for ships passing through the Canal or touching at either of the terminal ports should be addressed to "Cristobal, Canal Zone."

Merchandise Shipped to Canal Zone for Orders.

The Panama Railroad Company, a New York corporation, of which the stock is now owned by the United States Government, will warehouse "for orders" at its piers and warehouses at Balboa and Cristobal, Canal Zone, nonperishable and nondangerous merchandise, excepting alcoholic liquors.

The rates are as follows:

(a) For handling cargo from ship's side to storage place, \$1 per ton of 2,000 pounds or 40 cubic feet on general merchandise, and one-half of the transfer rates provided by Item 34, Panama Canal Tariff No. 10, on other commodities.

(b) For handling cargo from storage place to ship's side, *i. e.*, for delivering or reforwarding it, the same rates as for receiving and storing, as per (a), above. The minimum charge for handling any shipment taken out of storage is \$1.

(c) For storage: First 35 days free; thereafter, 3 cents per day or fraction thereof per ton of 2,000 pounds or 1½ cents per day or fraction thereof per ton of 40 cubic feet.

Special rates on special commodities in large quantities may be obtained on request.

Various lines operating out of Cristobal and Balboa to the west coast of Central and South America will accept their proportion of the through rate for the haul beyond the Isthmus, as explained in the following paragraph:

By virtue of the Canal Zone for Orders arrangement shippers are enabled to consign cargo to the Isthmus and subsequently to reconsign it to any port beyond the Isthmus to which there is a through rate from port of origin without sacrificing their right to the through freight rate. This means that when a shipment moves from, say, New York to the Canal Zone, usual local rates will be charged to Cristobal or Balboa, as the case may be; but should the owner wish to reforward to any other port to which there is a through rate from port of origin, he may do so upon payment of the receiving carrier's proportion of the through rate from port of origin to port of ultimate destination, and upon evidence that the shipment, or any part of it, has moved beyond the Isthmus, the initial carrier will refund the difference between its proportion of the through rate applicable and the local rate.

In addition to reconsigning beyond the Isthmus, cargo billed Cristobal for Orders may be reconsigned to Panama City or line points on the Panama Railroad on the basis of through rates from port of origin to Panama City. In this case the Panama Railroad Company's charges will be the difference between the rate charged to Cristobal by the ocean carrier and the through rate from port of origin to Panama City, and the necessary adjustments with the ocean carrier will be made by the Panama Railroad Company without inconvenience to shippers or consignees. The handling charge from storage place to cars is the same as from storage place to ship's side.

Cargo deposited in Hold for Orders Warehouse, Cristobal, which consignees desire transferred to Hold for Orders Warehouse, Balboa, will be assessed a charge of \$1 per ton on general cargo and one-half the transfer rates on other commodities for handling from the warehouse into cars at Cristobal, and a second charge of the same kind for handling from cars into warehouse at Balboa. The same charge will again apply when the cargo is reforwarded from, or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on Hold for Orders cargo discharged from vessels at Balboa.

Cargo consigned to Hold for Orders, Balboa, arriving at Cristobal piers, and/or cargo consigned to Hold for Orders, Cristobal, on which by previous arrangement the destination has been changed to Hold for Orders, Balboa, prior to arrival of the vessel, will be assessed one handling charge of \$1 per ton on general cargo or one-half of the transfer rates on other commodities for handling from shipside across piers and into cars at Cristobal and from cars into the Hold for Orders Warehouse, Balboa. The same charge will apply when the cargo is reforwarded from or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on cargo moving in the opposite direction.

There are no special forms for use in shipping except the warehouseman's order to release the cargo for shipment ("Authority to Deliver Cargo from Storage on Piers"). Shipper takes out his bill of lading and consular invoice and the cargo moves as regular outward local.

Samples of the forms used, "Negotiable Warehouse Receipt," and "Authority to Deliver Cargo from Storage on Piers," will be supplied on request to the Panama Railroad Co., Balboa Heights, C. Z., or 24 State Street, New York City.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Location of Patients and Visiting Hours, at Gorgas Hospital.

The following table shows the distribution of patients in the Gorgas hospital buildings and the visiting hours for the various wards and sections:

Section and Ward.	Visiting Hours.
Section "A:"	
Ward 2, Semi-private, white male.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 3, American male, eye, ear, nose and throat patients.....	Tuesdays, Thursdays and Saturdays, 2.30 to 4.30 p. m., 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 4, Private rooms.....	Daily, same as Ward 2 (above).
Section "B:"	
Ward 5, Male, private rooms, American boys.....	} Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 6, Foreign, male and female, private rooms, American girls.....	
Ward 7, White females, private rooms.....	
Ward 8, Obstetrical department, white females.....	
Nursery.....	No visitors permitted in nursery.
Section "C:"	
Ward 9, Colored, male.....	} Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 10, White foreign, male.....	
Ward 11, Colored, male (surgical).....	
Ward 12, Colored, male (medical).....	
Ward 13, Colored, male, G. U.....	} Tuesdays, Thursdays, Saturdays, Sundays, and holidays, 2.30 to 4.30 p. m.
Ward 14, White, male, G. U.....	
Section "D:"	
Ward 15, American, male (surgical).....	} Tuesdays, Thursdays, Saturdays, Sundays and holidays, 2.30 to 4.30 p. m.; 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.
Ward 16, American, male (medical).....	
Ward 17, Colored children.....	Wednesdays, Fridays, Sundays, and holidays, 1.30 to 3.00 p. m.
Ward 18, White children.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 19, Colored, female (medical).....	} Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 20, Colored, female, surgical, obstetrical.....	
Isolation section.....	No visitors permitted except to visit tuberculosis patients Thursdays, Sundays and holidays, 1.30 to 3.00 p. m.

Permission to visit outside of visiting hours may be granted upon application to the Superintendent's Office.

Immediate relatives of seriously ill patients will be admitted at any time by and in the discretion of the attending physician, section nurse, and in her absence, the nurse in charge.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., February 1, 1933. No. 27.

Canal Traffic During January, 1933.

During the month of January, 1933, 415 commercial vessels and 14 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,762,808.56, and on the launches, \$72.84, or a total tolls collection of \$1,762,881.40.

The daily average of commercial vessels was 13.39, and the daily average tolls collection was \$56,864.79, as compared with an average of 13.90 transits and \$57,491.94 in tolls for the previous month, and an average of 12.16 transits and \$57,104.30 in tolls for January, 1932. The average amount of tolls paid by each of the commercial transits was \$4,247.73, as compared with \$4,695.63 for the corresponding month last year.

Commercial traffic in January, 1933, showed a decline of 16 transits and \$19,131.47 in tolls, decreases of 3.7 per cent and 1.1 per cent, respectively, in comparison with the previous month (December, 1932), which to date is the month of the heaviest traffic of the current fiscal year. In comparison with January, 1932, traffic during the past month made an increase of 38 transits (10.1 per cent), although tolls collected were slightly less—\$7,442.12, or 0.4 of 1 per cent. This decrease of tolls in face of an increase in traffic was due to a substantial decrease in average tolls collected per vessel (as noted above), caused principally by the traffic of a number of small banana schooners which pay relatively slight tolls, and to the transit of a relatively greater number of vessels in ballast in comparison with those in January, 1932.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 7 months of the current fiscal year, with the daily average of transits and tolls, and the totals for the first 7 months of the fiscal years 1932 and 1931:

Month.	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
July.....	326	\$1,468,728.36	10.52	\$47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
December.....	431	1,781,940.03	13.90	57,481.94
January.....	415	1,762,808.56	13.39	56,864.79
Total, first 7 months of fiscal year 1933.....	2,621	11,524,236.70	12.19	53,601.10
Total, first 7 months of fiscal year 1932.....	2,722	12,553,384.06	12.66	58,387.83
Total, first 7 months of fiscal year 1931.....	3,378	15,005,909.53	15.71	69,794.93

In comparison with the first 7 months of the fiscal year 1932, the corresponding period this year has had 101 fewer transits and \$1,029,147.36 less tolls, decreases of 3.7 per cent and 8.2 per cent, respectively; in comparison with the first 7 months of the fiscal year 1931 there occurred a decrease of 757 transits and \$3,481,672.83 in tolls, 22.4 per cent and 23.2 per cent, respectively.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, January 28, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Titanic ¹	21	15.20	22	6.20	22	14.32	22	15.55	Norwegian.	W. L. Comyn & Sons.	400.6	54.2	17.0	London, England.	Vancouver, B. C.	Ballast.	1,917	6,558	4,633
Kentuckian	21	17.35	22	6.20	22	17.02	22	18.00	American.	Amer.-Hawaiian Line.	414.5	53.7	18.0	Boston, Mass.	Portland, Oreg.	General.	1,917	7,049	4,941
Stella Polaris ²	22	7.05	22	7.25	22	18.02	23	1.14	Norwegian.	D.B. Dampskibsselskab	389.0	50.0	17.0	New York, N. Y.	Tahiti.	Passengers only	5,392	3,448	2,723
Vithild ¹	21	19.40	22	7.30	22	19.09	22	20.37	Danish.	Waried Tank, Co.	419.0	57.2	19.0	Hamburg, Germany.	Talara, Peru.	Ballast.	3,900	7,105	4,723
Somerville ²	21	22.30	22	8.40	22	21.13	22	22.30	Norwegian.	Isbrandtsen Moller Co.	381.0	53.6	18.0	Baltimore, Md.	Iloilo, P. I.	General.	3,900	6,276	4,550
Arzamas ¹	21	22.30	22	8.55	22	22.20	22	23.30	Norwegian.	Anglo-Saxon Pet. Co.	457.2	59.7	21.3	Curacao, D. W. I.	Los Angeles, Calif.	Ballast.	8,301	5,720	5,720
Solana ¹	22	4.40	22	9.25	22	23.20	23	00.15	American.	Associated Oil Co.	419.0	56.0	20.0	New York, N. Y.	San Francisco, Cal.	Phosph. te, cotton.	1,172	7,060	5,025
Barwin ¹	22	7.00	22	9.55	22	23.30	23	2.00	British.	Thos. Rice & Co.	405.6	55.7	26.0	Port Tampa, Fla.	Kobe, Japan.	General.	7,797	6,881	4,845
Santa Ana	22	5.45	22	11.10	22	20.00	23	2.50	American.	Panama Mail S. S. Co.	360.2	51.6	23.7	Philadelphia, Pa.	San Francisco, Cal.	Coffee, pipe, gen.	1,450	5,710	4,011
Democracy	21	14.35	22	13.15	22	23.30	23	3.30	American.	Nelson Line.	377.0	52.0	17.8	New York, N. Y.	Seattle, Wash.	General.	1,600	5,434	3,969
San Bernardino	22	7.35	22	14.05	23	2.26	23	3.50	American.	States S. S. Co.	410.5	54.2	18.0	Norfolk, Va.	Seattle, Wash.	General.	1,182	6,755	4,873
Raby Castle ¹	22	11.25	22	15.30	23	3.21	23	4.30	British.	Barber S. S. Line.	400.0	52.0	16.8	New York, N. Y.	Shanghai, China.	General.	1,181	6,805	5,077
Pursuit ¹	22	11.25	22	15.30	23	3.21	23	4.30	British.	J. M. Sheppard.	400.0	52.0	16.8	New York, N. Y.	Gatun, C. Z.	Ballast.	513	1,572	1,011
Cerigo	18	17.30	23	6.00	23	18.22	23	20.50	German.	Hamburg-American Line	227.2	34.4	14.6	Cristobal, C. Z.	Guayaquil, Ecuador	General.	513	1,572	1,011
Trenaton	22	18.55	23	6.25	23	18.30	23	20.00	British.	Hain S. S. Co.	400.0	52.3	16.0	Cardiff, Wales.	Vancouver, B. C.	Ballast.	513	1,572	1,011
Pan Aruba ¹	22	19.10	23	6.30	23	19.32	23	20.50	Norwegian.	Husteca Petroleum Co.	484.4	65.5	20.3	Rouen, France.	Talara, Peru.	Ballast.	4,467	9,961	6,805
Point Ancha	22	23.35	23	7.15	23	20.44	23	21.55	American.	Swayne & Hoyt.	379.0	53.0	19.0	Galveston, Tex.	Powell River, B. C.	General.	4,467	9,961	6,805
Storstad ¹	23	8.00	23	8.45	23	21.45	23	23.00	Norwegian.	A. F. Klavness & Co.	470.0	62.2	21.0	Hamburg, Germany.	California	Ballast.	9,198	6,558	4,158
Nuevo Panama ²	22	22.30	23	12.05	23	19.25	23	20.50	Panamanian.	Hans Elliot.	108.0	20.0	8.6	Cristobal, C. Z.	Buenaventura, Col.	Gen., gasoline.	73	226	101
Langegorse	23	13.00	23	13.15	23	22.53	23	23.55	British.	F. Carriek & Co.	386.3	52.0	15.0	Tyne, England.	Vancouver, B. C.	Ballast.	513	1,572	1,011
White Shadow	24	6.15	24	6.15	24	14.26	25	7.59	American.	E. Hope Norton.	77.7	22.2		Colon, R. P.	Guayaquil, Ecuador	Ballast.	98	590	4,065
West Ira	24	3.15	24	6.20	24	14.30	24	15.00	American.	McCormick S. S. Co.	410.5	54.3	15.9	Rosario, Argentina.	San Francisco, Cal.	Coffee, cocoa.	1,097	6,753	5,011
Carlton	24	6.30	24	7.05	24	16.40	24	18.00	British.	Dale & Co.	390.0	53.5	16.0	Shields, England.	Vancouver, B. C.	Ballast.	5,612	4,119	3,119
Iowan	24	8.05	24	8.50	24	19.00	24	20.00	American.	Amer.-Hawaiian Line.	407.7	53.7	18.6	Boston, Mass.	Seattle, Wash.	General.	1,588	7,079	5,028
Punta Gorda ¹	24	7.30	24	10.15	24	20.00	24	21.30	British.	Lago Shipping Co.	305.7	50.0	14.4	Aruba, D. W. I.	Guayaquil, Ecuador	Fuel oil.	2,698		
New Westminster	24	13.30	24	13.35	24	21.10	24	22.45	British.	Reardon Smith Line.	400.0	54.0	22.7	Jacksonville, Fla.	Shanghai, China.	Cotton, rags.	5,200	7,000	5,407
Belgium Maru.	24	14.40	24	14.45	24	22.18	25	00.55	Japanese.	Kokusei Kaisha.	385.0	51.0	26.7	Jacksonville, Fla.	Yawata, Japan.	Phosph. te, cotton.	7,974	6,219	4,611
Atlante	24	15.30	24	19.20	25	12.28	25	13.30	American.	U. S. Army.	410.0	54.3	16.0	Baltimore, Md.	Seattle, Wash.	General.	953	6,567	4,917
Riche ¹	24	15.30	24	19.20	25	12.28	25	13.30	American.	U. S. Army.	410.0	54.3	16.0	Baltimore, Md.	Seattle, Wash.	General.	953	6,567	4,917
Ciprot ¹	24	11.45	25	6.10	25	12.11	25	16.45	Panamanian.	Max Bigray.	485.6	62.3	18.9	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	822	10,803	7,606
Loehol ¹	24	16.10	25	6.20	25	15.30	25	16.45	British.	Royal Mail Lines, Ltd.	431.0	59.2	23.6	Rotterdam, Holland.	Vancouver, B. C.	General.	7,883	5,104	3,104
Betterton ¹	24	16.30	25	6.25	25	16.36	25	18.00	American.	Associated Oil Co.	406.0	56.0	23.6	New York, N. Y.	San Francisco, Cal.	Ballast.	6,907	4,955	3,104
Appledore	24	16.30	25	7.15	25	18.40	25	19.54	British.	Anglo-Canad. S. S. Co.	415.2	53.0	16.0	Barry, Wales.	Vancouver, B. C.	Ballast.	6,907	4,955	3,104
Silksworth	24	20.45	25	7.15	25	19.44	25	20.58	British.	R. S. Dalgleish.	415.2	53.0	16.0	Newcastle, Eng.	Vancouver, B. C.	Ballast.	6,907	4,955	3,104
Marian Otis	25	00.25	25	8.20	25	20.47	25	22.15	American.	Arrow Line.	409.6	54.0	16.0	Baltimore, Md.	Seattle, Wash.	General.	1,500	6,653	4,863
Chandler ¹	25	00.40	25	8.55	25	22.05	25	23.26	British.	Ellerman-Hall Line.	475.0	58.2	22.0	Philadelphia, Pa.	Dairen, China.	General.	2,928	9,741	7,465

Chateau Thierry ⁵	24	19.25	25	10.25	25	17.35	26	1.10	American.....	U. S. Army.....	436.0	58.0	25.2	New York, N. Y.....	Honolulu, T. H.....	General.....	1,349	3,402	5,001
Samuel Bakke ²	25	2.40	25	10.25	25	23.09	26	00.26	Norwegian.....	Islandsen Moller Co.....	390.0	54.6	18.6	Oslo, Norway.....	Valparaiso, Chile.....	General.....	3,402	6,822	5,001
Lillian Lucken- bach.....	25	5.00	25	11.20	26	00.10	26	1.12	American.....	Luckenbach Line.....	449.0	60.2	17.6	Boston, Mass.....	Tacoma, Wash.....	General.....	2,067	9,294	6,865
Canada ²	25	12.35	25	12.50	26	1.25	26	5.20	Swedish.....	Johnson Line.....	426.0	56.0	25.6	Stockholm, Sweden.....	Hawaii.....	Pulp, fertilizer.....	8,741	7,476	5,485
Coptic ²	26	3.05	26	6.15	26	13.16	26	19.12	British.....	Shaw, Savill & Albion.....	482.6	64.2	25.0	London, England.....	N. Plymouth, N. Z.....	General.....	4,135	11,819	8,368
Kelsonoor ²	26	6.05	26	7.20	26	15.24	26	16.55	British.....	Moor Line.....	331.2	47.7	12.9	Philadelphia, Pa.....	Iquique, Chile.....	Ballast.....	3,551	2,551	2,551
América ²	26	10.05	26	12.20	26	18.50	27	16.00	Danish.....	East Asiatic Co.....	465.0	62.0	18.1	Copenhagen Den.....	Vancouver, B. C.....	General.....	731	11,060	8,076
President Her- renschmidt ²	26	11.30	26	14.30	26	21.30	26	22.57	Norwegian.....	Pechelbroom.....	477.0	63.0	20.0	Gibraltar.....	La Libertad, Ecua.....	Ballast.....	9,444	6,483	6,483
Elisa Walker ²	26	13.35	27	6.00	27	15.26	27	21.50	American.....	Standard Shipping Co.....	429.0	59.2	21.0	New York, N. Y.....	Los Angeles, Calif.....	Ballast.....	7,739	5,544	5,544
President Grant Dago.....	26	16.30	27	6.20	27	18.47	27	20.00	Norwegian.....	Dollar Line.....	517.0	72.2	27.5	New York, N. Y.....	Manila, P. I.....	General.....	1,245	15,234	10,470
Cresington Court ²	26	18.50	27	6.20	27	18.43	27	20.00	British.....	John P. Petersen.....	256.9	40.0	10.11	Norfolk, Va.....	Amnapah, Hond.....	Ballast.....	1,824	1,159	1,159
Pennsylvania.....	26	4.50	27	7.10	27	19.43	28	1.15	American.....	Canadian Transp. Co.....	405.0	55.0	14.3	St. John, N. B.....	Vancouver, B. C.....	General.....	350	7,705	5,308
Rangitiki ²	27	6.45	27	8.30	27	17.48	28	00.13	British.....	Panama-Pacific Line.....	586.4	80.3	26.6	New York, N. Y.....	San Francisco, Cal.....	General.....	1,882	25,168	18,194
Bangor ²	26	21.40	27	8.35	27	20.58	27	22.10	Norwegian.....	N. Z. Shipping Co.....	531.0	70.2	25.7	London, England.....	Auckland, N. Z.....	General.....	3,027	18,197	13,526
Kwanto Maru ²	26	21.40	27	8.35	27	20.58	27	22.10	Japanese.....	Intercon S. Corp.....	464.0	61.0	21.0	Rotterdam, Holl.....	Vancouver, B. C.....	Ballast.....	9,345	6,983	6,983
Eda.....	27	7.35	27	8.40	27	23.21	28	00.49	Italian.....	Oaka Shosen Kaisha.....	461.0	61.0	25.6	New York, N. Y.....	Kobe, Japan.....	Ballast.....	7,608	9,407	6,777
Wital.....	27	12.05	27	12.15	28	00.25	28	1.30	German.....	Nav. Lobos Trieste.....	405.0	58.3	17.0	Antwerp, Belgium.....	Seattle, Wash.....	Ballast.....	6,206	4,421	4,421
Santa Rosa.....	27	5.15	27	13.10	27	19.50	28	5.22	American.....	North German Lloyd.....	449.6	58.3	15.6	Bremen, Germany.....	Vancouver, B. C.....	Ballast.....	7,816	5,755	5,755
Palatia ²	25	15.30	28	6.05	28	13.52	28	15.10	German.....	Panama Mail S. Co.....	484.0	72.0	22.9	New York, N. Y.....	San Francisco, Cal.....	General.....	1,883	13,948	9,217
Blue Dolphin ⁴	16	8.05	28	6.05	28	13.47	29	10.00	British.....	Hamburg-American Line.....	374.0	54.0	14.2	Ramberg, Germany.....	Champrico, Guat.....	General.....	1,046	5,364	3,442
Pacific.....	27	17.45	28	7.15	28	16.16	28	17.35	British.....	A. Coolidge.....	90.0	21.0	.....	Newport News, Va.....	Coco Island.....	Ballast.....	90	90	73
Pioneer ²	27	17.45	28	7.15	28	16.16	28	17.35	British.....	Furness, Withy & Co.....	435.0	60.0	18.3	Glasgow, Scotland.....	Vancouver, B. C.....	General.....	583	9,630	6,943
Branny ²	28	6.25	28	8.25	28	17.13	28	18.25	Norwegian.....	Canadian Transp. Co.....	380.0	54.0	15.0	Leith, Scotland.....	Vancouver, B. C.....	Ballast.....	6,447	4,757	4,757
Silverleaf ²	28	7.10	28	9.40	28	18.10	28	23.20	British.....	Kerr S. S. Co.....	456.0	62.0	22.6	Boston, Mass.....	Manila, P. I.....	General.....	4,730	9,576	6,618
Arnold Maersk.....	28	9.05	28	10.50	28	19.17	28	20.40	Danish.....	A. P. Moller & Co.....	280.0	40.0	11.0	Kingston, Jamaica.....	Arica, Chile.....	Ballast.....	2,176	1,487	1,487
Robert B. Hopkins ¹	28	12.55	28	13.01	28	20.24	28	22.35	American.....	Tidewater Oil Co.....	424.0	58.0	14.6	New York, N. Y.....	San Francisco, Cal.....	Ballast.....	7,333	5,182	5,182

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Pan Scandia ²	21	21.10	22	5.45	22	13.05	22	13.35	Norwegian.....	Standard Oil Co.....	491.3	67.0	27.6	Talara, Peru.....	Southampton, Eng.....	Crude oil.....	13,842	10,424	7,214
Imperial Valley.....	21	21.10	22	5.45	22	13.05	22	13.35	Norwegian.....	Sir W. R. Smith & Sons.....	401.6	54.3	24.8	N. Westm'er, B. C.....	London, England.....	Wheat, general.....	7,572	6,656	4,954
Reinher.....	22	6.32	22	7.35	22	15.40	22	21.00	American.....	Dollar Line.....	516.5	72.2	29.0	Manila, P. I.....	New York, N. Y.....	General.....	4,453	15,299	10,589
Leche.....	21	21.00	22	8.34	22	20.25	23	3.40	French.....	Messages Maritimes.....	350.0	52.5	19.0	Noumea, N. Caled.....	Havre, France.....	General.....	3,297	5,303	7,732
Arwyoo.....	16	16.50	22	8.36	22	19.55	23	9.05	British.....	Gen. Nav. of Canada.....	225.4	34.2	14.0	Vancouver, B. C.....	St. Pierre, N. F.....	Liquors.....	558	1,370	783
Tokai Maru ²	22	9.40	22	10.22	22	21.10	23	7.45	Japanese.....	Oaka Shosen Kaisha.....	446.0	60.5	20.6	Tsingtau, China.....	Baltimore, Md.....	General.....	2,838	8,982	6,274
Nuevo.....	22	10.30	22	11.08	22	22.35	23	12.05	Panamanian.....	Hans Elliot.....	108.5	67.6	9.2	Buenaventura, Col.....	Cristobal, C. Z.....	Coffee.....	235	226	101
Napier Star.....	22	11.00	22	13.40	22	22.43	23	5.40	British.....	Blue Star Line.....	476.0	60.3	28.0	N. Westm'er, B. C.....	Liverpool, England.....	Apples, general.....	7,938	11,635	7,751
Childar ²	23	7.20	23	8.08	23	15.30	23	15.30	Norwegian.....	Wiel & Amundsen.....	377.6	54.0	24.7	Vancouver, B. C.....	Greece.....	Wheat.....	6,985	6,076	4,775
Montanan.....	23	9.00	23	9.57	23	18.15	23	18.15	American.....	Amor-Hawaland Line.....	404.6	53.9	26.1	Seattle, Wash.....	Boston, Mass.....	General.....	6,995	6,756	4,775
Lasbek.....	23	9.50	23	10.36	23	19.30	23	19.30	German.....	Knorr & Buehland.....	281.7	44.1	17.6	Yavros, Mexico.....	Bilbao, Spain.....	Chick peas.....	2,881	2,571	1,887
Peter Kerr.....	23	10.15	23	12.01	23	20.35	23	21.40	American.....	Quaker Line.....	415.0	55.7	25.6	Portland, Ore.....	Philadelphia, Pa.....	Lumber, general.....	7,757	7,704	5,696

¹ Yacht.² Launch.³ Motor ship.⁴ Tanker.⁵ Transport.⁶ For orders.⁷ Lubricating oil and grease.⁸ Towling barge No. 1.⁹ Phosphate, rock, and general.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Gross.	Net.
Tuscaloosa City	23	10 25	23	13 23	23	22 40	24	1 25	American.	Isthmian S. S. Lines	424.2	56.2	25.2	Kahului, T. H.	Baltimore, Md.	(*)	8,266	7,611	5,450
Tai Yang	23	3 40	23	14 34	23	23 30	24	3 15	Norwegian.	Barber-Wilhelmsen Line	461.4	61.6	24.6	Manila, P. I.	Boston, Mass.	General	6,217	10,009	7,075
California	23	11 30	24	6 24	24	13 30	24	14 00	American.	Panama-Pacific Line.	574.4	80.3	26.6	San Francisco, Cal.	New York, N. Y.	General	5,065	24,506	17,565
Julia Luckenbach	24	1 00	24	7 22	24	14 45	24	14 45	American.	Luckenbach Line.	437.0	57.3	27.3	Seattle, Wash.	Boston, Mass.	(*)	6,278	8,543	6,402
Emilie Maersk	24	6 00	24	8 15	24	18 40	24	18 40	Danish.	Grace Line.	276.7	41.4	20.0	Atica, Chile	Jacksonville, Fla.	Guano	2,754	2,458	1,645
Highlander	24	9 15	24	9 56	24	19 00	25	1 05	British.	Can. Nat. Steamships	400.0	52.4	11.8	Brisbane, Australia	Halifax, N. S.	Wool, skins, gen.	569	6,192	4,402
Southern Sun	24	9 20	24	10 59	24	20 00	24	20 00	American.	Sun Oil Co.	480.5	66.0	28.1	Los Angeles, Calif.	Marcus Hook, Pa.	Gasoline	13,773	9,716	6,544
Pacific Grove	24	12 25	24	13 27	24	21 10	24	22 45	British.	Furness, Withy & Co.	450.4	60.8	27.0	Vancouver, B. C.	Glasgow, Scotland.	General	8,553	10,086	7,226
Treacrell	24	14 45	24	16 00	24	23 25	24	23 25	British.	Hain S. S. Co.	400.1	52.3	24.4	Vancouver, B. C.	Europe	Wheat	7,540	5,790	4,067
Maria	24	7 27	24	7 27	24	20 00	25	13 35	American.	Wm. Carter	408.0	54.0	25.0	Balboa, C. Z.	Cristobal, C. Z.	Lumber, general	5,597	7,150	5,024
Minnesota	25	00 29	25	6 10	25	13 35	25	13 35	American.	Amer.-Hawaiian Line.	431.0	70.0	29.6	Seattle, Wash.	Boston, Mass.	Crude oil	16,023	12,344	8,249
Peter Hurl	25	6 08	25	7 38	25	15 40	25	15 40	Danish.	W. F. R. R. & H. R.	324.0	46.2	22.7	Talara, Peru	Southampton, Eng.	Lum T, sugar, gen	3,734	3,984	2,612
Point Sur	25	4 20	25	8 58	25	17 35	25	17 45	American.	Swayne & Hoyt	187.0	37.0		Seattle, Wash.	Mobile, Ala.	Wheat	8,059	5,875	4,265
Lapping	25	10 25	25	11 30	25	20 15	25	20 15	British.	U. S. Navy	405.0	53.5	24.6	Balboa, C. Z.	Cristobal, C. Z.	Wheat	8,972	6,811	4,810
Carpetby	25	23 00	26	6 06	26	13 40	26	13 40	British.	Sir R. Ropner & Co.	412.6	55.7	28.0	Vancouver, B. C.	Hull, England	Wheat	8,307	9,345	6,968
Korontan	25	23 00	26	6 06	26	13 40	26	13 40	British.	R. Chapman & Son	412.6	55.7	28.0	Vancouver, B. C.	Hull, England	Wheat	8,307	9,345	6,968
Sappho	26	1 30	26	7 20	26	14 15	26	14 15	American.	W. C. Cope	486.0	61.0	28.0	Miraflores Lake	Gatun Lake, C. Z.	Ballast	5,702	11,443	8,469
Trondanger	26	7 15	26	8 10	26	15 45	26	15 45	Norwegian.	Intercean Line	486.0	61.0	28.0	Vancouver, B. C.	Rotterdam, Holland	Grain, general	8,307	9,345	6,968
Ruahine	26	4 10	26	9 45	26	19 30	26	19 30	British.	N. S. Shipping Co.	480.0	60.0	28.2	Wellington, N. Z.	Rotterdam, Holland	Frozen, general	5,702	11,443	8,469
Sun	26	4 10	26	9 45	26	19 30	26	19 30	American.	Shell Oil Co.	480.0	66.0	29.0	San Francisco, Cal.	Perth Amboy, N. J.	Stove oil	13,848	9,620	6,476
Call	25	23 30	26	12 11	26	20 45	27	13 55	German.	North German Lloyd	216.5	32.9	16.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	945	1,105	698
Cathwood	27	2 30	27	6 08	27	13 55	27	13 55	American.	Union Oil Co.	435.0	56.0	27.4	Los Angeles, Calif.	Tiverton, R. I.	Kerosene	10,000	7,482	5,143
Beljeune	26	20 00	27	7 15	27	15 20	27	15 20	Norwegian.	W. L. Comyn & Sons	414.4	67.1	28.0	Vancouver, B. C.	Liverpool, England	Grain, lum + gen.	9,769	7,546	5,021
Pierre	27	7 25	27	17 07	27	17 05	29	6 45	Panamanian	Lafargue Brothers.	60.0	18.8		Darien, R. F.	Cristobal, C. Z.	Boards	20	47	32
Gen. Wm. M. Graham	27	7 30	27	15 20					American.	U. S. Army	160.2	32.0		Balboa, C. Z.	Cristobal, C. Z.				
Canadian	26	20 30	27	8 20	27	17 15	29	00 10	British.	Can. Nat. Steamships	400.3	52.2	16.0	Dunedin, N. Z.	Halifax, N. S.	Wool, hides	2,000	5,891	4,114
Leader	27	2 48	27	9 06	27	17 55	27	18 45	German.	Hamburg-American Line	409.8	53.9	23.0	Valparaiso, Chile.	Hamburg, Germany	General	6,601	7,145	5,474
Carl Legien	27	3 00	27	10 18	27	19 15	27	19 15	British.	Canadian Transp. Co.	420.0	54.0	26.1	Victoria, B. C.	London, England	Grain, general	8,038	6,996	5,346
Pacific Commerce	27	8 00	27	10 54	27	20 25	27	20 25	American.	Union Sulphur Co.	388.7	45.1	21.0	Victoria, B. C.	London, England	Steel pipe	4,116	3,894	1,994
Frieda	27	3 00	27	10 54	27	20 25	27	20 25	American.	Charles Nelson Co.	380.0	53.1	22.0	Seattle, Wash.	Freeport, Tex.	Lumber, general	4,212	5,657	4,133
Nelson Traveler	25	16 30	27	11 16	27	21 40	27	21 40	American.	Williams S. S. Corp.	415.1	55.7	26.0	Seattle, Wash.	New York, N. Y.	Lumber, general	8,910	7,731	5,805
Willipio	27	9 10	28	4 58	28	12 40	28	12 40	British.	Geo. H. Seales, Ltd.	428.6	55.9	20.1	Pieton, N. Z.	London, England	General	3,485	6,526	4,228
Beneruchan	27	15 27	28	6 56	28	13 50	28	14 15	British.	Pacific Steam Nav. Co.	215.7	33.6	14.0	Champerico, Guat.	Cristobal, C. Z.	General	358	1,273	706
Anacutia	27	19 45	28	7 08	28	15 05			British.	Grace Line	216.5	32.9	16.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	855	1,132	741
Manzanitas	28	4 43	28	7 12	28	15 05			German.	Anglo-Can. Ship. Co.	418.8	55.1	28.0	Vancouver, B. C.	Liverpool, England	Wheat, lumber	9,840	7,274	5,213
Pajala	28	12 20	28	13 10	28	21 10	28	21 10	Swedish.	Anglo-Can. Ship. Co.	418.8	55.1	28.0	Vancouver, B. C.	Liverpool, England	Wheat, lumber	9,840	7,274	5,213
Atika	28	17 30	28	18 30	29	11 15	29	14 55	German.	North German Lloyd	315.7	46.8	18.0	Champerico, Guat.	Hamburg, Germany	Coffee, general	1,656	3,512	2,471

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.			* DEPARTURES.		
Date.	Vessel.	From—	Date.	Vessel.	For—
January 22	No. 414-H ¹⁷	Pan American Airways	January 22	Sixola	United Fruit Co.
January 23	Duchess of Bedford	Canadian-Pacific S. S. Co.	January 23	Quirigua	United Fruit Co.
January 23	Quirigua	United Fruit Co.	January 23	Haiti	Colombian S. S. Line
January 23	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways	January 23	No. 669-M ¹⁷	Pan American Airways
January 23	No. 669-M ¹⁷	Pan American Airways	January 24	No. 144-M ¹⁷	Pan American-Grace Airways
January 23	Canden	United Fruit Co.	January 24	Canden	United Fruit Co.
January 24	Hamburg via wayports.	Hamburg via wayports.	January 24	Duchess of Bedford	Canadian-Pacific S. S. Co.
January 24	Port Limon, Costa Rica.	Port Limon, Costa Rica.	January 25	Crynssen	Royal Netherlands S. S. Co.
January 24	Crynssen	Amsterdam via wayports.	January 25	Kyphissia	Hamburg-American Line
January 25	Ancon	New York via wayports.	January 25	No. 669-M ¹⁷	Pan American Airways
January 25	No. 300-N ¹⁷	Panama Railroad S. S. Line.	January 26	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways
January 25	No. 9688 ¹⁷	Pan American Airways	January 26	No. 945-M ¹⁷	Pan American-Grace Airways
January 26	No. 660-M ¹⁷	Pan American Airways	January 27	Cayana	Elders & Fyffes, Ltd.
January 26	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways	January 27	Columbus	North German Lloyd
January 27	Guardian ¹⁸	All America Cables	January 27	Calamates	United Fruit Co.
January 27	Cayana	Avonmouth via wayports.	January 28	No. 9688 ¹⁷	Pan American Airways
January 27	Turrialba	New Orleans via wayports.	January 28	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways
January 27	Calamates	New York via Habana.	January 28	Mauretania	Cunard Line
January 27	United Fruit Co.	New York via Habana.	January 28	Turrialba	United Fruit Co.
January 27	North German Lloyd	New York via wayports.	January 28	Crynssen	Royal Netherlands S. S. Co.
January 28	Columbus	New York via wayports.	January 28		Colombian S. S. Line.
January 28	Mauretania	New York via wayports.			
January 28	Metapan	New York via wayports.			
January 28	Crynssen	Port Limon, Costa Rica.			
January 28	Pastores				

PORT OF BALBOA.

January 23	Bokuyo Maru	Hongkong, China.	January 23	Bokuyo Maru	Nippon Yusen Kaisha.	Valparaiso, Chile.
January 24	Real ¹¹	Juan Diaz, R. de P.	January 24	Real ¹¹	Hans Elliot	Juan Diaz, R. de P.
January 25	Real ¹¹	Juan Diaz, R. de P.	January 25	Real ¹¹	Hans Elliot	Panama Bay, R. P.

¹ Tanker. ¹⁰ Motor ship. ¹¹ Lumber, wood pulp, and beans. ¹² Launch. ¹³ Tug. ¹⁴ Mine planter. ¹⁵ For orders. ¹⁶ Sugar, canned pines, and wall board.

* Other than ships passing through the the Canal.

Summary of Passenger Movement at the Canal During 1932.

During the calendar year 1932, the number of passengers disembarking at the Canal Zone ports in termination of voyage aggregated 28,156, and the number embarking, or beginning a voyage during the same period, totaled 29,116. Approximately 54 per cent of the arrivals and 51 per cent of the departures were carried as first-class, and the remainder as second, tourist, third, or steerage. These figures do not include passengers merely calling at the Canal, that is, arriving and departing on the same ships.

The following tabulation shows by months the number of passengers disembarking and embarking at Canal Zone ports during the calendar year 1932, segregated as between first class and "others," with comparative totals for the calendar years 1931 and 1930:

Month.	Disembarking.			Embarking.		
	First class.	Others.	Total.	First class.	Others.	Total.
January.....	1,454	851	2,305	1,173	1,355	2,528
February.....	1,043	540	1,583	1,122	1,049	2,171
March.....	1,011	1,044	2,055	1,050	969	2,019
April.....	1,172	714	1,886	1,220	878	2,098
May.....	1,058	1,891	2,949	1,527	2,213	3,740
June.....	1,505	1,206	2,711	1,423	997	2,420
July.....	1,444	773	2,217	1,862	1,000	2,862
August.....	1,352	790	2,142	1,338	1,204	2,542
September.....	1,519	1,093	2,612	1,265	901	2,166
October.....	1,177	881	2,058	866	1,169	2,035
November.....	1,311	1,340	2,651	919	1,004	1,923
December.....	1,192	1,795	2,987	962	1,650	2,612
Total, 1932.....	15,238	12,918	28,156	14,727	14,389	29,116
Total, 1931.....	20,305	17,953	38,258	19,268	15,143	34,411
Total, 1930.....	22,751	18,672	41,423	21,480	17,850	39,330

As compared with 1931, the calendar year 1932 shows a 26.4 per cent decrease in the number of arrivals and in comparison with 1930 a 32.0 per cent decrease; in the number of departures there was a decrease of 15.4 per cent under 1931 and 26.0 per cent under 1930.

For the past 3 calendar years approximately 71 per cent of the passenger movement to and from the Canal has been through the port of Cristobal as may be seen from the following tabulation in which the totals are given for the years 1930, 1931, and 1932:

	Port of Cristobal.			Port of Balboa.		
	1930.	1931.	1932.	1930.	1931.	1932.
Passengers disembarking.....	30,167	27,094	19,155	11,256	11,164	9,001
Passengers embarking.....	28,886	24,574	20,421	10,444	9,837	8,695

A further segregation of the passenger movement shows that 21,447 incoming and 21,608 outgoing passengers were brought from and were destined to ports on the Atlantic, and 6,709 incoming and 7,508 outgoing passengers were brought from and were destined to ports on the Pacific.

TRANSIENT VISITORS.

In addition to the figures shown above of passengers disembarking and embarking, there were 93,210 transient passengers brought to the Isthmus by vessels calling at Canal ports during 1932. For the calendar year 1931, this number was 96,105, and in 1930, 111,884.

The number in 1932 decreased 2,895, or 3.0 per cent, from those in 1931, and 18,674, or 16.7 per cent, from the number in 1930. Most of these passengers came ashore for a period of from 24 to 48 hours, but as they departed on the same vessel on which they arrived, they are not taken up in the above tabulation. This group of 93,210 passengers is segregated as follows:

	Calendar year 1932.			Total.	
	Cristobal.	Balboa.	Total.	1931.	1930.
Remaining on board vessels transiting Canal:					
Atlantic to Pacific.....	35,816		35,816	37,940	46,952
Pacific to Atlantic.....		31,694	31,694	32,509	36,295
Remaining on board vessels entering port but not transiting Canal.....	24,526	1,174	25,700	25,656	28,637
Total.....	60,342	32,868	93,210	96,105	111,884

NOTE.—In passengers "remaining on board vessels transiting Canal," those from the Atlantic to the Pacific are taken up at Cristobal, and those from the Pacific to the Atlantic at Balboa, i. e., at the port of arrival from sea, and not again at the other terminus of the Canal.

CREWS.

The foregoing represents the strictly passenger traffic through the Canal and to and from Canal Zone ports. To get the total number of arrivals and departures of individuals at Canal Zone ports it would be necessary to add the crews of 4,367 commercial vessels and 519 noncommercial vessels which transited the Canal during the year, as well as 878 vessels calling at the ports of Cristobal and Balboa during the year without transiting the Canal. The aggregate personnel of such crews in the past calendar year numbered 339,349, based on the report of quarantine inspection. Owing to the fact that many of the vessels made a number of calls, however, there would be considerable duplication in so far as the number of individuals was concerned in any figures compiled relative to crews.

New Quaker Line Service.

The Quaker Line, operator of a fleet of cargo vessels in the United States intercoastal trade via the Panama Canal, has begun a direct service from Norfolk to the west coast ports of San Diego, Los Angeles, San Francisco, Oakland, Alameda, Portland, Seattle, and Tacoma. This service went into effect with the sailing from Norfolk on January 14, 1933, of the *San Bernardino*, which passed through the Canal on January 22. The new arrangement is also to provide a service from Norfolk to the Canal Zone ports of Cristobal and Balboa and, through transshipment, to ports in the West Indies, Central America, and the west coast of South America.

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., December 24, 1932.

No. 1250.

Central America, Costa Rica, Gulf of Nicoya, amended position of light. The second officer of the S. S. *Salvador* reports the following:

Negritos Island Light.—Flashing white, 1 flash every 6 seconds. Amended position, latitude 9° 49' 05" N., longitude 84° 49' 30" W.

Light is located on the eastern extremity of Negritos Island. Above position is determined from H. O. Chart No. 1034 and places the light about one mile east of the position previously announced.

(See Notice to Mariners, Balboa Heights, No. 1074, dated May 12, 1932.)

C. S. RIDLEY,
Acting Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending January 28, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Sixaola.....	United Fruit Co.		January 22		150
Santa Ana.....	Panama Mail S. S. Co.	January 22	January 22	172	76
San Bernardino.....	States S. S. Line	January 22	January 22	95	(¹)
President Lincoln.....	Dollar Line.	January 22	January 22	481	16
Nuevo Panama.....	Hans Elliot.	January 22	January 23	254	73
Tokai Maru.....	Osaka Shosen Kaisha	January 22	January 23	317	1 ¹ / ₂
Cerigo.....	Hamburg-American Line.		January 23		514
Haiti.....	Colombian S. S. Line.		January 23		678
Quirigua.....	United Fruit Co.	January 23	January 23	26	9 ¹ / ₂
Camden.....	United Fruit Co.	January 23	January 24	5,917	(²)
Tai Yang.....	Barber S. S. Line.	January 23	January 24	238	(²)
West Ira.....	McCormick S. S. Co.	January 24	January 24	3	(²)
Crijnsen.....	Royal Netherlands S. S. Co.	January 24	January 25	131	1
Orinoco.....	Hamburg-American Line.	January 24	January 25	254	13
Kyphissia.....	Hamburg-American Line.	January 24	January 25	39	250
Lochgail.....	Royal Mail Lines, Ltd.	January 24	January 25	176	(²)
Canadian Highlander.....	Canadian National Steamships.	January 24	January 25	56	19
Samuel Bakke.....	Scandinavian-South Pacific Line.	January 25	January 25	2	39
Sea Star.....	S. Mays	January 25		¹ / ₂	
Dago.....	John P. Peterson & Sons.	January 25	January 27	1,289	(²)
Palatia.....	Hamburg-American Line.	January 25	January 28	57	221
Ancon.....	Panama R. R. S. S. Line.	January 25		1,295	
President Grant.....	Dollar Line.	January 26	January 27	(¹)	95
Cali.....	Hamburg-American Line.	January 26		1,172	
Amerika.....	Danish-East Asiatic Line.	January 26	January 26	10	20
Ruahine.....	New Zealand Shipping Co.	January 26	January 26	144	(²)
Santa Rosa.....	Panama Mail S. S. Co.	January 27	January 27	223	181
Cavina.....	Elders & Fyffes, Ltd.	January 27	January 27	4	(²)
Calamares.....	United Fruit Co.	January 27	January 27	168	16
Turrialba.....	United Fruit Co.	January 27	January 28	913	320 ¹ / ₂
Metapan.....	United Fruit Co.	January 28		364	
Pastores.....	United Fruit Co.	January 28		208	
Crijnsen.....	Royal Netherlands S. S. Co.	January 28	January 28	5	342
Manizales.....	Grace Line.	January 28		969	
Acajutla.....	Pacific Steam Navigation Co.	January 28		359	

* No cargo discharged.

* No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending January 28, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Salvador.....	Pacific Steam Navigation Co.	January 21	January 21		
Santa Ana.....	Panama Mail S. S. Co.	January 22	January 22	89	1
Bokuyo Maru.....	Toyo Kisen Kaisha	January 23	January 23	25	(²)
Tai Yang.....	Barber S. S. Line.	January 23	January 23	258	
Point Palmas.....	Swayne & Hoyt.	January 24	January 30	3,773	176
Nelson Traveler.....	Nelson S. S. Line.	January 25	January 26	831	
Chateau Thierry.....	U. S. Government.	January 25	January 25	53	4
Amerika.....	Danish-East Asiatic Line.	January 26	January 27	664	
Cathwood.....	Union Oil Co.	January 27	January 27	8	
Pennsylvania.....	Panama-Pacific Line.	January 27	January 27	9	10
Santa Rosa.....	Panama Mail S. S. Co.	January 27	January 27	181	

* 439 pounds.

* 500 pounds.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., February 8, 1933. No. 28.

Traffic by Nationality for January, 1933.

The following tabulation shows the commercial traffic through the Canal during the month of January, 1933, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for January, 1932 and 1931:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	62	346,492	239,613	398,027	242,550	\$273,561.36	100,249
Danish.....	4	17,652	12,110	20,582	12,532	14,443.65	4,081
Danzig.....	3	21,564	17,167	29,255	16,722	15,526.08	
Dutch.....	3	17,259	11,183	18,581	11,438	13,978.75	2,935
French.....	3	20,216	12,590	22,775	13,288	15,737.50	4,983
German.....	15	46,364	29,569	50,958	30,200	36,116.76	15,268
Italian.....	3	19,823	12,666	23,877	14,435	14,310.62	3,599
Japanese.....	8	45,582	37,271	57,698	37,164	45,103.41	44,906
Norwegian.....	28	138,262	96,814	163,028	96,537	99,306.64	22,387
Panamanian.....	16	6,822	4,190	6,620	4,146	5,034.24	2,391
Swedish.....	5	24,651	16,657	28,558	21,334	18,645.41	17,039
United States.....	78	468,177	340,973	561,315	340,249	394,358.42	131,722
Yugoslav.....	1	4,570	3,271	5,291	3,299	3,290.40	
Total, January, 1933.....	229	1,177,434	834,074	1,386,565	843,894	949,413.24	349,550
Total, January, 1932.....	203	1,118,771	815,388	1,370,035	824,156	945,374.91	474,356
Total, January, 1931.....	244	1,228,839	903,368	1,498,244	906,915	1,036,840.05	562,832

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,708.75	10,123
British.....	44	234,334	172,755	284,302	174,218	214,248.39	294,563
Danish.....	3	15,504	10,337	16,847	10,525	12,921.25	22,114
Danzig.....	3	23,200	18,355	31,355	17,807	22,943.75	42,544
Dutch.....	2	14,452	9,356	15,701	9,662	11,695.00	17,928
French.....	3	12,967	9,739	17,711	9,507	12,173.75	18,581
German.....	16	52,254	35,842	60,503	35,991	44,802.50	62,402
Italian.....	3	21,715	14,106	27,690	16,318	17,632.50	23,920
Japanese.....	9	48,336	38,128	60,411	37,604	47,503.90	48,060
Norwegian.....	15	72,716	49,097	82,641	49,458	61,371.25	112,455
Panamanian.....	18	993	946	1,792	1,002	1,168.60	1,375
Peruvian.....	1	336	367	654	444	423.60	669
Swedish.....	4	20,260	12,467	21,442	15,731	15,583.75	30,775
United States.....	64	367,673	276,214	454,376	275,961	345,218.33	428,434
Total, January, 1933.....	186	891,784	652,276	1,082,642	658,626	813,395.32	1,113,943
Total, January, 1932.....	174	903,504	661,128	1,104,035	667,357	824,875.77	1,119,229
Total, January, 1931.....	232	1,152,032	860,449	1,420,536	864,294	1,071,300.37	1,544,105

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,708.75	10,123
British.....	106	580,826	412,368	682,329	416,768	487,809.75	394,812
Danish.....	7	33,156	22,447	37,429	23,057	27,364.90	26,195
Danzig.....	6	44,764	35,522	60,610	34,529	38,469.83	42,544
Dutch.....	5	31,711	20,539	34,282	21,100	25,673.75	20,863
French.....	6	33,183	22,329	40,486	22,795	27,911.25	23,564
German.....	31	98,618	65,411	111,461	66,191	80,919.26	77,670
Italian.....	6	41,538	26,772	51,567	30,753	31,943.12	27,519
Japanese.....	17	93,918	75,399	118,109	74,768	92,607.31	92,966
Norwegian.....	43	210,978	145,911	245,669	145,995	160,677.89	134,842
Panamanian.....	34	7,815	5,136	8,412	5,143	6,202.84	3,766
Peruvian.....	1	336	367	654	444	423.60	669
Swedish.....	9	44,911	29,124	50,000	37,065	34,229.16	47,814
United States.....	142	835,850	617,187	1,015,691	616,210	739,576.75	560,156
Yugoslav.....	1	4,570	3,271	5,291	3,299	3,290.40	.....
Total, January, 1933.....	415	2,069,218	1,486,350	2,469,207	1,502,520	1,762,808.56	1,463,503
Total, January, 1932.....	377	2,022,275	1,476,516	2,474,070	1,491,513	1,770,250.68	1,593,585
Total, January, 1931.....	476	2,380,871	1,763,817	2,918,780	1,771,209	2,108,140.42	2,106,937

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending February 5, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Santa Catalina.....	Panama Mail S. S. Co.....	January 29	January 29	2	.....
Antigua.....	United Fruit Co.....	January 29	January 29	549	 2
Lochnonar.....	Pacific Steam Navigation Co.....	January 30	January 30	4	.....
Neil Maersk.....	A. P. Moller.....	January 31	January 31	47	.....
Leikanger.....	Hapag Lloyd.....	January 31	January 31	100	.....
Santa Maria.....	Grace Line.....	February 1	February 1	98	.....
Benjamin Franklin.....	Fred Olsen Line.....	February 1	February 1	431	.....
Durazzo.....	Hapag Lloyd.....	February 2	February 2	4	.....
President Hayes.....	Dollar Line.....	February 3	February 3	2	.....
Santa Clara.....	Grace Line.....	February 3	February 3	142	1
Bijo.....	E. E. Meyers.....	February 4	.....	1	.....
Santa Cecilia.....	Panama Mail S. S. Co.....	February 4	February 4	150	(1)

* 200 pounds.

Tanker Traffic Through the Panama Canal in January, 1933.

During the month of January, 1933, 61 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement), of 364,720, on which tolls amounting to \$312,496.43 were paid. Cargo amounted to 291,809 tons, comprised of 281,308 tons of mineral oils, 6,151 tons of coconut oil, and 4,350 tons of cottonseed oil.

In point of net tonnage (Panama Canal measurement), tanker traffic increased 34.0 per cent in comparison with the corresponding month a year ago, and cargo tonnage made a gain of 17.7 per cent.

Tank ships comprised 14.7 per cent of the total commercial transits through the Canal during the month; made up 17.6 per cent of the total Panama Canal net tonnage; were the source of 17.7 per cent of the tolls collected; and carried 19.9 per cent of the total cargo through the Canal.

The number, aggregate net tonnage (Panama Canal measurement), tolls, and cargo of tank ships transiting the Canal during the month of January, 1933, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for January, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	3	16,901	\$12,748.02	2,698
Danzig.....	3	21,564	15,526.08	.....
Norwegian.....	9	57,151	41,148.72	.....
Swedish.....	1	7,103	5,114.16	.....
United States.....	18	104,990	78,426.91	* 5,522
Total, January, 1933.....	34	207,709	152,963.89	8,220
Total, December, 1932.....	32	185,483	135,344.61	10,345
Total, November, 1932.....	23	141,975	107,597.17	25,898
Total, January, 1932.....	25	148,102	118,197.39	37,961
<i>Pacific to Atlantic.</i>				
British.....	3	15,983	15,598.79	21,286
Danzig.....	3	23,200	22,943.75	42,544
French.....	1	4,545	4,995.00	8,471
Italian.....	1	6,299	6,517.50	11,407
Norwegian.....	2	12,616	13,173.75	23,608
United States.....	17	94,368	96,303.75	* 176,273
Total, January, 1933.....	27	157,011	159,532.54	283,589
Total, December, 1932.....	27	169,551	174,836.25	327,071
Total, November, 1932.....	30	182,731	187,668.75	345,237
Total, January, 1932.....	20	124,120	125,249.92	200,925

* Includes 4,350 tons cottonseed oil.

* Includes 6,151 tons coconut oil.

The following tabulation shows the tanker traffic through the Canal in January, 1933, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	21	126,555	\$93,953.71	* 5,522
United States to South America.....	2	15,463	11,133.36	.....
West Indies to United States.....	1	5,720	4,118.40	.....
West Indies to South America.....	1	1,560	1,702.50	2,698
Europe to United States.....	4	24,705	17,787.60	.....
Europe to South America.....	4	26,603	19,154.16	.....
Africa to United States.....	1	7,103	5,114.16	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	16	90,466	92,301.25	* 170,122
United States to Europe.....	5	27,652	29,212.50	50,572
South America to Mexico.....	1	4,352	3,155.04	.....
South America to Europe.....	4	30,609	30,861.25	56,744
Philippine Islands to United States.....	1	3,902	4,002.50	* 6,151

* Includes 4,350 tons cottonseed oil.

* 1,889 tons discharged at Cristobal.

* Coconut oil.

Of the tanker traffic passing through the Canal in January, 1933, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for January, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
January, 1933.....	15	90,985	\$65,509.20	.....
December, 1932.....	20	114,812	82,664.64	.....
November, 1932.....	12	75,537	55,575.35	6,216
January, 1932.....	17	102,387	79,193.66	21,719
<i>From Los Angeles.</i>				
January, 1933.....	12	71,176	71,953.75	134,475
December, 1932.....	16	98,456	100,018.75	191,554
November, 1932.....	18	109,608	112,335.00	209,064
January, 1932.....	9	58,800	60,428.10	100,164

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, February 4, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Danwood ²	28	21 50	29	6 15	29	15 35	29	16 50	American.	J. J. Moore & Co.	445 0	59 0	18 0	Boston, Mass.	Portland, Oreg.	General.	1,767	8,567
Wind Rush	28	21 50	29	6 30	29	16 32	29	17 50	Norwegian.	Amer.-Hawaiian Line.	386 0	60 0	14 4	New York, N. Y.	Los Angeles, Calif.	Ballast.	3,034	6,913
Masuda	29	3 25	29	7 20	29	17 41	29	19 05	American.	Shepard S. Co.	410 0	54 0	20 3	Chesler, Pa.	Vancouver, B. C.	General.	3,034	6,913
Pont Salinas.	29	7 40	29	8 25	29	18 35	29	19 55	British.	McLay & McIntyre	402 0	55 0	16 7	Boston, Mass.	Vancouver, B. C.	Ballast.	4,658	6,085
Pirre ³	29	7 43	29	10 03	29	20 48	29	22 18	American.	Swayne & Hoyt, Inc.	386 0	52 0	20 7	Houston, Tex.	Seattle, Wash.	General.	4,658	6,085
Arizona	27	17 05	29	6 43	29	15 37	29	17 00	Panamaian	Lafarge Brothers.	64 0	18 0	6 0	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	47	32
Gundule	30	00 30	30	7 20	30	13 33	30	15 45	American.	William S. S. Line.	434 0	57 0	16 4	Baltimore, Md.	Seattle, Wash.	General.	1,914	7,983
M-101 ⁴	30	1 53	30	8 20	30	16 16	30	17 55	Yugoslav.	Yugoslav Lloyd	409 0	55 0	16 6	Rotterdam, Holland.	Chile.	Ballast.	6,584	4,570
Swan ⁵	31	6 25	31	19 20	31	19 20	31	19 20	American.	U. S. Army	180 0	35 0	18 0	Cristobal, C. Z.	Gatun, C. Z.	(*)	3,122	5,953
Leikanger	31	5 50	31	7 45	31	17 57	31	23 04	Norwegian.	Westfal, Larsen & Co.	357 0	52 0	18 0	Buenos Aires, Arg.	Vancouver, B. C.	General.	3,294	2,356
Barnbek	31	8 40	31	9 40	31	19 05	31	21 45	German.	Knorr & Burchard.	307 0	45 0	12 6	Hamburg, Germany	Topolobampo, Mex.	Ballast.	300	1,105
Cal.	26	20 45	31	13 00	31	20 31	31	21 45	German.	North German Lloyd	216 0	32 0	13 1	Cristobal, C. Z.	Buenaventura, Col.	General.	682	3,848
Santa Catalina	30	20 00	31	13 35	31	20 40	31	21 45	American.	Panama Mail S. S. Co.	296 0	45 0	16 5	Cristobal, C. Z.	San Francisco, Cal.	General.	3,446	10,745
Lt. Col. H. C. Schumm ⁶	31	6 25	31	18 00	31	18 00	31	18 00	American.	U. S. Army	98 0	22 0	19 3	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	7,900	8,820
Mary Ann ⁷	1	00 25	1	6 15	1	13 30	1	14 40	British.	U. S. Navy	400 0	52 0	19 3	Cristobal, C. Z.	Gatun Lake, C. Z.	Ballast.	6,870	4,909
Viking Star	1	4 25	1	7 20	1	14 41	1	16 00	American.	Blue Star Line	435 0	57 0	21 6	Newcastle, Eng.	Vancouver, B. C.	Ballast.	3,446	10,745
R. J. Hanna ¹	1	5 15	1	8 05	1	15 44	1	16 55	British.	J. B. Berry & Sons.	480 0	62 0	25 0	Tiverton, R. I.	San Francisco, Cal.	Oil, auto parts.	7,900	8,820
Port Bowen.	1	5 25	1	8 00	1	16 45	1	17 50	Japanese.	Com'ith & Dom. Line.	440 0	60 0	26 3	New York, N. Y.	Fremantle, Auslia.	(*)	1,246	9,062
Katsuragi Maru ¹	1	6 40	1	10 35	1	18 45	2	10 20	Norwegian.	Kokusai Line	452 0	59 0	18 2	New York, N. Y.	Mojit, Japan.	Paper, cement.	9,033	5,938
Benjamin Franklin ²	1	7 00	1	9 20	1	17 59	1	19 19	American.	Fred Olsen Line	440 0	58 0	17 6	Oslo, Norway	Vancouver, B. C.	Ballast.	5,979	4,419
K. R. Kingsbury ³	30	19 00	1	13 40	1	21 03	1	22 15	British.	Union Oil Co.	396 0	53 0	13 0	Tiverton, R. I.	San Francisco, Cal.	Ballast.	57	29
Orient City ⁴	1	22 50	1	10 40	1	19 00	1	19 53	Panamaian	Reardon Smith Line.	37 8	18 7	17 0	Barry, England.	Vancouver, B. C.	Ballast.	1,237	6,779
Taipei Maru ⁵	1	16 30	2	6 15	2	13 40	2	15 00	Japanese.	A. A. Valdez.	414 0	56 0	17 0	Cristobal, C. Z.	Balboa, C. Z.	General.	3,401	7,344
Dalven ⁶	1	19 50	2	7 15	2	17 58	2	19 00	British.	Mitsui Bussan Kaisha.	406 0	52 0	16 0	New York, N. Y.	Yokohama, Japan.	General.	584	13,787
City of Elwood ⁷	2	3 35	2	8 20	2	18 55	2	20 05	American.	Campbell Brothers.	395 0	55 0	20 8	Port Royal, Jam.	Vancouver, B. C.	Ballast.	2,401	11,487
California ⁸	2	6 25	2	12 00	2	21 35	2	22 53	Italian.	Roosevelt S. S. Co., S. B. Nav. Libera-Tristina.	523 0	64 0	22 8	Baltimore, Md.	Darien, China.	General.	2,734	5,905
Andrea F. Luckenbach ⁹	2	12 10	2	13 05	2	22 50	2	24 00	American.	Nav. Libera-Tristina.	496 0	68 0	19 0	Naples, Italy.	Vancouver, B. C.	General.	2,289	11,680
Canadian Scot-tish ¹⁰	1	15 50	2	20 03	3	11 50	3	13 25	British.	Luckenbach Line.	399 0	52 0	22 6	Boston, Mass.	Seattle, Wash.	General.	2,769	12,023
J-No. 10 ¹¹	2	10 30	3	6 10	3	13 53	3	15 25	American.	Can. Nat. Steamships.	483 0	63 0	24 5	Halifax, Canada.	Bluff, N. Z.	General, paper.	8,443	8,443
Santa Clara ¹²	2	10 30	3	6 10	3	13 53	3	15 25	American.	U. S. Army.	483 0	63 0	24 5	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	2,289	11,680
President Hayes ¹³	3	5 35	3	7 20	3	14 52	3	16 30	American.	Grace Line.	502 0	62 0	26 0	New York, N. Y.	San Antonio, Chile	General.	2,769	12,023
									American.	Dollar Line.	502 0	62 0	26 0	New York, N. Y.	San Francisco, Cal.	General.	2,769	12,023

Cortona	31	22	15	3	8	25	3	18	35	3	10	49	British	Donaldson Line, Ltd.	414	0	55	0	19	6	Glasgow, Scotland	Vancouver, B. C.	General	251	7	424	5	393
Atlanta City	2	16	50	3	8	45	3	19	35	3	20	50	American	Isthmian S. S. Lines	424	0	56	0	21	5	Baltimore, Md.	Hawaii Islands	Steel, general	3,702	7	611	3	054
Nebraska	2	21	55	3	9	40	3	20	46	3	21	57	American	Amer-Hawian Line	472	0	60	0	17	3	Boston, Mass.	Seattle, Wash.	General	1,215	9	037	6	644
Yorkmar	3	1	00	3	10	00	3	21	55	3	23	58	American	Calmar S. S. Line	409	0	54	0	18	6	Baltimore, Md.	Seattle, Wash.	Steel, general	3,786	6	757	4	802
Madras City	3	2	20	3	11	10	3	22	45	3	24	00	British	Reardon Smith Line	383	0	57	0	13	6	Barrow, England	Vancouver, B. C.	Ballast	5,913	4	377		
British Star	3	2	20	3	11	10	3	22	45	3	24	00	British	Berre Refineries	430	0	56	0	20	0	Estero Bay, Calif.	General	5,174	4	904			
Acapulca	28	15	05	4	6	00	4	16	25	4	16	25	British	Pacific Steam Nav. Co.	215	0	34	0	13	7	Champerio, Guat.	General	410	1	273	7	06	
Manzanilla	28	15	05	4	6	10	4	18	39	4	22	35	German	Grace Line	216	0	33	0	12	0	Tumaco, Colombia	General	129	1	132	741		
Nuevo Panama	2	17	55	4	6	15	4	18	37	4	20	00	Panamanian	Reardon Smith Line	108	0	50	0	8	6	Buenaventura, Col.	General	180	226	101			
Alvito City	4	1	50	4	6	10	4	18	37	4	20	00	British	Hans Elliot	411	0	55	0	21	4	Shanghai, China	General	5,067	6	555	4	659	
Port Gaborne	4	2	25	4	7	15	4	19	37	5	1	05	British	Com'lth & Dom. Line	475	0	60	0	20	0	Dunedin, N. Z.	General	600	10	678	7	674	
Eli	4	7	05	4	7	30	4	20	42	4	21	48	Norwegian	I. C. Jorgensen	380	0	54	0	20	0	Fowey, England	General	4,013	6	150	4	639	
Mercier	4	7	30	4	8	50	4	21	50	5	4	17	Belgium	Comp. Maritime Belge	476	0	60	0	18	0	London, England	Vancouver, B. C.	Ballast	8,771	6	292		
Montevideo	4	11	15	4	11	30	4	22	49	4	23	57	Japanese	Osaka Shosen Kaisha	430	0	56	0	22	6	Buenos Aires, Arg.	Kobe, Japan	(*)	3,564	7	875	5	821
Mani	4	13	20	4	13	30	4	23	58	4	24	00	American	Lockenbach-Gulf Line	401	0	52	0	21	0	Houston, Tex.	Seattle, Wash.	General	3,520	6	002	4	621
Florence Luckenbach	2	18	45	4	6	35	4	18	21	4	19	20	Panamanian	A. Valdez	64	0	18	0	0	0	Cristobal, C. Z.	Panama, R. P.	Ballast	10	185	106		
Pirre	3	22	40	1	14	00	1	22	15	1	22	15	Panamanian	Hans Elliot	120	2	22	0	6	6	Cristobal, C. Z.	Panama, R. P.	Flour	10	185	106		
Baru	31	22	40	1	14	00	1	22	15	1	22	15	Panamanian	Hans Elliot	120	2	22	0	6	6	Cristobal, C. Z.	Panama, R. P.	Flour	10	185	106		

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

San Antonio	28	23	45	29	4	38	29	12	30	29	23	10	French	French Line	431	0	57	2	27	0	Astoria, Oreg.	Havre, France	General	6,831	7	771	4	630
Langbeek	29	00	40	29	6	15	29	13	40	29	13	40	British	Louis Dreyfus	414	9	55	8	24	2	Vancouver, B. C.	Greece	Wheat	8,638	6	671	4	831
Standard Arrow	29	3	50	29	7	18	29	15	30	29	15	30	American	Stand. Vac. Transp. Co.	467	6	62	7	28	0	Los Angeles, Calif.	Providence, R. I.	Kerosene	12,025	9	698	6	733
Alaskan	29	6	40	29	8	21	29	15	40	29	15	40	American	Amer-Hawian Line	415	0	53	7	25	0	Portland, Oreg.	Boston, Mass.	Lumber, general	6,192	7	380	5	339
William A. McKenney	29	7	30	29	9	21	29	17	40	29	17	40	American	McComick S. S. Co.	395	0	55	1	26	3	Pt. Townsend, Wash.	Philadelphia, Pa.	Lumber, general	6,512	6	993	5	009
Flomar	29	8	30	29	10	25	29	18	55	29	18	55	American	Calmar S. S. Corp.	410	0	54	2	25	0	Seattle, Wash.	Baltimore, Md.	Lumber	7,407	6	604	4	655
Santa Catalina	29	6	45	29	11	21	29	20	00	31	13	35	American	Panama Mail S. S. Co.	296	1	45	9	18	0	San Francisco, Cal.	Cristobal, C. Z.	Coffee, general	7,901	3	848	2	603
Oratio	29	16	00	29	17	05	30	9	05	31	1	00	Italian	Italia-America Line	482	8	61	2	26	0	Valparaiso, Chile	Genoa, Italy	General	3,553	12	977	9	373
Point Palmas	24	22	30	5	12	30	32	10	35	31	1	05	American	Swayze & Hoyt	386	8	52	2	21	0	Portland, Oreg.	Houston, Tex.	Lumber, general	2,001	5	708	4	138
Ferhill	29	13	30	30	6	20	30	13	45	30	13	45	Norwegian	Fern Line	377	6	54	0	25	0	Manila, P. I.	Cape Hatteras	Sugar	7,200	6	081	4	538
Nuevo Panama	30	10	00	30	11	20	30	17	45	31	12	25	Panamanian	Hans Elliot	108	5	20	6	9	0	Buenaventura, Col.	Cristobal, C. Z.	(*)	185	226	101		
Lochnonar	30	15	01	30	15	54	30	23	45	31	13	15	British	Royal Mail Lines, Ltd	486	0	62	0	30	0	Vancouver, B. C.	Rotterdam, Holl'd.	Fruit, grain, gen.	9,370	10	772	7	581
Pukkestan	30	17	01	31	4	45	31	12	35	31	12	35	British	Common Brothers	440	5	56	1	22	0	Vancouver, B. C.	Hull, England	General	9,927	7	679	5	828
Katrina Luckenbach	30	17	20	31	6	16	31	13	20	31	13	20	American	Lockenbach Gulf Line	446	0	56	1	22	0	Portland, Oreg.	Mobile, Ala.	General	4,000	8	508	6	179
F. J. Luckenbach	31	6	30	31	7	21	31	14	45	31	14	45	American	Lockenbach Line	446	0	56	1	26	0	Seattle, Wash.	Boston, Mass.	General	4,827	8	508	6	179
Niel Maersk	31	00	25	31	9	29	31	17	05	31	20	00	Danish	A. P. Moller	409	8	54	7	26	0	Cebu, P. I.	New York, N. Y.	General	7,362	7	410	5	23
A. B. Obarrio	31	11	05	31	12	22	31	22	55	1	10	00	Panamanian	A. Valdez	57	8	19	7	0	0	Darien, R. P.	Cristobal, C. Z.	Bananas	55	57	29		
Deroche	31	11	05	31	12	22	31	22	55	1	10	00	American	Union Oil Co.	435	0	56	0	30	0	Los Angeles, Calif.	Baltimore, Md.	Furnace oil	9,800	7	452	5	199
Fela	31	12	45	31	13	40	31	22	40	1	3	00	Italian	Nas. Libera-Trestitina	436	6	53	4	26	0	Vancouver, B. C.	Trieste, Italy	General	8,960	7	841	6	043
Baru	31	14	08	31	15	27	31	22	40	1	14	00	Panamanian	Hans Elliot	108	0	21	6	8	0	Darien, R. P.	Cristobal, C. Z.	Bananas	111	185	106		
Norfolk Maru	31	19	05	31	19	49	1	11	40	1	11	40	Japanese	Kawasaki Kisen Kaisha	485	0	53	0	18	0	Shanghai, China	New York, N. Y.	Silk, general	1,334	7	632	4	984
Swan, No. 34	31	19	20	31	19	50	1	8	30	31	19	50	American	U. S. Navy	107	0	34	0	0	0	Balboa, C. Z.	Cristobal, C. Z.	(*)	1,334	7	632	4	984

* Cotton, nitrate, scrap iron, tobacco, zinc, and cottonseed oil.

* Towing barge.

* Crane.

* Tug.

* Mine sweeper.

* Launch.

* Motor ship.

* Motor schooner.

* Canned beef, coffee, wool, bones, hides, and general.

* For orders.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From— Seattle, Wash. Hilo, P. I. Vancouver, B. C. San Antonio, Calif. New York, N. Y. N. Westm, B. C. Vancouver, B. C. Stockholm, Sweden Glasgow, Scotland Tiverton, R. I. Cristobal, C. Z. Antwerp, Belgium London, England Cristobal, C. Z. Greenock, Scotl'd. Hamburg, Germany U. S. Atlantic ports Lands End, Eng. ¹³	For— Boston, Mass. Cape Hatteras ¹³ London, England Characo, D. W. I. New York, N. Y. Newcastle, Eng. (¹³) Glasgow, Scotland Tiverton, R. I. Cristobal, C. Z. Antwerp, Belgium London, England Cristobal, C. Z. Greenock, Scotl'd. Hamburg, Germany U. S. Atlantic ports Lands End, Eng. ¹³	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Mexican ¹³	31	18.45	1	4.57	1	12.50	1	12.50	American	Amer-Hawaiian Line	472.3	57.2	26.1	Seattle, Wash.	Boston, Mass.	Lumber, general.	8,336	9,258	6,944
Stemstad ¹³	31	22.30	1	6.14	1	14.10	1	14.10	Norwegian	Pen Line	375.5	53.8	26.0	Hilo, P. I.	Cape Hatteras ¹³	Sugar.	7,555	6,256	4,663
Romany ¹³	31	23.00	1	7.15	1	14.55	1	14.55	British	Sir R. Roper & Co.	402.7	53.0	25.0	Vancouver, B. C.	London, England	Wheat, timber.	7,900	9,910	4,242
Anatina ¹³	1	00.35	1	8.15	1	18.30	1	18.30	Norwegian	Shell Oil Co.	406.0	52.2	25.0	San Antonio, Calif.	Characo, D. W. I.	Fuel oil.	6,196	6,006	4,533
Santa Maria ¹³	1	5.30	1	10.14	1	17.30	1	20.40	American	Grace Line	420.5	64.0	25.0	Los Angeles, Calif.	New York, N. Y.	General.	3,064	6,626	6,666
Gothic Star ¹³	1	20.00	2	4.43	2	12.35	2	12.35	British	Blue Star Line	427.0	56.2	27.0	N. Westm, B. C.	Newcastle, Eng.	Apples, general.	8,391	7,521	5,862
Balboa ¹³	1	18.35	2	6.19	2	14.25	2	15.20	British	Johnson Line	425.0	56.0	28.0	Vancouver, B. C.	Stockholm, Sweden	(¹³)	8,391	7,480	5,833
Cape Horn ¹³	1	19.00	2	7.24	2	17.25	2	17.25	British	Lybie Shipping Co.	480.5	66.0	28.0	Vancouver, B. C.	Glasgow, Scotland	(¹³)	9,473	6,813	4,838
Cerro Elano ¹³	2	1.00	2	8.18	2	17.25	2	17.25	American	J. B. Berry Sons Co.	60.0	18.8		San Francisco, Cal.	Tiverton, R. I.	Gas oil.	13,175	9,398	6,451
Pirre ¹³	2	9.10	2	8.40	2	18.40	4	6.35	Panamaian	Laffargue Brothers.	381.2	53.7	25.4	Darien, R. P.	Cristobal, C. Z.	Lumber.	21	47	32
Nyhorn ¹³	2	12.10	2	9.55	2	18.40	2	18.40	Norwegian	Canadian Transp. Co.	400.0	53.7	25.0	Vancouver, B. C.	Antwerp, Belgium	General.	7,592	6,475	4,899
Durazzo ¹³	2	12.25	2	12.54	2	20.40	2	20.40	British	R. Chapman & Son	400.0	53.7	25.0	Vancouver, B. C.	London, England	Wheat, general.	7,494	5,740	4,087
Lycia ¹³	2	1.30	2	14.02	2	21.50	2	21.50	German	Hamburg-American Line	227.5	34.3	14.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	943	1,632	1,041
San Francisco ¹³	2	16.00	2	14.10	3	10.20	3	13.00	British	Duncan Fox & Co.	300.5	44.2	22.0	Pt. Chicama, Peru.	Greenock, Scotl'd.	Sugar.	4,338	3,333	2,207
Steel Inventor ¹³	2	21.15	3	5.24	3	13.25	3	15.00	German	Hamburg-American Line	432.3	59.1	26.0	Vancouver, B. C.	Hamburg, Germany	General.	8,133	8,454	6,344
Herborg ¹³	2	22.20	3	6.39	3	14.55	3	18.00	Norwegian	Isthmian S. S. Lines	424.2	56.2	26.0	Hilo, P. I.	U. S. Atlantic ports	Sugar.	8,468	7,611	5,450
District of Columbia ¹³	2	16.34	3	7.29	3	16.55	3	16.55	American	Anglo-Saxon Pet. Co.	455.0	59.6	27.0	San Francisco, Cal.	Lands End, Eng. ¹³	Benzine.	10,657	8,214	5,719
Northern ¹³	3	7.20	3	8.46	3	17.50	3	16.55	American	Texas Oil Co.	431.0	59.2	28.0	Los Angeles, Calif.	Port Neches, Tex.	Fuel oil.	11,199	8,097	5,431
Punta Gorda ¹³	3	9.30	3	10.52	3	19.00	3	17.50	British	Sun Oil Co.	480.6	66.0	29.2	Los Angeles, Calif.	Chester, Pa.	Gasoline.	14,013	9,664	6,552
Ionic ¹³	3	00.30	3	14.19	3	21.45	3	19.00	British	Lago Shipping Co.	305.0	50.0	11.0	Guayaquil, Ecuador	Aruba, D. W. I.	Ballast.	2,597	1,500	977
Tanager ¹³	3	11.00	3	15.10	3	23.10	3	21.45	British	Slaw, Savill & Albion	398.1	63.3	27.0	Auckland, N. Z.	London, England	Frozen, wool.	5,474	12,872	5,577
Dagbild ¹³	3	12.45	4	4.45	4	13.25	4	13.25	Norwegian	Interocean S. S. Corp.	398.1	63.3	27.0	Vancouver, B. C.	Rouderdam, Holl'd.	General.	7,496	6,858	5,308
Nordval ¹³	3	20.00	4	6.21	4	14.25	4	14.25	Danish	Cie. P. C. et R. de Berre	471.8	64.2	27.0	Estero Bay, Calif.	Berre, France	Crude oil.	11,802	9,453	6,730
Chile Maru ¹³	3	21.30	4	7.24	4	15.05	4	16.05	Japanese	Canadian Transp. Co.	369.0	53.9	26.0	Vancouver, B. C.	Hall, England	Grain, flour.	7,750	6,194	4,467
President Her-reuschmidt ¹³	3	22.30	4	8.24	4	17.05	4	17.05	Norwegian	Kokusai Kisen Kaisha.	385.0	51.0	26.0	Manila, P. I.	U. S. Atlantic ports	Sugar.	7,000	5,923	4,409
Kwanai ¹³	4	1.05	4	9.24	4	18.35	4	17.05	Japanese	Pechelbronn, Strasburg.	477.1	63.0	29.0	La Libertad, Ecua.	Antwerp, Belgium	Crude oil.	13,033	9,444	6,483
Sollund ¹³	4	22.40	4	10.05	4	19.30	4	18.35	Japanese	Oak Shosen Kaisha.	461.7	61.5	26.4	Manila, P. I.	New York, N. Y.	General.	6,715	9,414	6,790
Bodegraven ¹³	4	4.30	4	10.17	4	20.50	5	21.45	Norwegian	Panama Mail S. S. Co.	221.6	32.2	15.0	Charapetico, Guat.	Cristobal, C. Z.	Coffee.	1,043	980	579
Tatsumo Maru ¹³	4	8.20	4	11.37	4	20.50	5	21.45	Dutch	Royal Neth. S. S. Co.	400.9	58.2	26.0	Valparaiso, Chile.	Hamburg, Germany	General.	7,955	7,834	6,018
Santa Cecilia ¹³	4	11.00	4	14.33	4	22.15	5	13.25	Japanese	Nippon Yusen Kaisha.	445.0	58.0	26.3	Manila, P. I.	Boston, Mass.	General.	8,268	8,015	5,716
Steel Maker ¹³	4	14.35	4	15.08	4	23.25	5	13.25	American	Panama Mail S. S. Co.	360.2	51.6	26.0	San Francisco, Cal.	New York, N. Y.	General.	2,958	5,797	4,188
	4	14.35	4	15.08	4	23.25	5	3.50	American	Isthmian S. S. Lines	395.6	55.0	27.1	Tacoma, Wash.	Avonmouth, Eng.	General.	8,328	7,330	5,245

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.			* DEPARTURES.				
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
January 29	Pellerin de Latouche	French Line	St. Nazaire via wayports.	January 29	Metapan	United Fruit Co.	New York via wayports.
January 29	Dakarlan	Leyland S. S. Line	Liverpool via wayports.	January 29	Ancon	Panama R. R. S. S. Line	New York via Haiti.
January 29	No. 144-M ¹⁶	Pan American-Grace Airways	Buenaventura, Colombia.	January 29	Pastores	Colombian S. S. Line	New York via wayports.
January 29	No. 9685-M ¹⁶	Pan American Airways	San Salvador via waypts.	January 30	No. 660-M ¹⁶	Pan American Airways	Barranquilla, Colombia.
January 30	Calamares	United Fruit Co.	Port Limon, Costa Rica.	January 30	Calamares	United Fruit Co.	New York via Habana.
January 30	Maxwell Newball	United Fruit Co.	San Andres, Colombia.	January 30	Sea Star	S. Mayo	Havre via wayports.
January 30	Klondyke ¹⁴	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	January 30	Fellerin de Latouche	Pan American-Grace Airways	Acaadi, Colombia.
January 30	No. 145-M ¹⁶	Pan American Airways	Barranquilla, Colombia.	January 31	No. 300-N ¹⁶	Pan American Airways	Buenaventura, Colombia.
January 30	No. 660-M ¹⁶	Pan American Airways	New Orleans via waypts.	January 31	No. 9685-M ¹⁶	Pan American Airways	San Salvador via waypts.
January 31	Contessa	Holland-America Line	New Orleans via waypts.	February 1	Statendam	Holland-America Line	New York via wayports.
February 1	Statendam	Pan American Airways	San Salvador via waypts.	February 1	Contessa	Standard Fruit & S. S. Co.	New Orleans via waypts.
February 1	No. 945-M ¹⁶	Pan American-Grace Airways	Chiclayo via wayports.	February 2	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways	Medellin via wayports.
February 2	No. 664-M ¹⁶	Pan American Airways	Miami via wayports.	February 2	No. 660-M ¹⁶	Pan American Airways	Miami via wayports.
February 2	Argon	Standard Vacuum Transp. Co.	Baumont, Tex.	February 2	Pearl Marie	G. I. Bryan	Bluefields, Nicaragua.
February 3	Vragia	United Fruit Co.	New York via wayports.	February 2	Dakarlan	Leyland S. S. Line	Elio Bueno, Jamaica.
February 3	Colombia	Royal Netherlands S. S. Co.	Amsterdam via wayports.	February 3	Vragia	United Fruit Co.	Port Limon, Costa Rica.
February 3	Tivvies	United Fruit Co.	New Orleans via waypts.	February 4	No. 9673 ¹⁶	Pan American Airways	San Salvador via waypts.
February 3	Guayaquil	Panama R. R. S. S. Line	New York, N. Y.	February 4	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways	Medellin via wayports.
February 3	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways	Medellin via wayports.	February 4	Argon	Standard Vacuum Transp. Co.	Baumont, Tex.
February 4	Colombia	Colombian Line	New York via wayports.	February 4	Guayaquil	Panama R. R. S. S. Line	New York, N. Y.
February 4	Santa Marta	United Fruit Co.	New York via Kingston.	February 4	Colombia	Royal Netherlands S. S. Co.	Port Limon via Kingston.
				February 4	Tivvies	United Fruit Co.	New Orleans via waypts.

PORT OF BALBOA.

January 29	Antigua Bijo ¹³	United Fruit Co. E. E. Meyers	San Francisco, Calif.	January 29	Antigua	United Fruit Co	San Francisco, Calif.
February 4			San Diego, Calif.				
' Tanker.	¹³ Motor ship.	¹⁴ Motor schooner.	¹⁵ For orders.	¹⁶ Air mail carrier.	¹⁷ Wheat, barley, and general.	¹⁸ Wheat, lumber, and general.	
			* Other than ships passing through the Canal.				

* Other than ships passing through the Canal.

Quality of Radio Apparatus and Operation on Ships.

THE PANAMA CANAL, DEPARTMENT OF OPERATION AND MAINTENANCE,
BALBOA HEIGHTS, C. Z., February 4, 1933.

Notice to steamship owners and agents:

The Commandant, Fifteenth Naval District, has reported that on several occasions recently the Gatun Radio Station, which handles communications with commercial vessels in this area, has had difficulty in getting messages through promptly. He reports that in the case of a certain vessel on two occasions about 25 minutes were required to clear a despatch of 19 words, which normally should go through in about 1 minute. Furthermore, after contact had been established, the Gatun station was obliged to communicate on the international distress frequency on account of ignorance or inability of this vessel's operator.

Rule 171 of the Rules and Regulations Governing Navigation of the Panama Canal and Adjacent Waters are specific as to the quality required for ship's radio apparatus as well as of the proficiency of the operators, and it is requested that the necessary steps be taken to insure efficient communication by vessels using the Canal.

W. ANCRUM,
Marine Superintendent.

APPROVED:

J. L. SCHLEY,
Governor.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 3, 1933.

No. 14.

Panama Canal, Pacific entrance, aids to navigation. The small unlighted nun buoy, red and black horizontal striped, marking the sunken schooner *Leonidas* (in position San Jose Rock bears 157 degrees; Flamenco Island light bears 266 degrees) was discontinued, effective February 1, 1933.

The position of the wreck and its vicinity was carefully dragged and no trace of the wreck could be found.

Notices to Mariners Nos. 1196 and 1199, Balboa Heights, C. Z., are hereby canceled.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 3, 1933.

No. 15.

Panama, Panama Bay (Gulf of San Miguel), Iguana Island, rock southward. The following is quoted from the Hydrographic Bulletin dated Washington, D. C., January 25, 1933:

The commanding officer of the U. S. S. *Nokomis* reports the existence of a pinnacle rock about one-half mile southeast of the southern point of Iguana Island. The rock has a depth of 2 fathoms over it at low water with a depth of 12 fathoms or more 200 yards farther south. Approximate position, lat. 7° 36' 30" N., long. 80° 00' 00" W.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 6, 1933.

No. 16.

Ecuador, Galapagos Islands, Isabela (Albemarle) Island, wreck. The following is quoted from Notice to Mariners No. 3, dated Washington, D. C., January 21, 1933:

The second officer of the American fishing vessel *Glory of the Seas* reports that the wreck of the fishing vessel *Santa Veronica* lies stranded on the reef off Albemarle Point, northern extremity of Isabela (Albemarle) Island. Approximate position, lat. 0° 10' 45" N., long. 91° 23' 30" W.

J. L. SCHLEY,
Governor.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal, Washington, D. C.

Entered as second-class matter, February 6, 1913, at the Post Office

at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., February 15, 1933. No. 29.

Cargo Through the Canal During January, 1933.

On pages 388 and 389 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in January, 1933. This cargo, segregated according to direction as compared with January, 1932, and the differences, are shown in the following tabulation:

	January, 1932.	January, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	474,356	349,560	-124,796
Pacific to Atlantic.....	1,119,229	1,113,943	-5,286
Total.....	1,593,585	1,463,503	-130,082

Total cargo through the Canal in the past month made a decline of 130,082 tons, or 8.2 per cent, in comparison with January, 1932. As will be noted from the above, all of this loss with the exception of 5,286 tons, occurred in the Atlantic to Pacific movement. In comparison with the preceding month (December, 1932) total cargo tonnage declined 158,078 tons, or 9.7 per cent. Decreased shipments in both directions contributed to this loss, those from the Atlantic to Pacific declining 41,527 tons, or 10.6 per cent, while those in the opposite direction fell off 116,551 tons, or 9.5 per cent.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the 349,560 tons of cargo originating in the Atlantic area, that coming from the United States amounted to 241,776 tons, or 69.2 per cent of the total moving from the Atlantic to the Pacific during the month. This was a decrease of 107,156 tons, or 30.7 per cent, in comparison with the tonnage coming from the east coast of the United States in January, 1932. Cargo from Europe, which amounted to 77,689 tons, or 22.2 per cent of the total moving from the Atlantic to the Pacific during the past month, registered a decrease of 21,704 tons, or 21.8 per cent, in comparison with January, 1932. Tonnage from the United States and Europe made up over 91 per cent to the total cargo tonnage moving from the Atlantic to the Pacific in January, 1933. The proportion of the total tonnage originating in the United States in the past month was lower than in January, 1932, while that from Europe was slightly higher.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in January, 1933, was reported as follows: 137,509 tons, or 39.4 per cent, to the United States; 129,305 tons, or 37.0 per cent, to Asia; 23,554 tons, or 6.7 per cent, to South America; and

32,969 tons, or 9.4 per cent, to Australasia. Tonnage to all these areas declined in comparison with January, 1932, as follows: To the United States, 63,786 tons, or 31.7 per cent; to Asia, 14,736 tons, or 10.2 per cent; to South America, 13,447 tons, or 36.3 per cent; and to Australasia, 1,069 tons, or 3.1 per cent. The percentage of the total cargo destined to the United States showed a decrease in comparison with January, 1932, as did that to South America, while the proportions to Asia and Australasia registered gains.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in January, 1933, 516,966 tons, or 46.4 per cent of the total, originated in the United States; 319,624 tons, or 28.7 per cent, in Canada; 113,207 tons, or 10.2 per cent, in South America; 105,730 tons, or 9.5 cent, in Asia; and 36,802 tons, or 3.3 per cent, in Australasia. Tonnage from the United States, Canada, and Asia, made increases in comparison with January, 1932, as follows: From the United States, 73,029 tons, or 16.5 per cent; from Canada, 55,984 tons, or 21.2 per cent; and from Asia, 36,014 tons, or 51.7 per cent. From South America there occurred the heavy decrease of 164,518 tons, or 59.2 per cent, and from Australasia a loss of 6,132 tons, or 14.3 per cent. Cargo from regions from which increases occurred also showed substantial increases in the proportion of the total cargo, while from South America the percentage dropped from 24.8 per cent of the total in January, 1932, to 10.2 per cent in the past month. The proportion from Australasia also made a slight decline. An increase of some 100,000 tons in mineral oil shipments played an important part in the gain in tonnage from the United States, while larger shipments from Canada were influenced by heavy wheat shipments. Heavy loss in tonnage from South America was due to the discontinuance of shipments of iron ore, and the heavy curtailment of nitrate tonnage.

Destination.—Segregated according to destination, 487,796 tons, or 43.8 per cent of the cargo moving from the Pacific to the Atlantic was reported destined to ports on the east coast of the United States, and 593,267 tons, or 53.3 per cent of the total, to Europe. These two areas absorbed 97.1 per cent of the total cargo moving in this direction in the past month. Cargo destined to the United States declined 19,871 tons, or 3.9 per cent, while that to Europe gained 44,921 tons, or 8.2 per cent. Discontinuance of iron ore shipments to the United States from South America and smaller lumber shipments were largely responsible for the decreased tonnage to the United States, while the heavier tonnage to Europe was greatly influenced by heavier wheat shipments.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify approximately 92 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of January, 1933. The remaining 8 per cent consisted, for the most part, of manufactured articles in small lots report as "general cargo."

Pacific-bound commodities which aggregated more than 5,000 tons for January, 1932, or January, 1933, are listed in the following tabulation, showing the differences:

Commodity.	January, 1932.	January, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Ammonium compounds.....	10,895	1,978	-8,917
Asphalt and tar.....	7,221	1,097	-6,124
Automobiles, parts and accessories.....	8,393	8,167	-226
Canned goods (fish, fruit, vegetables, etc.).....	11,900	8,467	-3,433
Cement.....	5,693	4,923	-770
Chemicals.....	7,206	5,301	-1,905
Coal and coke.....	9,605	6,616	-2,989
Coffee.....	7,352	4,974	-2,378
Corn.....	6,781	10,667	+3,886
Cotton.....	74,683	52,515	-22,168
Cresote.....	6,770	.....	-6,770
Iron and steel, manufactures of.....	60,099	37,462	-22,637
Machinery.....	5,374	4,820	-554
Oils, mineral.....	42,458	17,075	-25,383
Oils, vegetable.....	3,249	5,603	+2,354
Ores.....	70	6,237	+6,167
Paper.....	14,694	13,644	-1,050
Phosphates.....	16,516	15,503	-1,013
Potash.....	5,524	4,585	-939
Slag.....	10,488	2,880	-7,608
Scrap metal.....	3,922	18,963	+15,041
Sulphur.....	9,494	7,283	-2,211
Textiles.....	5,853	6,597	+744
Tinplate.....	11,485	5,462	-6,023
Tobacco.....	5,452	6,065	+613
Wood pulp.....	3,201	5,135	+1,934

The above 26 commodity groups for January, 1933, comprise about 74 per cent of the total cargo moving from the Atlantic to the Pacific. Seven of the items made gains in comparison with January, 1932, while the balance decreased.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify over 98 per cent of the cargo moving from the Pacific to the Atlantic during January, 1933. Commodities which aggregated more than 5,000 tons either during the past month or January, 1932, are listed below, showing the differences:

Commodity.	January, 1932.	January, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	5,473	16,266	+10,793
Beans, edible, dry.....	8,367	10,956	+2,589
Beans, soy.....	7,841	600	-7,241
Borax.....	7,592	4,869	-2,723
Canned goods (fish, fruit, vegetables, etc.).....	58,851	49,405	-9,446
Coffee.....	11,784	13,280	+1,496
Cold storage (food products) ¹	19,886	21,205	+1,319
Copra.....	3,963	6,631	+2,668
Flour.....	7,939	16,186	+8,247
Fruit, dried.....	20,677	21,912	+1,235
Fruit, fresh.....	27,136	27,518	+382
Iron and steel, manufactures of.....	967	5,282	+4,315
Lumber.....	148,901	114,996	-33,905
Metals, principally copper.....	50,011	23,277	-26,734
Nitrates.....	66,925	2,238	-64,687
Oats.....	14,977	8,668	-6,309
Oils, mineral.....	201,561	279,642	+78,081
Oils, vegetable.....	2,006	11,954	+9,948
Ores.....	60,357	3,692	-56,665
Paper.....	8,353	6,372	-1,981
Skins and hides.....	3,555	5,053	+1,498
Sugar.....	88,774	106,862	+18,088
Wheat.....	210,553	262,339	+51,786
Wood pulp.....	10,621	8,394	-2,227
Wool.....	13,453	12,772	-681

¹ Does not include fresh fruit.

The above 25 commodity groups for January, 1933, comprise over 93 per cent of the cargo tonnage moving from the Pacific to the Atlantic. Fourteen of the items show increases and the balance decreases in comparison with January, 1932. Important gains were registered in shipments of mineral oils and wheat, while ores, nitrates, metals, and lumber made heavy decreases.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, January, 1933.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.						AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.		
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. ²	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. ¹	Total, South America.	Australia.	New Zealand.	Australasia. ¹	Total, Australasia.	Philippine Islands.	China.	Japan.	Far East. ¹			Total, Asia.	
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports.....	64,753	61	533	405	1,967	67,719	1,375	425	202	772		2,774	5,209		20	5,289	9,213	10,121	22,183	574	42,091	117,873	33.7	
South Atlantic ports.....	2,856					2,856											323	275	5,099	69	5,766	8,622	2.5	
Gulf ports.....	38,566	1,170				39,736											1,761	5,208	64,696	3,880	75,545	115,281	33.0	
Total, United States.....	106,175	1,231	533	405	1,967	110,311	1,375	425	202	772		2,774	5,269		20	5,289	11,297	15,604	91,978	4,523	123,402	241,776	69.2	
East coast of Canada.....	349					349							2,466	3,745		6,211			4,750		4,750	11,310	3.2	
East coast of Central America.....	691	3,290				3,981	494	1,303	950	549	12	3,308							651		651	7,289	2.1	
Cristobal, C. Z. ²	141	170				311		2,698				2,698						6		11		17	0.9	
West Indies.....																								
Total, North America.....	107,007	1,750	3,823	405	1,967	114,952	1,869	1,728	3,850	1,321	12	8,780	7,735	3,745	20	11,500	11,303	15,604	97,390	4,523	128,820	264,052	75.6	
EUROPE:																								
British Isles.....	1,177	4,513				5,690	2,355	138	306	2,418		5,217				19,069	1,200	20,269				31,176	8.9	
Belgium.....	6,403	143	1,579			10,899	1,037	186	167	709	345	2,444										13,343	3.8	
Denmark.....	19			602		621						20				1,099	1,099					1,733	0.5	
France.....	590	24				614	20															1,733	0.5	
Germany.....	2,715	325	751	55	4,483	8,314	1,009	152	166	824	715	2,866										11,180	3.2	
Holland.....	933	113				1,045	137	74	156	110		477										1,522	0.4	
Italy.....	1,099	45	85	1		1,231	163			24	107	294										1,625	0.4	
Norway.....	111	58	628	10		807	39		576	200		815										1,622	0.5	
Spain and Portugal.....	500	1,535	1			2,036	16		50	60		16										2,052	0.6	
Sweden.....	9,640	12				9,652	1,450					1,560										11,212	3.2	
Europe ¹	381		257			638	118	30	31	91	795	1,665										1,703	0.5	
Total, Europe.....	23,568	6,767	3,301	669	7,242	41,547	6,344	580	1,452	4,436	1,962	14,774				19,069	2,299	21,368				77,689	22.2	
East coast of South America.....	6,828	198		100		7,126														485		485	7,611	2.2
Far East.....	67			1		68																68	0.0	
Africa (other than Egypt).....																						101	0.0	
Egypt.....	39					39																39	0.0	
Grand total.....	137,509	8,715	7,124	1,175	9,209	163,732	8,213	2,308	5,302	5,757	1,974	23,554	7,735	22,814	2,420	32,969	11,303	15,604	97,875	4,523	129,305	349,500	100.0	
Per cent of total cargo:																								
January, 1933.....	39.4	2.5	2.0	0.3	2.7	46.9	2.3	0.7	1.5	1.6	0.6	6.7	2.2	6.5	0.7	9.4	3.2	4.5	28.0	1.3	37.0	100.0	.....	
January, 1932.....	42.4	1.6	2.5	3.9	4.2	54.6	5.1	0.3	0.6	1.7	0.1	7.8	2.2	4.5	0.5	7.2	2.5	9.5	17.6	0.8	30.4	100.0	.....	
January, 1931.....	39.6	1.6	2.1	4.6	1.5	49.4	6.4	0.6	0.5	2.3	4.0	13.8	2.8	11.0	0.8	14.6	1.9	4.3	9.4	6.6	22.2	100.0	.....	

Per cent of total cargo:

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, January, 1933.

(Figures represent tons of 2,240 pounds.)

From —	NORTH AMERICA.										EUROPE.										Grand total.	Per cent of total cargo.											
	UNITED STATES.					Other North America.					Europe.					Other Europe.																	
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Central America.	Cuba, C. Z.	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Greece.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.			Europe. ¹	Total, Europe.	East coast of South America.	Far East.	Africa.						
N. AMERICA:																																	
W. coast U. S.	332,486	8,079,200	992,361	557,631	1,849	25	2,370	6,045,309	997,60,005	8,484	631	15,368	20,609	11,164	374	363	291	653	23,572	142,312	2,449	1,183	1,025	516,966	46.4								
W. coast Can.																																	
W. coast C.A.	299			631				421,738	4,409,224	845	5,017	5,490	2,927	6,127	15,623	6,136	207	5,828	2,881	200	40,769	313,169	723	1,233	319,624	28.7							
Bahoa, C.Z.								3,512	496	4,307	431	3	1,630	139												11,866	1.1						
Hawaiian Is.	8,123			1,308	9,431																					317	0.8						
Total, N. A.	340,908	8,079,200	931,371	918,184	264	6,241	8,279	388,551	285,341	13,501	6,121	18,298	28,366	15,623	17,439	581	6,191	2,910	1,853	66,809	463,033	1,179	1,183	2,258	858,204	77.0							
S. AMERICA:																																	
Chile	2,606	2,754		5,360				213	217	5,790	1,994		217	3,208		83	2,383		741	800	3,035	14,073				19,863	1.8						
Colombia	1,698			1,698				4,463		6,161			17	9							68	94	114			6,369	0.6						
Ecuador								1,787		1,787			80								80					1,867	0.2						
Peru	1,257			1,257				9		1,266	47,462	721	401	6,823	227	11,867	102	5,200			9,255	82,058	669			83,993	7.5						
W. coast S. A.																	57				1,058	1,115				1,115	0.1						
Total, S. A.	5,561	2,754		8,315				6,472	217	15,004	48,741	2,715	401	7,057	3,524	11,950	2,542	5,200		74	1,800	13,416	97,420	783		113,207	10.2						
ASIA:																																	
Australia	943			943	385			203		1,531			900													1,531	0.1						
New Zealand	1,885			1,885	377			195		2,457	28,617		3,297													31,974	2.9						
Australasia ¹																										3,297	0.3						
Total, Asia	2,828			2,828	762			398		3,988	28,617		4,197													36,802	3.3						
ASIA:																																	
Philippine Is.	67,626			13,594	81,220					81,220																	81,220	7.3					
China	6,216			2,340	8,616			504	22	9,142																	9,142	0.8					
Japan	13,279	374		13,653				445	19	14,117																	14,122	1.3					
Far East ¹	555			711	1,246					1,246																	1,246	0.1					
Total, Asia	87,716	374	16,645	794,735				949	41	105,725																	105,730	9.5					
Grand total.	437,013	11,207	39,576	487,796	2,611	264	14,060	8,537	513,268	362,699	16,216	6,822	29,552	31,890	15,623	29,389	123	11,391	2,984	3,653	80,225	593,267	3,967	1,183	2,258	1,113,943	100.0						
Per cent of total cargo:																																	
January, 1933	39.2	1.0	3.6	43.8	0.2			1.3	0.8	46.1	32.5	1.6	0.6	2.7	2.9	1.4	2.6	0.2	1.0	0.3	0.3	7.2	53.3	0.3	0.1	0.2	100.0						
January, 1932	40.0	1.4	3.9	45.3	3.0	0.3		1.3	0.6	50.5	23.4	2.6	0.4	4.2	2.6		2.9	0.4	1.6		10.9	49.0	0.5			100.0							
January, 1931	42.6	2.6	5.7	50.9	2.7	0.1		1.5	1.7	56.9	16.0	1.0	0.1	2.0	3.0		0.7	0.6	1.3	0.1	17.8	42.6	0.5			100.0							

¹ General cargo not routed so as to allow segregation between definite ports.² Includes both local and transit cargo.³ Includes Sweden.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, February 11, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.		Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Schwaben.....	4	15 05	5	6 10	5	14 29	5	15 35	German.....	North German Lloyd.....	491.5	63.8	21.9	Hamburg, Germany	Portland, Oreg.	General.	3,074	10,002	6,743
Tai Yin.....	4	15 50	5	6 15	5	15 36	5	16 45	Norwegian.....	Borher S. S. Line.....	461.4	60.6	19.0	New York, N. Y.	Shanghai, China.	General.	1,711	9,997	7,063
S. C. T. Dodd.....	4	16 25	5	7 15	5	18 46	5	19 56	American.....	Shell Oil Co.....	425.0	57.2	20.0	Tiverton, R. I.	San Francisco, Cal.	Ballast.		7,481	5,095
New Jersey.....	4	20 25	5	7 25	5	19 50	5	21 00	American.....	The Texas Co.....	416.0	56.0	19.0	New York, N. Y.	Los Angeles, Calif.	Ballast.		6,925	4,982
Panaman.....	4	22 45	5	8 35	5	20 50	5	21 56	American.....	Amer.-Hawaiian Line.....	407.7	53.7	20.8	Boston, Mass.	Portland, Oreg.	General.	1,911	7,093	5,065
Rheonor.....	5	9 30	5	9 45	5	22 00	5	23 17	British.....	Ocean Steam Ship Co.....	439.0	58.0	22.8	Savannah, Ga.	Manila, P. I.	General.		832	8,207
Santa Elisa.....	5	9 30	5	11 10	5	17 37	5	22 34	American.....	Panama Mail S. S. Co.....	360.0	51.7	21.4	New York, N. Y.	San Francisco, Cal.	General.		832	8,207
Sollund.....	4	19 30	5	14 35	5	23 00	6	00 18	Norwegian.....	Panama Mail S. S. Co.....	221.0	32.0	11.2	Cristobal, C. Z.	Champeron, Guat.	Office, general.	1,540	5,957	4,325
Major.....	5	15 45	5	17 30	6	00 22	6	1 30	Norwegian.....	Lauritz Kloster.....	368.0	51.0	12.0	Baltimore, Md.	Los Angeles, Calif.	Ballast.		980	579
Seward Pullen.....	5		5	8 32	5	8 32	5	8 32	American.....	U. S. Army.....				Cristobal, C. Z.	Gatun, C. Z.	Ballast.		5,404	3,970
Breckenridge.....	5		5	16 39	5	16 39	5	16 39	American.....	U. S. Army.....				Cristobal, C. Z.	Gatun, C. Z.	Ballast.		5,404	3,970
German Frisch.....	5	18 50	6	6 20	6	17 03	6	18 10	American.....	Texas Gulf Sulphur Co.....	356.0	51.6	26.0	Galveston, Tex.	Tacoma, Wash.	Sulphur.	6,200	5,349	2,950
Tekoa.....	5	20 30	6	6 20	6	14 22	6	15 25	British.....	N. Z. Shipping Co.....	460.0	62.6	20.7	Falmouth, Eng.	New Zealand.	Ballast.		10,582	7,491
S-48.....			6	7 30	6	18 20			American.....	U. S. Navy.....	240.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-10.....			6	7 30	6	18 20			American.....	U. S. Navy.....	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-11.....			6	7 30	6	19 30			American.....	U. S. Navy.....	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
S-12.....			6	7 30	6	19 30			American.....	U. S. Navy.....	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Canadian Con- structor.....	6	7 50	6	8 30	6	19 40	7	4 49	British.....	Can. Nat. Steamships.....	430.0	56.0	23.0	Halifax, N. S.	Melbourne, Aus. lia.	General.	4,400	7,080	5,508
San Clemente.....	6	3 15	6	11 05	6	20 50	6	22 25	American.....	Quaker S. S. Line.....	410.8	54.4	13.2	New York, N. Y.	Tacoma, Wash.	General.	1,289	6,476	4,682
Forbes Haupt- man.....	6		6	11 50	6	21 55	6	23 15	American.....	McCormick S. S. Co.....	409.8	54.2	18.2	Norfolk, Va.	Tacoma, Wash.	General.	2,165	6,831	4,969
Winning.....	6	7 43	6	14 35	6	23 15	7	00 24	French.....	French Line.....	472.0	59.0	21.3	Havre, France.	Vancouver, B. C.	Steel bars, gen.	863	10,619	7,592
Comet.....	6	14 45	6	15 35	7	00 12	7	1 30	American.....	Stand. Vac. Transp. Co.....	480.5	66.0	21.0	New York, N. Y.	Los Angeles, Calif.	Ballast.		9,820	6,750
Svan.....			6	7 10	6	17 02			American.....	U. S. Navy.....	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Malard.....			6	7 30	6	17 00			American.....	U. S. Navy.....	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
I-10.....			6		6				American.....	U. S. Army.....				Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Sadie.....			6		6				American.....	Lieut. Hotchett.....				Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
Eisenach.....	5	20 50	7	6 00	7	17 52	7	19 00	German.....	North German Lloyd.....	360.0	51.0	19.8	Hamburg, Germany	Valparaiso, Chile	General.	2,621	4,814	3,370
Nordfær.....	6	16 50	7	6 15	7	16 42	7	17 40	Danish.....	W. L. Comyn.....	384.7	54.4	14.6	Rotterdam, Holland	Vancouver, B. C.	Ballast.		6,492	4,790
Sarumac.....	6	17 25	7	7 05	7	19 00	7	21 25	British.....	International Co.....	550.5	66.6	20.0	Hull, England	Talara, Peru	Ballast.	12,207		8,543
Cities Service Toledo.....	7	10 10	7	10 20	7	20 03	7	21 30	American.....	The Texas Co.....	465.2	60.0	17.0	Mobile, Ala.	Los Angeles, Calif.	Ballast.		8,488	5,974
Hawaiian.....	7	16 50	8	6 10	8	18 51	8	19 50	American.....	Amer.-Hawaiian Line.....	404.6	53.9	17.0	Boston, Mass.	Tacoma, Wash.	General.	1,862	7,766	4,767
Brazil Maru.....	7	18 00	8	6 15	8	20 15	8	21 45	Japanese.....	Kokusa Kisen Kaisha.....	385.0	51.0	24.0	Chester, Pa.	Yokohama, Japan.	General.	5,701	5,915	4,423
Steel Traveler.....	7	22 15	8	7 15	8	21 06	8	22 40	American.....	Lethman S. S. Lines.....	424.0	56.2	25.6	Mobile, Ala.	Singapore, Str. Set.	General.	6,248	7,098	5,569
Ardenbohr.....	8	00 20	8	7 30	8	22 10	9	10 30	British.....	Australind S. S. Co.....	415.0	58.0	27.8	New York, N. Y.	Freemantle, Aus. lia.	General.	8,084	7,415	6,432
Justin.....	8	3 00	8	8 30	8	23 13	9	00 30	German.....	North German Lloyd.....	449.5	58.2	16.1	Hamburg, Germany	Vancouver, B. C.	Ballast.		7,974	6,798
Tulagag.....	8	10 50	8	11 00	9	00 22	9	1 45	American.....	Associated Oil Co.....	431.0	59.2	22.0	Tiverton, R. I.	San Francisco, Cal.	Ballast.		7,817	5,112

	8	1 35	8 13 25	9 1 22	9 2 29	British	Hindustan S. S. Co.	390.0	53.5 15.6	Newcastle, Eng.	Taltal, Chile	Ballast	5,619 4,127
Selvastian	8 13 35	8 14 43	9 2 31	9 2 31	9 3 58	American	Luekenbach Line	445.0	58.0 16.0	Boston, Mass.	Seattle, Wash.	General	2,165 8,699
Horace Luck-	7 19 20	8 5 50	8 18 55	8 19 50	9 10 50	Panamanian	A. Valdez	64.2	20.3	Cristobal, C. Z.	Balboa, C. Z.	Ballast	78 46
Real	7 22 50	8 11 30	8 21 10	8 21 10	9 11 50	Panamanian	A. Valdez	62.0	17.0	Cristobal, C. Z.	Pto. Armerles, R. P.	General	23 22
Normanstar	9 2 05	9 6 15	9 13 35	9 14 35	9 14 35	British	Blue Star Line	415.0	56.3 19.4	Tyne, England	Vancouver, B. C.	Ballast	7,521 5,424
Johannes	9 6 40	9 8 10	9 15 10	9 16 30	9 16 30	Danish	A. P. Moller	280.7	40.2 13.0	Norfolk, Va.	Topolobampo, Mex.	Ballast	2,181 1,427
Maersk	8 21 10	9 13 10	9 23 09	9 24 09	9 24 09	Colombian	Colombian Government	150.0	27.2 11.1	Manana, Colombia	Tunabo, Colombia	Salt	608 307
Floresna	8 14 25	9 14 05	9 20 55	9 21 55	9 21 55	American	U. S. Navy	310.0	31.0	Cristobal, C. Z.	Balboa, C. Z.	Ballast	312 1,633
Overton	2 21 50	9 14 35	9 22 53	9 23 53	9 23 53	German	Hamburg-American Line	227.0	34.0 12.9	Cristobal, C. Z.	Guayaquil, Ecuador	General	1,041 3,250
Durazo	9 15 45	9 15 50	9 23 54	9 24 54	9 24 54	Japanese	Mitsui & Co.	361.6	50.0 13.4	Cristobal, C. Z.	Balboa, C. Z.	Ballast	2 2
Nagisan Maru	9 17 05	9 18 10	9 51	9 51	9 51	American	J. E. Kirkpatrick	439.6	60.0 20.6	Cristobal, C. Z.	Balboa, C. Z.	Ballast	5,743 8,976
Florence	9 18 30	9 18 50	10 11 18	10 12 30	10 12 30	American	Lykes Bros. Ripley, S. B.	499.2	68.1 23.6	New Orleans, La.	Shanghai, China	Cotton, pipe-gen.	6,672 7,974
Ethan Allen	9 14 30	10 6 00	10 13 43	10 21 20	10 21 20	American	Standard Shipping Co.	516.5	72.2 26.1	New York, N. Y.	Talara, Peru	Ballast	11,016 7,974
J. A. Moffett, jr.	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
President Lincoln	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Kimai Maru	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
California	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Southern Sun	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Mercury Sun	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Santiago	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Swiftagle	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Virgilio	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
El Aleto	10 00 25	10 4 50	10 13 55	10 16 55	10 16 55	American	Dollar Line	446.0	60.0 23.5	New York, N. Y.	San Francisco, Cal.	General	1,297.15 299.10 589
Edwin Christenson	11 5 45	11 7 30	11 17 57	11 19 25	11 19 25	American	Sudden & Christenson	410.0	54.2 18.2	Jacksonville, Fla.	Seattle, Wash.	General	1,893 6,603
Laganbank	11 5 50	11 7 40	11 18 58	11 20 30	11 20 30	British	Andrew Weir & Co.	437.0	57.0 18.0	Boston, Mass.	Shanghai, China	General	1,485 7,507
Idlesleigh	11 8 00	11 9 50	11 20 00	11 21 20	11 21 20	British	Angle-Amer. Ship. Co.	450.0	55.0 16.2	Barry, Wales	Vancouver, B. C.	Ballast	6,887 4,871
Eklaren	11 9 30	11 10 05	11 21 09	11 22 45	11 22 45	Swedish	Transatlantic S. S. Co.	430.0	54.0 13.1	Göteborg, Sweden	Los Angeles, Calif.	Ballast	7,105 5,193
Point Brava	11 12 10	11 12 35	11 22 29	11 23 45	11 23 45	American	Swayze & Hoyt	386.8	52.2 23.0	Houston, Tex.	Seattle, Wash.	Corn, steel, gen.	5,260 5,696
Landby	11 14 55	11 15 03	11 23 15	12 00 39	12 00 39	Danish	Canadian Transp. Co.	357.0	51.3 14.9	Sharpness, Eng.	Los Angeles, Calif.	Ballast	4,973 3,651
Pacific Enter-	11 16 05	11 16 30	12 00 19	12 1 15	12 1 15	British	Furness, Withy & Co.	435.9	60.0 17.6	Manchester, Eng.	Vancouver, B. C.	General	852 9,641
prise	11 16 05	11 16 30	12 00 19	12 1 15	12 1 15	British	Furness, Withy & Co.	435.9	60.0 17.6	Manchester, Eng.	Vancouver, B. C.	General	852 9,641

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Yankee Arrow	4 19 15	5 6 11	5 14 15	5 14 15	American	Standard Oil Co.	468.3	62.7 28.3	Los Angeles, Calif	New York, N. Y.	Fuel oil.	12 619 9,841
Europa	5 1 10	5 7 28	5 14 45	5 19 15	Danish	East Asiatic Co.	465.4	62.2 29.0	Vancouver, B. C.	Copenhagen, Den.	General	9,787 11,226
Nimda	5 7 35	5 8 26	5 16 10	5 16 10	British	Kerr, Gifford & Co.	409.5	55.8 24.0	Vancouver, B. C.	St. Thomas	Wheat	8,025 6,376
President McKinley	5 10 30	5 11 20	5 18 50	5 23 10	American	Dollar Line.	516.5	72.2 28.0	San Francisco, Cal.	New York, N. Y.	Silk, general	6,621 15,286
Charles Christenson	5 13 30	5 14 04	5 22 10	5 23 58	American	Sudden & Christenson.	410.0	54.0 23.0	Seattle, Wash.	New York, N. Y.	Lumber, general	6,615 6,683
Pennsylvania	5 22 15	6 5 50	6 13 35	6 13 35	American	Amer-Hawaiian Line	407.7	53.7 25.0	Portland, Ore.	Boston, Mass.	General	5,190 7,107
Oreona	6 3 15	6 8 03	6 15 55	6 1 45	British	Pacific Steam Nav. Co.	511.6	62.7 29.0	Talcahuano, Chile	Liverpool, England	General	6,872 12,417
Salawati	6 8 00	6 10 14	6 19 05	6 19 05	Dutch	S. S. Nav. Co., Neth.	420.8	54.2 20.4	Calcutta, India.	Calcutta, India.	General	1,731 7,114
Valparaiso	6 5 50	6 11 06	6 20 20	6 20 20	Chilean	M. Hoehschildt & Co.	400.0	52.0 27.0	Valparaiso, Chile.	New York, N. Y.	Gold, silver ore.	6,508 5,863
Motor ship.					Launch.	Motor sweep.						
Tanker.					Submarine.	5 Mine sweep.						

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Lobos *	6	12 40	6	13 39	6	21 45	6	23 25	British.	Pacific Steam Nav. Co.	405.6	54.2	27.0	San Antonio, Chile.	Liverpool, England	General.	8,376	7,151	4,756
Virginia	6	13 30	7	6 13	7	14 08	7	14 35	American.	Panama-Pacific Line.	586.4	80.3	29.0	San Francisco, Cal.	New York, N. Y.	General.	6,474 25	5,254	18,170
Annie Johnson *	7	2 00	7	7 15	7	15 35	7	19 15	Swedish.	Johnson Line.	392.0	52.6	25.0	Vancouver, B. C.	Stockholm, Sweden	Wheat, fruit, gen.	6,542	6,650	4,919
Cheewink *	7	4 30	7	7 40	7	17 15	7	18 05	American.	U. S. Navy.	180.0	35.6		Balboa, C. Z.	Cristobal, C. Z.	Nitrate of soda.	6,090	4,312	3,155
Cydonia.	7	4 30	7	8 17	7	17 25	7	18 05	British.	J. Robinson & Sons.	365.0	48.9	23.0	Tocopilla, Chile.	Azores Is.	(*)			
Swan, 34 *	7	8 40	7	8 40	7	17 40			American.	U. S. Navy.	187.0	35.0		Balboa, C. Z.	Cristobal, C. Z.				
Edward Luckenbach.	7	5 00	7	9 22	7	18 30	7	18 30	American.	Luckenbach Line.	436.6	57.2	25.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	5,081	8,543	6,427
Chickasaw City.	7	5 25	7	10 11	7	20 00	7	21 20	American.	Norton, Lilly & Co.	395.5	55.0	24.0	Kahului, T. H.	Baltimore, Md.	Sugar, general.	6,318	7,321	5,237
Vancouver City.	7	8 30	7	12 39	7	20 55	7	20 55	British.	Reardon Smith & Sons.	415.6	55.5	26.0	N. Westminster, B. C.	Manchester, Eng.	General.	8,294	7,272	5,494
Real.	7	10 53	7	10 53	7	19 50	7	19 50	Panamanian.	Hans Elliot.	62.2	17.1	5.0	Cristobal, C. Z.	Cristobal, C. Z.	Bananas.	98	46	92
Fernbrook *	7	11 00	7	13 26	7	22 10	7	22 10	Norwegian.	Fern Line.	391.4	55.2	26.0	U. S. Atl coast Is.	U. S. Atl coast Is.	Sugar.	8,032	6,930	5,048
Tulra *	7	13 28	7	13 28	7	22 20	7	22 20	Panamanian.	Hans Elliot.	64.0	20.0	6.0	Cristobal, C. Z.	Cristobal, C. Z.	Bananas.	40	78	49
Ward *	7	8 35	8	4 47	8	12 15	8	12 15	American.	Roosevelt S. S. Co.	396.6	55.0	27.0	New York, N. Y.	New York, N. Y.	Sugar, hemp, gen.	7,134	7,342	5,247
Rangtata *	7	17 00	8	6 24	8	13 50	8	13 50	British.	U. S. Shipping Co.	531.0	70.0	29.0	Wellington, N. Z.	London, England	General.	7,179 18	206	13,500
Overton, 239 *	8	6 40	8	7 09	8	14 25	8	14 25	American.	U. S. Navy.	310.0	30.0	12.0	Balboa, C. Z.	Cristobal, C. Z.		11,221		
Gold Shell *	8	8 30	8	8 30	8	18 45	8	18 45	British.	Anglo-Saxon Pet. Co.	451.2	62.1	28.0	San Francisco, Cal.	Lands End, Eng.	Stove oil	5,183	5,708	4,131
Pont Calata.	8	11 00	8	11 29	8	19 30	8	19 30	American.	Gulf Pacific Line.	381.0	52.2	23.0	Portland, Ore.	Tampa, Fla.	Sugar, general.	5,703	6,576	4,724
Moveria *	8	11 05	8	12 21	8	20 35	8	20 35	British.	Donaldson Line.	385.0	51.6	28.0	Vancouver, B. C.	Glasgow, Scotland	Fruit, general.	5,177	7,744	5,621
Empire Star *	8	11 30	8	13 22	8	22 15	9	3 40	British.	Blue Star Line.	423.0	56.0	26.0	N. Westminster, B. C.	London, England	General.	8,410	7,979	5,916
Pacific Trader *	8	11 55	8	14 15	8	23 05	8	23 50	German.	Furness, Withy & Co.	420.0	57.9	27.0	Vancouver, B. C.	Bremen, Germany	General.	9,608	9,965	6,656
Este.	8	13 45	8	15 13	9	9 15	9	22 20	German.	North German Lloyd.	495.5	63.8	29.0	Vancouver, B. C.	Bremen, Germany	General.	12,740	10,084	7,388
Java Arrow *	8	16 45	9	6 25	9	14 30	9	14 30	American.	Stand. Vac. Transp. Co.	488.3	62.7	28.0	Los Angeles, Calif.	New York, N. Y.	Fuel oil.	5,829	7,157	5,094
Dakotan.	9	10 00	9	10 29	9	19 25	9	19 25	American.	Amer.-Hawaiian Line.	407.7	53.7	26.0	Seattle, Wash.	Boston, Mass.	General, lumber.			
Nuevo.	10	4 00	10	7 07	10	13 35	11	1 20	Panamanian.	Hans Elliot.	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general.	128	226	101
Manizales.	10	5 30	10	10 53	10	17 50	12	13 15	German.	Grade Line.	216.5	32.9	14.0	Tunaco, Colombia.	Cristobal, C. Z.	Coffee, general.	580	1,132	741
Peterson.	11	10 10	11	7 05	11	14 40	11	14 40	British.	R. Chapman & Son.	400.1	52.4	25.0	Vancouver, B. C.	Avonmouth, Eng.	Wheat, general.	7,554	5,885	4,144
La Brea.	11	8 00	11	8 47	11	16 20	11	16 20	American.	Union Oil Co.	435.0	56.2	28.0	Los Angeles, Calif.	Baltimore, Md.	Crab oil.	10,135	7,150	4,895
Nordho *	11	9 25	11	10 28	11	20 05	11	20 05	Danish.	Canadian Transp. Co.	369.0	52.3	25.0	Vancouver, B. C.	Veile, Denmark.	Wheat, general.	8,069	6,190	4,569
Cengo.	11	12 10	11	12 58	11	21 35	13	14 05	German.	Hamburg-American Line.	227.2	34.3	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	Coffee, general.	1,125	1,572	1,011
Losmar.	11	13 15	11	14 02	11	22 30	11	22 30	American.	Calmar Line.	409.8	54.2	25.0	Seattle, Wash.	Baltimore, Md.	Lumber.	6,950	6,381	4,795

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

Commercial Traffic Through the Panama Canal in January, 1933, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of January, 1933, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for January, 1932 and 1931. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States	62	376,175	275,590	451,930	275,082	\$312,681.67	100,547
Europe to Canada:							
British	26	130,714	90,499	147,523	90,385	96,802.05	5,490
Danish	1	8,076	5,689	10,110	6,170	7,111.25	731
Dutch	1	7,619	5,782	9,338	5,808	7,227.50	1,515
French	2	14,587	8,247	15,768	8,886	10,308.75	3,783
German	3	19,841	12,758	21,717	13,178	15,373.60	6,639
Italian	1	6,029	3,679	6,101	3,773	4,598.75	3,289
Norwegian	5	26,764	15,487	26,144	15,925	19,022.31	100
Panamanian	1	6,065	3,447	5,745	3,507	4,308.75	2,068
Swedish	1	5,337	2,861	5,210	3,747	3,576.25	2,061
Total	41	225,032	148,449	247,656	151,379	168,329.21	25,676
United States to Far East:							
British	10	55,894	35,487	58,107	35,789	44,358.75	42,248
Japanese	7	37,956	31,830	48,071	31,316	38,302.16	42,313
Norwegian	1	5,058	2,788	4,663	2,793	3,485.00	4,928
United States	2	11,669	9,215	13,407	9,201	11,518.75	9,415
Total	20	110,577	79,320	124,248	79,099	97,664.66	98,904
Europe to South America:							
British	3	15,352	12,133	20,158	12,379	15,166.25	5,579
Danzig	2	13,315	10,143	17,212	9,865	9,586.80	.....
Dutch	2	9,640	5,401	9,243	5,630	6,751.25	1,420
German	2	10,732	6,872	11,533	6,965	8,590.00	4,727
Italian	1	9,373	5,223	11,669	6,779	6,528.75	310
Norwegian	4	22,109	16,230	26,964	16,190	15,759.01	3,402
Yugoslav	1	4,570	3,271	5,291	3,299	3,290.40	.....
Total	15	85,091	59,273	102,070	61,107	65,672.46	15,438
Europe to Australasia:							
British	6	58,184	42,575	70,644	44,017	51,524.64	20,269
French	1	5,629	4,343	7,007	4,402	5,428.75	1,200
Total	7	63,813	46,918	77,651	48,419	56,953.39	21,469
United States to Philippine Islands:							
British	3	19,381	10,844	20,274	11,042	13,555.00	15,797
Norwegian	2	11,379	6,177	11,284	6,391	7,721.25	6,085
United States	2	21,050	16,872	28,247	16,806	21,090.00	2,938
Total	7	51,810	33,893	59,805	34,239	42,366.25	24,820
Europe to United States:							
British	1	5,592	3,085	5,066	3,129	3,856.25	.....
Italian	1	4,421	3,764	6,107	3,883	3,183.12	.....
Norwegian	5	29,641	23,701	39,299	23,250	21,341.52	.....
Swedish	1	4,288	3,363	5,659	4,225	4,203.75	6,237
Total	8	43,942	33,913	56,131	34,487	32,584.64	6,237
Around the world:							
British	1	16,701	10,155	20,277	12,088	12,693.75	.....
United States	3	18,466	12,626	21,074	12,620	15,764.00	4,237
Total	4	35,167	22,781	41,351	24,708	28,457.75	4,237
Foreign vessels in ballast—U. S. intercoastal:							
British	2	15,341	12,852	20,965	12,403	11,045.52	.....
Norwegian	3	15,476	11,776	19,386	11,335	11,023.71	.....
Swedish	1	2,438	1,195	2,382	1,605	1,493.75	.....
Total	6	33,255	25,823	42,733	25,343	23,562.98	.....

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to South America:							
British.....	1	2,551	2,023	3,174	1,962	\$1,836.72	.....
Danzig.....	1	8,249	7,024	12,043	6,857	5,939.28	.....
Norwegian.....	1	7,214	6,034	9,816	5,937	5,194.08	.....
United States.....	2	13,296	7,733	16,175	7,733	9,666.25	3,411
Total.....	5	31,310	22,814	41,208	22,489	22,636.33	3,411
United States to Canada:							
Danish.....	1	4,558	2,734	4,553	2,785	3,281.76	.....
British.....	1	4,289	3,318	5,250	3,286	3,088.08	.....
United States.....	2	9,608	6,476	10,502	6,441	8,095.00	3,796
Total.....	4	18,455	12,528	20,305	12,512	14,464.84	5,796
United States to Australasia:							
British.....	1	6,784	4,885	7,863	4,906	6,106.25	3,443
Norwegian.....	1	3,448	2,416	5,020	2,647	3,020.00	.....
United States.....	1	5,277	3,750	5,960	3,704	4,687.50	1,826
Total.....	3	15,509	11,051	18,843	11,257	13,813.75	5,269
South America to United States:							
United States.....	2	9,978	7,293	11,487	7,244	9,116.25	2,870
Europe to Central America:							
German.....	3	8,269	5,112	8,772	5,151	6,251.32	2,035
Canada to Australasia:							
British.....	1	4,172	3,286	5,454	3,340	4,107.50	2,861
Danish.....	1	3,531	2,384	3,953	2,394	2,980.00	3,350
Total.....	2	7,703	5,670	9,407	5,734	7,087.50	6,211
South America to Far East:							
Japanese.....	1	7,626	5,441	9,627	5,848	6,801.25	2,593
Africa to United States:							
Swedish.....	1	7,103	5,832	9,749	7,511	5,114.16	.....
West Indies to South America:							
British.....	2	4,715	4,085	5,912	3,419	3,974.10	2,698
Danish.....	1	1,487	1,303	1,966	1,183	1,070.64	.....
Total.....	3	6,202	5,388	7,878	4,602	5,044.74	2,698
West Indies to United States:							
Norwegian.....	1	5,720	4,736	7,984	4,701	4,118.40	.....
Europe to Hawaiian Islands:							
Swedish.....	1	5,485	3,406	5,558	4,246	4,257.50	8,741
Cristobal to South America:							
German.....	6	5,200	3,384	6,490	3,472	4,230.00	1,867
Panamanian.....	2	202	206	406	202	242.40	243
Total.....	8	5,402	3,590	6,896	3,674	4,472.40	2,110
Canadian intercoastal:							
British.....	1	5,308	3,028	4,971	3,033	3,785.00	350
United States to Central America:							
British.....	1	73	72	91	68	54.00	.....
German.....	1	2,322	1,443	2,446	1,434	1,671.84	.....
Norwegian.....	2	2,298	1,997	3,222	1,878	2,055.73	.....
Total.....	4	4,693	3,512	5,759	3,380	3,781.57	.....
South America to Canada:							
Norwegian.....	1	4,354	2,432	4,003	2,483	3,040.00	3,122
Canada to Far East:							
Norwegian.....	1	4,222	2,487	4,302	2,450	3,108.75	4,750
Cristobal to United States:							
United States.....	1	2,603	1,351	2,435	1,351	1,688.75	682
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,514
Norwegian.....	1	579	553	941	557	416.88	.....
Panamanian.....	1	49	49	.....	60	58.80	30
Total.....	4	2,069	1,888	3,239	1,921	2,083.18	1,544
Cristobal to Balboa:							
Panamanian.....	11	405	385	266	276	303.09	.....
United States.....	1	55	67	98	67	50.25	.....
Total.....	12	460	452	364	343	353.34	.....

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Central America to South America: Panamanian	1	101	103	203	101	\$121.20	50
Grand total, January, 1933...	229	1,177,434	834,074	1,386,565	843,894	949,413.24	349,560
Grand total, January, 1932...	203	1,118,771	815,388	1,370,035	824,156	945,374.91	474,356
Grand total, January, 1931...	244	1,228,839	903,368	1,498,244	906,915	1,036,840.05	562,832

PACIFIC TO ATLANTIC.

United States intercoastal: United States	51	293,912	223,316	364,571	223,103	\$279,141.55	364,534
Canada to Europe:							
Belgian	1	7,044	4,567	7,217	4,398	5,708.75	10,123
British	27	144,482	104,625	170,005	104,553	130,781.25	218,421
Danish	1	8,336	5,933	9,549	6,031	7,416.25	11,998
Dutch	1	8,351	6,201	10,155	6,337	7,751.25	9,735
French	1	4,650	2,656	6,013	2,796	3,320.00	6,813
German	4	27,436	19,211	32,348	19,444	24,013.75	34,969
Italian	1	6,043	3,669	7,061	4,460	4,586.25	8,960
Norwegian	8	39,132	26,069	43,309	26,290	32,586.25	61,259
Swedish	4	20,260	12,467	21,442	15,731	15,583.75	30,775
United States	1	5,450	3,465	5,687	3,450	4,331.25	7,725
Total	49	271,184	188,863	312,786	193,490	236,078.75	400,778
Philippine Islands to United States:							
Danish	1	5,523	3,091	5,086	3,168	3,863.75	7,362
Japanese	4	19,863	15,189	23,422	15,079	18,830.15	27,866
Norwegian	3	16,592	8,897	15,895	9,084	11,121.25	21,217
United States	4	31,623	24,945	41,358	24,893	31,181.25	26,326
Total	12	73,601	52,122	85,761	52,224	64,996.40	82,771
South America to Europe:							
British	2	10,083	8,283	13,410	8,053	10,353.75	18,671
Danzig	2	16,841	13,147	22,396	12,800	16,433.75	31,052
Dutch	1	6,101	3,155	5,546	3,325	3,943.75	8,193
German	3	13,288	9,043	14,769	8,901	11,303.75	16,648
Italian	1	9,373	5,223	11,669	6,779	6,528.75	3,553
Norwegian	2	11,011	9,073	14,857	9,038	11,341.25	19,520
Total	11	66,697	47,924	82,647	48,896	59,905.00	97,637
Australasia to Europe:							
British	5	43,927	31,670	54,575	33,642	39,587.50	29,712
French	1	3,772	3,087	5,111	3,070	3,858.75	3,297
Total	6	47,699	34,757	59,686	36,712	43,446.25	33,009
Far East to United States:							
Japanese	5	28,473	22,939	36,989	22,525	28,673.75	20,194
United States	1	5,233	3,838	6,204	3,851	4,797.50	8,014
Total	6	33,706	26,777	43,193	26,376	33,471.25	28,208
United States to Europe:							
British	2	9,115	8,068	13,337	8,042	10,085.00	18,307
Danzig	1	6,359	5,208	8,959	5,007	6,510.00	11,492
French	1	4,545	3,996	6,587	3,641	4,995.00	8,471
Italian	1	6,299	5,214	8,960	5,079	6,517.50	11,407
Norwegian	1	5,402	4,505	7,639	4,489	5,631.25	9,766
Total	6	31,720	26,991	45,482	26,258	33,738.75	59,443
South America to United States:							
Danish	1	1,645	1,313	2,212	1,326	1,641.25	2,754
United States	2	14,107	9,147	17,797	9,141	11,433.75	6,145
Total	3	15,752	10,460	20,009	10,467	13,075.00	8,899
Australasia to Canada:							
British	3	14,084	10,953	18,040	11,015	13,691.25	3,793
Central America to Europe:							
German	3	6,600	4,091	6,965	4,056	5,113.75	5,561

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to Far East:							
British.....	1	6,037	3,238	5,302	3,094	\$4,047.50	4,214
West Indies to United States:							
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	8,266
South America to Cristobal:							
German.....	6	4,930	3,497	6,421	3,590	4,371.25	5,224
Panamanian.....	4	404	412	812	404	501.10	778
Total.....	10	5,334	3,909	7,233	3,994	4,872.35	6,002
United States to South America:							
United States.....	1	5,033	3,503	5,513	3,519	4,378.75	4,522
South America to Mexico:							
British.....	1	4,382	3,878	6,225	3,959	3,155.04	.....
Canada to United States:							
United States.....	1	4,138	3,076	4,834	3,045	3,845.00	2,001
United States to Cristobal:							
United States.....	1	2,603	1,351	2,435	1,350	1,688.75	901
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	887
Norwegian.....	1	579	553	941	557	681.25	693
Panamanian.....	7	272	256	447	283	320.00	280
Total.....	10	2,292	2,095	3,686	2,144	2,618.75	1,860
Canadian intercoastal:							
British.....	1	783	754	1,110	556	939.60	558
South American intercoastal:							
Peruvian.....	1	336	367	654	444	423.60	669
Balboa to Cristobal:							
Panamanian.....	7	317	278	533	315	347.50	317
United States to West Indies:							
United States.....	1	124	108	290	160	89.28	.....
Grand total, January, 1933...	186	891,784	652,276	1,082,642	658,626	813,395.32	1,113,943
Grand total, January, 1932...	174	903,504	661,128	1,104,035	667,357	824,875.77	1,119,229
Grand total, January, 1931...	232	1,152,032	860,449	1,420,536	864,294	1,071,300.37	1,544,105

Traffic by Commodities for January, 1933.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of January, 1933, 1932, and 1931. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. These figures represent tons of 2,240 pounds.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts.....	.....	.....	8	.....
Agricultural implements.....	1,001	15	1,110	29
Alfalfa meal.....	.....	817	.....	817
Ammonium compounds.....	27	.....	1,978	2,340
Animal foods.....	104	306	107	578
Apparel, wearing (hats, shoes, clothing, etc.).....	59	22	67	55
Asbestos.....	155	.....	815	.....
Asphalt and tar.....	120	.....	1,097	2,035
Automobiles (and auto trucks).....	1,772	10	4,273	17
Automobile parts and accessories.....	2,134	.....	3,894	19

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Bags and bagging, textile.....	93	224	658	224
Bananas.....				577
Barks, miscellaneous.....		18	1	326
Barley.....			35	16,266
Beans, edible, dry.....	185	7,835	232	10,956
Beverages, nonalcoholic.....	74	28	98	28
Blood and tankage.....			45	
Bones and bone meal.....			1,660	
Books and printed matter.....	151		155	
Borax.....	90	571	90	4,869
Bran and pollards.....				2,158
Bricks and tile.....	507	20	641	20
Camphor, crude.....				98
Canned and preserved goods:				
Fish.....	513	5,790	676	11,102
Fruit.....	638	12,407	651	22,275
Meat.....	170	1,108	974	1,213
Milk.....		131	159	295
Soup.....	1,480		1,545	
Vegetables.....	1,119	2,989	1,133	3,019
Miscellaneous and unclassified.....	1,896	10,947	3,329	11,501
Carbon black.....	239		538	
Celite.....		191		191
Cement.....	405		4,923	17
Chalk.....			694	
Charcoal.....	12		12	
Chemicals.....	1,840	402	5,301	1,957
Clay, china and fire.....			34	
Clorox.....		24		24
Coal.....	1,670		5,069	
Cocoa and cacao beans.....	37		605	657
Coconuts and products.....	71	643	71	703
Coffee.....	333	62	4,974	13,280
Coke.....	475	29	1,547	29
Cold storage and refrigerated products:				
Dairy products.....	11	35	188	15,398
Eggs.....				17
Fish.....		82	106	639
Lard.....	61		76	168
Meats.....	2		69	4,748
Vegetables.....		2		2
Other and unclassified.....	8	33	40	233
Confectionery.....	776		802	1
Copra.....				6,631
Copra meal and cake.....				724
Corn.....	10,559		10,667	
Cotton, raw.....	93	2,100	52,515	3,557
Drugs and medicines.....	1,385	35	1,609	58
Dyes.....			723	
Earthenware.....	78		234	5
Eggs, dried.....		52		168
Electrical apparatus and appliances.....	568	23	830	41
Explosives.....	13		190	36
Extract, quebracho.....			412	
Fertilizers.....		35	2,084	36
Fish, salted or dry cured.....	45		60	380
Fish meal.....				492
Floor coverings.....	445	616	563	1,226
Flour.....	57	9,244	928	16,186
Fruit, dried.....		13,656	47	21,912
Fruits, fresh.....		1,862	189	27,518
Furniture and household goods.....	201	27	216	44
Gallnuts.....		18		18
General.....	14,039	3,544	29,847	17,544
Glass and glassware.....	1,839	55	3,451	573
Glue.....	41		227	20
Groceries.....	399	206	468	596
Guano.....			75	2,754
Gums.....	6		18	18
Hair, all kinds.....		62		93
Hay.....		308		308
Hemp, unmanufactured.....			3	1,328
Honey.....		227		316
Hops.....		125		388
Horns and hoofs.....				22
Infusorial earth.....		180		333
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	20,591	5,229	37,462	5,282
Ivory nuts.....				1,232
Jute, unmanufactured.....				17

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Lard substitute.....	635		855	
Liquors.....	97		1,199	599
Lumber (including manufactured mill products).....	816	71,104	1,041	114,996
Machinery.....	1,293	210	4,820	412
Malt.....	15		101	
Manufactured goods ..	2,230	669	3,365	3,799
Marble and granite.....	77		91	
Matches.....	354	61	391	119
Metals:				
Copper.....	53	6,377	113	14,233
Gold and silver.....			94	39
Iron.....	172		244	559
Lead.....		726	1	4,380
Scrap.....		19	18,963	95
Tin.....	20		27	875
Zinc.....	22		395	3,091
Other and unclassified.....	137	80	170	100
Milk, powdered.....		371	63	515
Molasses and syrups.....	171		186	
Nitrates.....	1,436		2,553	2,238
Nuts, edible (including meats).....		73	87	174
Oats.....	565	44	590	8,668
Oils, mineral:				
Crude.....	60		514	53,373
Gas and fuel.....	54	47,840	2,754	57,342
Gasoline, benzine, and naphtha.....	14	67,537	546	114,693
Kerosene.....		51,679	2,166	51,742
Lubricating and greases.....	3,662	1,177	11,095	2,491
Other and unclassified.....				1
Oils, vegetable:				
Coconut.....		500		6,725
Cottonseed.....	4,350		4,355	
Linseed.....	14		88	9
Olive.....			871	
Rapeseed.....				146
Wood.....	24	10	80	4,211
Other and unclassified.....	99	17	209	863
Oil, fish.....	11		11	1,946
Oil, whale.....			26	
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		126	198	451
Oilseed cake and meal.....				2,290
Ores:				
Antimony.....				42
Copper.....			2,313	1,205
Gold and silver.....				25
Lead.....			3,924	25
Tin.....				1,334
Zinc.....				400
Other and unclassified.....				661
Paints and varnishes.....	202	8	654	16
Paper and paper products ..	4,115	4,807	13,644	6,372
Paper scrap.....			1,893	53
Peanuts.....	419	45	419	49
Peas, dry.....			9	2,898
Peatmoss.....	4		657	
Phosphates.....	114		15,503	
Plaster.....			27	
Porcelain ware.....		246	121	2,226
Potash.....		861	4,585	861
Pyrethrum flowers.....				60
Rags and waste.....	121	214	891	615
Railroad material.....	108		1,145	
Rice.....	690	377	802	2,676
Rope and twine.....	97	33	138	161
Rosin.....	680		3,185	
Rubber:				
Manufactured.....	669	13	910	15
Scrap.....	30	133	150	152
Salt.....	130		2,433	
Sand.....				583
Seeds (except oilseeds).....	28	440	358	1,223
Sewer pipe (concrete and terra cotta).....	50		50	
Shells, oyster.....	1,496		1,496	
Silk, raw.....		545	3	1,441
Skins and hides.....		2,280	40	5,053
Slag.....			2,880	
Slate.....	20		20	
Soaps and products.....	1,753	331	1,914	409
Soda and sodium compounds.....	845	20	3,362	326
Soy beans.....		593		600

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Sugar.....	85	10,245	337	106,362
Sulphur.....	5,193		7,283	335
Talc.....			3	
Tallow.....		50		340
Tea.....	50		151	1,107
Textiles.....	2,180	195	6,597	1,274
Tinplate.....	1,342		5,462	
Tobacco and manufactures.....	311	14	6,065	48
Toilet preparations.....	101	3	102	3
Turpentine.....	130		132	
Vegetables, dry.....	15	35	68	299
Wall board.....		28	500	254
Wax, paraffin.....	207		1,725	81
Wheat.....		600	37	262,339
Wines.....		54	239	1,025
Wood pulp.....	22	7,175	5,135	8,394
Wool.....		1,247	55	12,772
Total, January, 1933.....	106,175	361,557	349,560	1,113,943
Total, January, 1932.....	152,287	315,782	474,356	1,119,229
Total, January, 1931.....	178,997	526,987	562,832	1,544,105

* Except as otherwise classified.

* Cotton, silk, wool, rayon goods.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending February 4, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Ancon.....	Panama R. R. S. S. Line.....	January 29	January 29		696
Metapan.....	United Fruit Co.....	January 29	January 29		153
Pastores.....	United Fruit Co.....	January 29	January 29		518
Canadian Leader.....	Canadian National Steamships.....	January 29	January 29		431
Attika.....	North German Lloyd.....	January 29	January 29	1	100
San Antonio.....	French Line.....	January 29	January 29	13	50
Dakarian.....	Leyland S. S. Line.....	January 29	January 29	206	
Pellerin de Latouche.....	French Line.....	January 29	January 30	160	200
Santa Catalina.....	Panama Mail S. S. Co.....	January 29	January 31	1,134	655
Calamares.....	United Fruit Co.....	January 30	January 30	4	290
Point Palmas.....	Swayne & Hoyt, Inc.....	January 30	January 31	300	(²)
Orazio.....	Italian Line.....	January 30	January 31	67	912
Nuevo Panama.....	Hans Elliot.....	January 30	January 31	219	100
Lochmonar.....	Royal Mail Lines, Ltd.....	January 30	January 31	2	203
Cal.....	North German Lloyd.....	January 31	January 31		285
Niel Maersk.....	Isbrandtsen Moller Co.....	January 31	January 31	3	48
Contessa.....	Standard Fruit & S. S. Co.....	January 31	February 1	408	661
Santa Maria.....	Grace Line.....	February 1	February 1	233	74
Baru.....	Hans Elliot.....	February 1	February 1	94	10
Benjamin Franklin.....	Fred Olsen Line.....	February 1	February 1	85	(²)
Canadian Scottish.....	Canadian National Steamships.....	February 1	February 2	40	(²)
Durazzo.....	Hamburg-American Line.....	February 2	February 2	943	
Pearl Marie.....	R. Feuillebois.....	February 2	February 2	(¹)	24
Balboa.....	Johnson S. S. Line.....	February 2	February 2	(¹)	117
California.....	Navigazione Libera-Triestina.....	February 2	February 2	89½	(²)
Santa Clara.....	Grace Line.....	February 2	February 3	218	506
Argon.....	Standard Transportation Co.....	February 2	February 4	9,312	(²)
Veragua.....	United Fruit Co.....	February 3	February 3	217	44
President Hayes.....	Dollar Line.....	February 3	February 3	2	(²)
San Francisco.....	Hamburg-American Line.....	February 3	February 3	65	5
Guayaquil.....	Panama R. R. S. S. Line.....	February 3	February 4	804	450
Tivives.....	United Fruit Co.....	February 3	February 4	370	497
Colombia.....	Royal Netherlands S. S. Co.....	February 3	February 4	78	¾
Kwanai Maru.....	Osaka Shosen Kaisha.....	February 4	February 4	75	56
Tatsuno Maru.....	Nippon Yusen Kaisha.....	February 4	February 4	45	(²)
Sollund.....	Panama Mail S. S. Co.....	February 4	February 4	1,155	
Bodegraven.....	Royal Netherlands S. S. Co.....	February 4	February 4	103	
Schwaben.....	North German Lloyd.....	February 4	February 4	160	
Colombia.....	Colombian S. S. Line.....	February 4	February 4	125	
Santa Marta.....	United Fruit Co.....	February 4	February 4	369	
Santa Cecilia.....	Panama Mail S. S. Co.....	February 4	February 4	1,012	
Acajutla.....	Pacific Steam Navigation Co.....	February 4	February 4		410½
Manizales.....	Grace Line.....	February 4	February 4		129
Nuevo Panama.....	Hans Elliot.....	February 2	February 4	210	108

* No cargo discharged.

* No cargo laded.

THE PANAMA CANAL RECORD

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

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Comparison of Canal Traffic in January, 1933, with January Traffic in Previous Years.

Commercial traffic through the Canal during the month of January, 1933, showed an increase in comparison with January, 1932, with respect to the number of vessels and net tonnage of vessels (Panama Canal measurement), although cargo tonnage decreased. The increase in the number of transits was 38, or 10.1 per cent, and in net tonnage, 46,943 tons, or 2.3 per cent. The decrease in cargo tonnage was 130,082 tons, or 8.2 per cent. In comparison with January, 1931, the past month's traffic showed decreases in all the features considered above, as follows: In transits, 61, or 12.8 per cent; in net tonnage, 311,653 tons, or 13.1 per cent; and in cargo tonnage, 643,434 tons, or 30.5 per cent.

The peak month of January traffic since the opening of the Canal occurred in 1929, when 603 vessels, of 2,771,280 net tons, and carrying 2,858,835 tons of cargo, were passed through; this was also the greatest traffic in any month since the opening of the Canal. In comparison with these high figures last month's traffic was lower by 31.2 per cent in transits, 25.3 per cent in net tonnage, and 48.8 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of January each year from 1914 to 1933, inclusive, and for comparison the monthly averages for the corresponding fiscal year ending on June 30 following:

Calendar year.	Month of January.			Fiscal year.	Average per month for fiscal year.		
	Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.		Commer- cial transits.	Panama Canal net tonnage.	Tons of cargo.
1915.....	* 96	337,249	426,482	1915.....	* 102	361,197	465,567
1916.....	2	600	1,008	1916.....	63	199,687	257,843
1917.....	170	539,613	640,177	1917.....	150	483,213	588,213
1918.....	153	495,127	553,507	1918.....	172	547,839	627,669
1919.....	170	499,815	530,816	1919.....	169	510,416	576,385
1920.....	238	765,533	894,628	1920.....	206	712,170	781,208
1921.....	279	1,094,323	1,177,053	1921.....	241	951,323	966,601
1922.....	210	846,516	807,298	1922.....	228	951,455	907,075
1923.....	352	1,610,692	1,591,932	1923.....	331	1,550,482	1,630,656
1924.....	476	2,400,040	2,427,332	1924.....	436	2,179,073	2,249,559
1925.....	401	1,960,015	1,907,469	1925.....	389	1,904,596	1,996,570
1926.....	479	2,300,187	2,346,643	1926.....	433	2,064,549	2,169,787
1927.....	443	2,121,631	2,241,765	1927.....	456	2,185,651	2,312,351
1928.....	540	2,422,770	2,372,061	1928.....	538	2,454,886	2,469,226
1929.....	603	2,771,280	2,858,835	1929.....	534	2,468,483	2,555,250
1930.....	531	2,601,628	2,611,632	1930.....	515	2,498,385	2,502,519
1931.....	476	2,380,871	2,106,937	1931.....	461	2,316,012	2,090,233
1932.....	377	2,022,275	1,593,585	1932.....	376	1,968,785	1,650,667
1933.....	415	2,069,218	1,463,503	(*)	374	1,910,887	1,450,776

* Canal opened August 15, 1914.

* Average for 10 ½ months.

* Average for 7 months of fiscal year.

CANAL WORK IN JANUARY, 1933.

The following is the report of the Governor to the Secretary of War, of Canal work in the month of January, 1933.

BALBOA HEIGHTS, C. Z., February 18, 1933.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of January, 1933:

TRANSITS AND TOLLS.

During the month, 415 commercial vessels and 14 small nonseagoing launches under 20 tons transited the Canal. In addition to these, there were 26 vessels belonging to the United States Army and Navy, on which no tolls were collected, making a total of 455 transits for the month, or a daily average on all traffic of 14.68.

Tolls on the 415 commercial vessels amounted to \$1,762,808.56, and on the launches to \$72.84, a total of \$1,762,881.40, or a daily average on all traffic of \$56,867.14. In comparison with the previous month, December, 1932, which to date is the month of the greatest traffic of the current fiscal year, last month's traffic made a decline of 16 transits and \$19,131.47 in tolls, decreases of 3.7 per cent and 1.1 per cent, respectively. In comparison with January, 1932, commercial traffic in the past month showed an increase of 38 transits (10.1 per cent), although tolls collected were slightly less—\$7,442.12, or 0.4 of 1 per cent. This decrease in tolls notwithstanding a substantial increase in transits was due principally to the traffic of a number of small banana schooners which pay relatively slight tolls, and to the transit of a greater percentage of ballast traffic in January, 1933, which occasioned a decrease in the average tolls per vessel.

In comparison with the first 7 months of the fiscal year 1932, commercial traffic this year shows a decrease of 3.7 per cent in transits, 6.6 per cent in net tonnage (Panama Canal measurement), 15.3 per cent in cargo tonnage, and 8.2 per cent in tolls collection; in comparison with the first 7 months of the fiscal year 1931, there was a decline of 22.4 per cent in transits, 20.9 per cent in net tonnage (Panama Canal measurement), 34.7 per cent in cargo tonnage, and 23.2 per cent in tolls collected.

The regular quadrennial overhaul of Miraflores and Pedro Miguel locks was started on January 3, and will take about 5 months to complete. One side of the locks is being overhauled at a time, leaving the other side to take care of Canal traffic. During the progress of the work on Miraflores locks, traffic is being put through those locks on a 24-hour basis, and Pedro Miguel and Gatun on a 16-hour basis. Upon completion of the repairs at Miraflores (which is underway at the present time), and during the course of the overhaul of Pedro Miguel locks, operation will be on the regular 16-hour basis.

The total number of craft of all kinds transiting the Canal during the month of January in the two preceding years and in 1933 are shown in the following tabulation:

	January, 1931.	January, 1932.	January, 1933.
Commercial vessels.....	476	377	415
Launches (under 20 tons measurement).....	3	9	14
Noncommercial vessels:			
United States Government.....	69	52	26
For repairs.....	2	2	.....
Total.....	550	440	455

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	2	4	6
Pedro Miguel.....	28	33	61
Miraflores.....	28	34	62
Total.....	58	71	129

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, from the commercial traffic transiting the

Canal each month from the beginning of the fiscal year 1933 to the end of January, 1933, as compared with the same months in the previous year:

Month.	No. of vessels.		Panama Canal net tonnage.		Tons of cargo.		Tolls.	
	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September..	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November...	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December...	387	431	2,033,159	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
January...	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
Total.....	2,722	2,621	14,318,546	13,376,211	11,993,574	10,155,432	12,553,384.06	11,524,236.70

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for January in the years 1931, 1932, and 1933, and comparison with the monthly averages for the calendar year 1932:

	January, 1931.	January, 1932.	January, 1933.	Average per month for calendar year 1932.
Number of vessels.....	476	377	415	364
Panama Canal net tonnage.....	2,380,871	2,022,275	2,069,218	1,886,345
United States net tonnage.....	1,763,817	1,476,516	1,486,350	1,367,686
Registered gross tonnage.....	2,918,780	2,474,070	2,469,207	2,277,608
Registered net tonnage.....	1,771,209	1,491,513	1,502,520	1,381,155
Tolls.....	\$2,108,140.42	\$1,770,250.68	\$1,762,808.56	\$1,640,472.65
Tons of cargo carried.....	2,106,937	1,593,585	1,463,503	1,508,328

The daily average of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for calendar year 1932.
	January, 1931.	January, 1932.	January, 1933.	
Number of transits.....	15.35	12.16	13.39	11.93
Panama Canal net tonnage.....	76,802	65,235	66,749	61,847
Tolls.....	\$68,004.53	\$57,104.30	\$56,864.79	\$53,785.99
Tons of cargo.....	67,966	51,406	47,210	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of January in 1931, 1932, and 1933, are shown in the following tabulation:

	Average per vessel.			Average per vessel for calendar year 1932.
	January, 1931.	January, 1932.	January, 1933.	
Panama Canal net tonnage.....	5,002	5,393	4,986	5,195
United States net tonnage.....	3,705	3,937	3,582	3,767
Registered gross tonnage.....	6,132	6,598	5,950	6,273
Registered net tonnage.....	3,721	3,977	3,621	3,804
Tolls.....	\$4,428.87	\$4,695.63	\$4,247.73	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,426	4,250	3,527	4,154
Tons of cargo (laden vessels only).....	5,307	5,059	4,531	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fifteen nationalities were represented in the commercial traffic through the Canal in January, 1933, which corresponds to the number passing through in the previous month, and to the number passing through in January, 1932. Vessels of the United States registry, with 142, led in the number of transits in the past month, while those flying the British flag, with 106, were second. Vessels of these two nationalities made up approximately 60 per cent of the total transits for the month. Transits of vessels of Norwegian, Panamanian, and German registry were next in numerical importance with 43, 34, and 31, respectively. With respect to net tonnage (Panama Canal measurement), vessels of United States with 835,850 tons, made up 40.4 per cent of

the aggregate; British, with 580,826 tons, made up 28.1 per cent; Norwegian, with 210,978 tons, made up 10.2 per cent; and German, with 98,618 tons, made up 4.8 per cent.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of January, 1933, was 1,463,503 tons, a decrease of 130,082 tons, or 8.2 per cent, in comparison with January, 1932. Cargo from the Atlantic to the Pacific aggregated 349,560 tons, compared with 391,087 tons in the previous month, and 474,356 tons in January, 1932. From the Pacific to the Atlantic cargo amounted to 1,113,943 tons, as compared with 1,230,494 tons in the previous month and 1,119,229 tons in January, 1932. The combined cargo movement in January, 1933, was 158,078 tons, or 9.7 per cent, less than the tonnage passing through in the previous month.

From the Atlantic to the Pacific, raw cotton comprised the leading commodity, with shipments totaling 52,515 tons, followed by manufactures of iron and steel with 37,462 tons, scrap metal with 18,963 tons, mineral oils with 17,075 tons, phosphates with 15,503 tons, paper with 13,644 tons, and corn with 10,667 tons. A heavy increase occurred in the shipments of scrap metal, also a small increase in the shipments of corn, while the balance of the items decreased in comparison with January, 1932.

From the Pacific to the Atlantic mineral oils, totaling 279,642 tons, formed the leading commodity, followed by wheat with 262,339 tons, lumber with 114,996 tons, sugar with 106,862 tons, canned goods with 49,405 tons, fresh fruit with 27,518 tons, metals with 23,277 tons, and dried fruit with 21,912 tons. Of these items, mineral oil, wheat, sugar, fresh and dried fruits, made increases in comparison with January, 1932, while lumber, canned goods, and metals decreased.

The larger portion of the decrease in cargo tonnage in comparison with January, 1932, occurred in the Atlantic to Pacific movement which declined 124,796 tons, or 26.3 per cent, while from the Pacific to the Atlantic the decrease was but 5,286 tons, or less than one-half of one per cent.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.884 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.718 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of January, 1933, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian.....	\$5,708.75	\$7,044.00	\$1,335.25	.....	\$0.810	.....
British.....	487,809.75	528,312.80	40,503.05	.....	.876	\$0.716
Danish.....	27,364.90	30,738.00	3,373.10	.....	.849	.720
Danzig.....	38,469.83	36,138.40	.....	\$2,331.43	.989	.720
Dutch.....	25,673.75	31,711.00	6,037.25	.....	.810	.....
French.....	27,911.25	33,183.00	5,271.75	.....	.841	.....
German.....	80,919.26	94,444.80	13,525.54	.....	.832	.720
Italian.....	31,943.12	39,769.60	7,826.48	.....	.775	.720
Japanese.....	92,607.31	91,866.80	.....	740.51	1.001	.720
Norwegian.....	160,677.89	173,670.00	12,992.11	.....	.796	.719
Panamanian.....	6,202.84	7,653.00	1,450.16	.....	.796	.748
Peruvian.....	423.60	336.00	.....	87.60	1.261	.....
Swedish.....	34,229.16	41,094.60	6,865.44	.....	.781	.693
United States.....	739,576.75	792,359.20	52,782.45	.....	.909	.720
Yugoslav.....	3,290.40	2,742.00	.....	548.40	.....	.720
Total.....	1,762,808.56	1,911,063.20	151,962.58	3,707.94	.884	.718
Net increase for all traffic.....			148,254.64			

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$34,859.38
United States foreign trade.....	16,094.57
United States Canal Zone trade.....	1,828.50
Total.....	52,782.45

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in January, 1933, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
Belgian.....		1.44	1.44
British.....	.46	1.28	.88
Danish.....	.35	1.43	.97
Danzig.....		1.83	1.83
Dutch.....	.17	1.24	.66
French.....	.25	1.43	.71
German.....	.42	1.19	.88
Italian.....	.23	1.10	.74
Japanese.....	1.11	.99	1.05
Norwegian.....	.50	1.55	1.15
Panamanian.....	.37	1.38	.51
Peruvian.....		1.99	1.99
Swedish.....	1.13	1.52	1.35
United States.....	.37	1.17	.77
Average, January, 1933.....	.44	1.26	.87
Average, January, 1932.....	.56	1.27	.92
Average, January, 1931.....	.65	1.35	1.05

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of January, 1933, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tanks ships—						
Ballast.....	31	197,337	\$142,082.64	1	4,382	\$3,155.04
Laden.....	3	10,372	10,881.25	26	152,629	156,377.50
All others—						
Ballast.....	56	193,379	138,377.45			
Laden.....	136	776,181	657,939.90	158	734,649	653,773.50
Noncargo-carrying ships:						
Yachts.....	3	165	132.00	1	124	89.28
Total.....	229	1,177,434	949,413.24	186	891,784	813,395.32
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	135	722,310	\$601,906.61	117	593,349	\$553,042.59
Motor.....	79	454,505	347,012.74	54	297,722	259,595.95
Motor schooner.....	12	454	361.89	14	589	667.50
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	3	165	132.00	1	124	89.28
Total.....	229	1,177,434	949,413.24	186	891,784	813,395.32

Of the 252 steam driven vessels, 172 were oil burning, 72 coal burning, and 8 burned either oil or coal.

NONCOMMERCIAL VESSELS.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of January, 1933. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of transits.	Tonnage.	Tolls.	No. of transits.	Tonnage.	Tolls.
U. S. Naval vessels:						
Cranes.....	1	10 ¹	\$7.50			
Destroyers.....	5	6,059	3,029.50	3	3,494	\$1,747.00
Mine sweepers.....	2	1,900	950.00	2	1,900	950.00
Submarines.....	2	1,869	934.50	2	1,869	934.50
Submarine tenders.....	1	1,315	1,578.00			
Transports.....				1	3,992	4,990.00
U. S. Army vessels:						
Launches.....	3	30	22.50			
Mine planters.....	1	1,208	604.00	1	1,208	604.00
Transports.....	1	3,908	4,885.00			
Tugs.....	1	92	69.00			
Total.....	17		12,080.00	9		9,225.50

* Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of January, 1933, carried cargo as follows: Atlantic to Pacific, 1,394 tons; Pacific to Atlantic, 407 tons; total, 1,801 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of January, 1933. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	8	60	\$51.33
Pacific to Atlantic.....	6	29	21.51
Total.....	14	89	72.84

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of January, 1933, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	31,138	23,209	54,347
Local cargo shipped..... tons..	4,618	174	4,792
Cargo received for transshipment..... tons..	23,528	1,735	25,263
Cargo transhipped..... tons..	23,511	1,664	25,175
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	97	46	143
Number of releases issued.....	851	281	1,132
Tons received.....	710	262	972
Tons withdrawn.....	720	249	969
Packages received.....	9,750	2,209	11,959
Packages withdrawn.....	9,492	2,559	12,051
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	19	1	20
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,210	94	3,304
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	73	3	76
Panama Railroad Company..... tons..	7		7
U. S. Army, including vessels..... tons..	20		20
Individuals and companies..... tons..	85		85
Transferred to Navy..... tons..	97		97
Total sales and issues..... tons..	3,492	97	3,589
Coal on hand, January 1, 1933..... tons..	24,966		24,966
Coal on hand, February 1, 1933..... tons..	22,763		22,763
Coal received during month..... tons..	1,289		1,289
Coal received from Navy..... tons..		97	97

	Cristobal.	Balboa.	Total.
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls..	3,661.21	19,222.47	22,883.68
Panama Railroad Company..... bbls..	15,249.85	484.19	15,734.04
U. S. Army and Navy..... bbls..	—22.50	784.59	762.09
Individuals and companies..... bbls..		105.66	105.66
Total sales and issues..... bbls..	18,888.56	20,596.91	39,485.47
Fuel oil on hand, February 1, 1933..... bbls..	26,750.51	89,425.31	116,181.82
Diesel oil issued during January, 1933..... bbls..	236.40	1,273.89	1,510.29
Diesel oil on hand, February 1, 1933..... bbls..	3,813.35	14,781.15	18,594.50
Miscellaneous transfers..... bbls..	3,023.31	4,737.40	7,760.71
Gasoline and kerosene pumped for The Panama Canal..... bbls..	14,520.05	23,526.72	38,046.77
Gasoline pumped for individuals and companies..... bbls..	1,278.12	18,634.99	19,913.11
Oil pumped for individuals and companies:			
Receipts..... bbls..	103,092.67	29,056.31	132,148.98
Issues..... bbls..	116,820.21	58,297.45	174,917.66
Oil pumped for U. S. Navy..... bbls..	9,505.00	18,445.90	27,950.90
Total fuel oil, gasoline, and kerosene handled..... bbls..	267,164.32	174,569.57	441,733.89
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	15	5	20
Measured for Panama Canal net tonnage.....	8	4	12
Remeasured for Panama Canal net tonnage.....	12	3	15
Panama Canal net tonnage corrected.....	1	1	2
U. S. equivalent tonnage corrected.....	11	3	14
Services of harbor equipment:			
Tugs, total operating hours.....	205	117½	322½
Launches, total operating hours.....	956	1,139½	2,095½
Revenues from tug service, pilotage, etc.:			
Tug revenue.....	\$7,175.00	\$3,701.25	\$10,876.25
Pilotage.....	14,440.00	5,792.00	20,232.00
Seamen.....	10,134.00	7,952.00	18,086.00
Launch service.....	1,802.50	2,165.00	3,967.50
Wharfrage.....	11,871.21	4,092.39	15,963.60
Ships measured.....	175.00	155.00	330.00
Miscellaneous.....	367.35	78.00	445.35
Clearances issued.....	209	230	439
Bills of health issued.....	246	231	477

* Credit.

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal..	452	2,981,717	1,785,844	423	2,580,397	1,573,916
Vessels entering port but not transiting Canal.	61	453,636	252,242	12	54,770	32,258
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	98	666,433	402,612	81	599,456	353,255
<i>Ships clearing.</i>						
All vessels, including those transiting Canal..	455	2,982,957	1,787,796	422	2,565,638	1,563,490
Vessels clearing port but not transiting Canal.	62	439,865	245,167	11	54,767	32,255
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	97	659,665	398,400	82	606,159	357,458

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:									
From Atlantic ports....	692	349	1,041	70	130	200	762	479	1,241
From Pacific ports.....	59	42	101	104	121	225	163	163	326
Total disembarking.....	751	391	1,142	174	251	425	925	642	1,567
Embarking:									
For Atlantic ports.....	535	437	972	34	39	73	569	476	1,045
For Pacific ports.....	102	101	203	190	263	453	292	364	656
Total embarking.....	637	538	1,175	224	302	526	861	840	1,701

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Remaining on board:									
From Atlantic to Pacific ports.....	2,022	1,432	3,454				2,022	1,432	3,454
From Pacific to Atlantic ports.....				871	1,097	1,968	871	1,097	1,968
From Atlantic to Atlantic ports.....	2,722	62	2,784				2,722	62	2,784
From Pacific to Pacific ports.....				12	56	68	12	56	68
Total remaining on board.....	4,744	1,494	6,238	883	1,153	2,036	5,627	2,647	8,274
Total arriving on Canal Zone.....	5,495	1,885	7,380	1,057	1,404	2,461	6,552	3,289	9,841
Total departing from Canal Zone.....	5,381	2,032	7,413	1,107	1,455	2,562	6,488	3,487	9,975

NOTE.—In passengers "remaining on board," those from the Atlantic to the Pacific and Pacific to the Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.....	229	69	30.1	3,857
Pacific to Atlantic.....	186	60	32.3	2,142
Total.....	415	129	31.1	5,999

In addition to the aforesaid, 53 passenger-carrying vessels called at the port of Cristobal and 7 at the port of Balboa without transiting the Canal, making a total of 189 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of January, 1933, 38 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa. A total of 89 passengers (39 from the north and 50 from the south) disembarked from the planes landing at Cristobal, and 85 passengers (28 from the north and 57 from the south) embarked. Two passengers (from the south) were reported disembarking from the plane calling at Balboa.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of January, 1933, together with the total sales in the corresponding month in 1932 and 1931:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$499.51	\$3,278.10	\$1,066.05	\$48.27	\$1,757.63	\$12,649.56
Government vessels.....	116.40	1,654.69	4,526.30	9.76	345.45	6,652.60
P. R. R. vessels.....		273.14	25.49	409.96	3.92	712.51
Total sales, January, 1933...	615.91	5,205.93	11,617.84	467.99	2,107.00	20,014.67
Total sales, January, 1932...	842.48	5,257.23	13,364.73	736.11	2,765.30	22,965.85
Total sales, January, 1931...	1,910.79	9,781.76	28,005.18	1,199.38	5,883.07	46,780.18
Sales at Balboa to:						
Commercial vessels.....	239.22	2,139.38	3,190.99	168.80	2,162.97	7,901.36
Government vessels.....	436.30	3,190.60	12,516.13	612.81	647.74	17,403.58
Total sales, January, 1933...	675.52	5,329.98	15,707.12	781.61	2,810.71	25,304.94
Total sales, January, 1932...	609.50	4,899.73	16,101.65	873.32	3,625.44	26,109.64
Total sales, January, 1931...	964.58	4,730.92	23,033.71	927.42	9,041.61	38,698.24

The aggregate sales to commercial vessels during the month were \$20,550.92; to Government vessels, \$24,056.18; and Panama Railroad vessels, \$712.51; making the total sales to all vessels, \$45,319.61. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of January, 1933, as compared with the corresponding month in 1932 and 1931:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial. *					
	North.	South.	Total.	North.	South.	Total.	Jan., 1931.	Jan., 1932.	Jan., 1933.
Gatun.....	167	207	374	3	5	8	479	397	382
Pedro Miguel.....	171	206	377	10	14	24	504	406	401
Miraflores.....	166	202	368	9	15	24	501	404	392
Number of vessels put through locks.									
Gatun.....	185	229	414	23	34	57	576	452	471
Pedro Miguel.....	186	229	415	43	53	96	617	474	511
Miraflores.....	186	229	415	42	53	95	614	471	510

* Includes toll-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	35	25	25
Panama Canal equipment.....	6	61	62
Launches under 20 tons measurement.....	16	10	8

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in January, 1933, as compared with the preceding month and the corresponding month in 1932:

	Gatun.	Pedro Miguel.	Miraflores.
Lockages.....	<i>Cubic feet.</i> 1,602,050,000	<i>Cubic feet.</i> 1,362,210,000	<i>Cubic feet.</i> 1,260,050,000
Leakage.....	30,000,000	75,000,000	30,000,000
Maintenance.....	9,710,000		33,370,000
Total, January, 1933.....	1,641,760,000	1,437,210,000	1,323,420,000
Total, December, 1932.....	1,751,690,000	1,486,030,000	1,411,850,000
Total, January, 1932.....	1,683,400,000	1,268,550,000	1,254,770,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of January, 1933, are shown in comparative form in the following tabulation:

	January.		January—Years of record.		
	1932.	1933.	Maximum.	Minimum.	Mean.
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagres River at Alhajuela.....	1,520	2,281	4,963	734	1,903
Maximum momentary discharge for the month.....	6,027	18,744	47,500		
Gatun Lake watershed, total yield.....	2,386	3,803	9,298	1,455	2,962
Gatun Lake watershed, net yield.....	1,604	2,972	8,641	616	2,153
Draft on Gatun Lake for lockages and power.....	2,222	2,836			2,438

* January 2, 1902.

* 10-year average, 1921-1930.

The monthly mean discharge of the Chagres River at Alhajuela for January, 1933, was 2,281 c. f. s., which is 20 per cent above the 32-year mean of 1,903 c. f. s. The maximum monthly mean discharge on record for January is 4,963 c. f. s. in 1910 and the minimum is 734 c. f. s. in 1912. The maximum momentary discharge for the month was 18,744 c. f. s. at elevation 100.17 feet on the 10th and the minimum was 1,246 c. f. s. at elevation 92.73 feet on the 31st. The maximum momentary discharge on record for January is 47,500 c. f. s. at elevation 107.09 feet on January 2, 1902, and the minimum is 560 c. f. s. at elevation 91.60 feet on January 31, 1912.

Gatun Lake varied in elevation during January from a maximum of 87.12 feet on the 1st to a minimum of 86.55 feet on the 30th, and averaged 86.90 feet. The total yield of the Gatun Lake watershed for the month was 3,803 c. f. s., which is 28 per cent above the 20-year January average of 2,962 c. f. s. The maximum total yield on record for January is 9,298 c. f. s. in 1922, and the minimum is 1,455 c. f. s. in 1931.

Miraflores Lake varied between elevations 54.60 feet on the 10th and 52.84 feet on the 29th, averaged 53.84 feet, and ended the month at elevation 53.35 feet.

SEISMOLOGY.

Two seismic disturbances were recorded during the month—on the 10th and 11th.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 6,191,200 kilowatt hours, and the computed water consumption was 4,620,480,160 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 24,700 kilowatt hours, and the fuel oil consumption was 61.13 barrels. Diesel units were on the bus eight times during the month, five of which were for dry dock pump operation, one on account of overload on the Gatun hydroelectric station, and two for test purposes.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 27 vessels during the month. There were 319 work orders issued during the month, as compared with 337 during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of January, 1933, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	4	29	30
United States Army and Navy.....	4	6	5
Panama Canal equipment.....	3	2	3
At Balboa:			
Commercial.....		9	7
United States Army and Navy.....	4	6	5
Panama Canal equipment.....	2	6	7
Total.....	17	58	57
Vessels in dry dock.			
At Cristobal:			
None (dry dock under repairs).....			
At Balboa:			
United States Army and Navy.....	1	5	4
Panama Canal equipment.....	1	1	1
Total.....	2	6	5

Overhaul of the Panama Canal dredge *Cascadas* was completed during the month. Work was completed on the United States frigate *Constitution* and the U. S. S. *Mallard* during the month. Work was carried forward on annual overhaul of the Submarine S-13 and the U. S. S. *Chewink*.

MUNICIPAL ENGINEERING DIVISION.

In connection with reconditioning existing fuel oil line from oil handling plant to dock 13 at Cristobal, 3,000 feet of 12-inch oil line were lowered and 700 cubic yards were excavated and backfilled. On the installation of oil lines to the coaling dock at Cristobal, there were installed 365 feet of 6-inch galvanized iron pipe.

At the Cristobal dry dock the driving of sheet piling for cofferdam was completed, and 17,709 cubic yards of earth were hauled into the dam from the borrow pit. A total of 5,718 cubic yards were removed from the dry dock and 225 cubic yards were removed from the suction culvert.

On Bolivar Highway, 859 square yards of concrete slab were broken out and replaced.

In connection with the construction of a breakwater at the west ferry slip on the Thatcher Highway, 2,150 cubic yards of large rock were quarried and placed in the dike.

Work on a number of improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 761,458,750 gallons.

DREDGING DIVISION.

The movement of the West Culebra slide on the 450-foot west base line showed an average of 10.7 feet toward the Canal between stations 1776 plus 00 and 1795 plus 00 W., and no movement southward. The reference points on this slide showed no movement during the month. A dipper dredge worked 10 days on this slide between stations 1790 plus 00 and 1795 plus 75 W., removing a total of 42,550 cubic yards, of which 36,150 cubic yards were rock and 6,400 cubic yards earth. There was no observed movement on any of the reference points on East Culebra slide during the month. A dipper dredge worked 3 days in this slide between stations 1777 plus 50 and 1782 plus 50 E., removing a total of 15,700 cubic yards, of which 12,500 cubic yards were rock and 3,200 cubic yards were earth.

The East Culebra slide extension showed no movement during the month. Hydrographic and drag surveys were made periodically. The reference points were read at the end of the month and showed no movement. A dipper dredge worked two days in this slide between stations 1765 plus 10 and 1768 plus 50 E., removing a total of 12,150 cubic yards of earth and clay.

There were no new bank breaks in the Cut during the month. There was no interference with shipping on account of slides during the month.

The total excavation during January, 1933, was 686,250 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
Project No. 9.....	6,350	35,800	42,150
West Culebra slide.....	5,400	36,150	42,550
East Culebra slide.....	3,200	12,500	15,700
East Culebra slide extension.....	12,150		12,150
Canal prism, Pacific entrance—			
Project No. 1.....		80,400	80,400
Maintenance.....	490,200	3,100	493,300
Total.....	518,300	167,950	686,250

The ferry crossing between the east and west banks of the Canal at the Thatcher Highway crossing at Balboa operated 31 days during the month. A total of 1,540 single trips were made, and 969 Panama Canal, 763 U. S. Army, and 11,783 other vehicles, a total of 13,515, were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and contractors for January was 315 gold and 810 silver employees.

Excavation for the tail race apron and the apron upstream from blocks 13, 14 and 15 was completed. The rock excavation and most of the common in that part of the tail race downstream from the power house were finished. On the right abutment the rock work on blocks 1, 2, and 3 and the apron area upstream from them was 90 per cent completed. The cutoff trench has not been started to date. Practically all the unstable rock over the right training wall was removed. The material from all these locations was used for filling the downstream and left training wall diversion cribs and in building a road over dump No. 3 to reach saddle No. 8. The badly seamed rock in block No. 3 has been eliminated by following the seams down to elevation 95. At this level the excavation has been carried 20 feet further into the cliff than was originally intended and indications at the end of the month are that the difficulties are over. The digging of the cutoff trench may disclose the presence of additional open seams but this is doubtful.

Concreting the counterforted wall and tail race apron was completed. The apron upstream from blocks 13, 14 and 15 was completed except for the portion near the trash rack structure. The cap over the asphalt apron seal was placed for blocks 16 and 19. Concrete placing was discontinued on the 20th with the intention of resuming about March 1.

Two small floods occurred during the month—one of 18,700 c. f. s. on the 10th, and another of 12,000 c. f. s. on the 12th. Neither of these floods caused any damage at the main dam, although it was necessary to provide additional protection against the first one to keep it from overtopping the levee.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on January 31, 1933, was 24,424, composed of 8,261 Americans, 2,900 of whom were men, 2,588 women, and 2,773 children; 185 Europeans, 74 of whom were men, 28 women, and 83 children; and 15,978 West Indians, 4,261 of whom were men, 2,855 women, and 8,862 children. The total number of persons in quarters on January 31, 1932, was 24,425.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of January 18, 1933, with a comparison of the working force for the preceding month and for January, 1932:

	Total employees.		As of January 18, 1933.		
	January, 1932.	December, 1932.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	198	120	55	58	113
Electrical.....	444	385	147	243	390
Municipal engineering.....	1,026	915	104	1,088	1,192
Lock operation.....	927	971	311	1,378	1,689
Dredging.....	1,078	967	165	805	970
Madden Dam.....	283	199	53	138	191
Mechanical.....	1,177	1,230	394	695	1,079
Marine.....	731	667	176	497	673
Fortifications.....	180	86	12	139	151
Total.....	5,954	5,540	1,407	5,041	6,448
Supply Department:					
Quartermaster.....	1,746	1,709	187	1,492	1,679
Commissary.....	1,546	1,462	223	1,236	1,459
Cattle Industry—Plantations.....	115	100	2	98	100
Hotel Tivoli.....	110	98	6	93	99
Hotel Washington.....	95	91	7	84	91
Transportation.....	307	302	77	224	301
Total.....	3,919	3,762	502	3,227	3,729
Accounting Department.....	202	195	189	5	194
Health Department.....	1,081	1,117	277	838	1,115
Executive Department.....	923	930	563	356	919
Total.....	2,206	2,242	1,029	1,199	2,228
Panama Railroad Company:					
General Manager.....	107	79	23	47	70
Transportation.....	365	313	71	241	312
Receiving and Forwarding Agency.....	776	591	82	506	588
Coaling Stations.....	122				
Total.....	1,370	983	176	794	970
Grand total, January, 1932.....	13,449				
Grand total, December, 1932.....		12,527			
Grand total, January, 1933.....			3,114	10,261	13,375

Additions to the gold force on the Isthmus in January, 1933, were as follows: Employed on the Isthmus, 9; reemployed on the Isthmus, 40; total 49. Separations from the gold force totaled 12, as follows: Resigned, 5; discharged, 2; retired, 3; died, 2. At the end of the month there were on file 900 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 1,411 and separations from service, 219; the number seeking employment was estimated at approximately 2,000.

VITAL STATISTICS.

A total of 165 deaths occurred during the month of January, 1933, among the population of the Canal Zone (42,070) and the cities of Panama (79,000) and Colon (30,000) total population of 151,070, which is equivalent to an annual death rate of 13.19 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 27; pneumonia (broncho and lobar), 24; organic diseases of the heart, 11; cancer, 10, and nephritis (acute and chronic), 9. There were 7 deaths from diarrhea and enteritis, 5 from syphilis, 2 from typhoid and 2 from influenza. There were 32 deaths among nonresidents, which are not included in the above statistics.

There were 276 live births and 10 stillbirths reported during the month. Including stillbirths this is equivalent to an annual birth rate of 22.72. Deaths among children

under one year of age numbered 26, giving an infant mortality rate, based on the number of livebirths reported, of 94.20.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 203, of whom 36 were employees (11 white and 25 colored), 35 were members of employees' families (18 white and 17 colored), 11 were employees of the Madden Dam contractors (2 white and 9 colored), 15 were Canal Zone agriculturists, 63 were other civilian nonemployees, and 43 were Army and Navy personnel. Of the 71 employees and members of employees' families, 53 were probably infected outside our sanitated areas as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There was one death from malaria among residents, a white employee who acquired his infection while hunting in the vicinity of Gorgona Beach, in the interior of the Republic of Panama.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$291,224.27, of which \$271,482.06 was for the Department of Operation and Maintenance, and \$19,742.21 was for other Panama Canal Departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$31,284.33.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of December, 1932, as compared with December, 1931, with the figures for the first six months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of January at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	December, 1931.	December, 1932.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,757,864.05	\$1,781,897.13	\$10,783,306.54	\$9,761,526.98
Other receipts.....	306,644.12	306,467.81	1,600,624.42	1,498,106.78
Total transit revenues.....	2,064,508.17	2,088,364.94	12,383,930.96	11,259,633.76
Total transit expenses.....	1,049,683.38	986,008.44	6,349,278.81	5,521,182.71
Net transit revenues.....	1,014,824.79	1,102,356.50	6,034,652.15	5,738,451.05
3 % fixed capital charge.....	1,266,800.44	1,272,462.57	7,573,687.08	7,611,965.05
Deficit.....	(251,975.65)	(170,106.07)	(1,539,034.93)	(1,873,514.00)
Business revenues.....	1,551,616.39	1,246,484.28	8,947,531.08	7,435,422.55
Business expenses.....	1,493,298.66	1,171,724.87	8,584,632.80	7,063,739.09
Net business revenues.....	58,317.73	74,759.41	362,898.28	371,683.46
3 % fixed capital charge.....	59,397.77	60,302.45	383,502.18	384,625.09
Surplus or (deficit).....	(1,080.04)	14,456.96	(20,603.90)	(12,941.63)
Combined revenues.....	3,616,124.56	3,334,849.22	21,331,462.04	18,695,056.31
Combined expenses.....	2,542,982.04	2,157,733.31	14,933,911.61	12,584,921.80
Net revenues.....	1,073,142.52	1,177,115.91	6,397,550.43	6,110,134.51
3 % fixed capital charge.....	1,326,198.21	1,332,765.02	7,957,189.26	7,996,590.14
Deficit.....	(253,055.69)	(155,649.11)	(1,559,638.83)	(1,886,455.63)

() Denotes deficit.

Respectfully,

J. L. SCHLEY,
Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 14, 1933.

No. 19.

Panama, Panama Bay, off Cape Mala, shipwreck. The commanding officer of the U. S. S. *Nokomis* furnishes the following information:

The steamship *Santiago* burned and sank in latitude 7° 25' 32" N., longitude 80° 02' 11" W., at 3 a. m. on February 13, 1933, in 13 fathoms of water.

J. L. SCHLEY,
Governor.

Origin and Destination of Cargo Passing Through the Panama Canal During Calendar Year 1932.

Cargo tonnage through the Panama Canal during the calendar year 1932, totaling 18,099,938 tons, showed a decrease of 3,948,259 tons, or 17.9 per cent, in comparison with the previous year. Of this decrease, there was a decline of 1,085,287 tons, or 18.2 per cent, in the Atlantic to Pacific movement, while in the cargo from the Pacific the decrease was 2,862,972 tons, or 17.8 per cent. In the latter movement a number of important gains were recorded in several of the larger commodities, particularly in food products, but heavy decreases in a number of bulk commodities, notably lumber, nitrates, iron ore, and mineral oils, more than offset these gains.

In another part of this issue (pages 418 to 421) will be found tables showing in detail the origin and destination of all cargo tonnage passing through the Canal in the calendar year ended December 31, 1932. This tonnage, segregated according to direction, as compared with the calendar year 1931, and the decreases and percentages of decrease, are summarized in the following tabulation:

	Calendar year, 1931.	Calendar year, 1932.	Decrease.	
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>	<i>Per cent.</i>
Atlantic to Pacific	5,974,099	4,888,812	1,085,287	18.2
Pacific to Atlantic	16,074,098	13,211,126	2,862,972	17.8
Total	22,048,197	18,099,938	3,948,259	17.9

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Seventy-one and seven-tenths (71.7) per cent of the cargo moving from the Atlantic to the Pacific originated on the eastern and Gulf seaboard of the United States, and 17.9 per cent in Europe, these two areas contributing approximately 90 per cent of the total cargo moving from the Atlantic to the Pacific. Tonnage originating in the United States, while showing a slight increase in relation to the total tonnage, made an actual decrease of 745,641 tons, or 17.5 per cent. Tonnage coming from Europe showed a decrease both in relation to the total cargo and in actual tonnage of 327,900 tons, or 27.2 per cent.

Destination.—Forty-three and six-tenths (43.6) per cent of all cargo moving from the Atlantic to the Pacific was destined to the United States; 29.5 per cent to Asia; 10.8 per cent to Australasia; and 7.1 per cent to South America. Tonnage to all these areas declined in comparison with the calendar year 1931. The most marked decline occurred in the amount destined to South America and the United States, which, in addition to showing actual decrease of 207,788 tons, or 37.6 per cent, and 541,649 tons, or 20.3 per cent, respectively, also showed decreases in their respective relations to the total cargo. Australasia and Asia showed decreases of 11.4 per cent and 9.0 per cent, respectively, but each showed a slight gain in percentage of total cargo. The decline in tonnage to all these areas was due to a continuing general curtailment in shipments of almost all the important commodities normally routed in this direction. Increase of 21.0 per cent in shipments of cotton to Asia (which showed the lowest percentage of decrease), assisted materially in offsetting losses in other commodities.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the cargo moving from the Pacific to the Atlantic, 47.3 per cent originated in the United States; 16.9 per cent in South America; 21.7 per cent in Canada; 7.0 per cent in Asia; and 3.4 per cent in Australasia. Tonnage from Canada registered a gain of 769,064 tons, or 36.7 per cent, over the preceding calendar year, this increase being due to heavy wheat shipments from that region. A loss of 1,863,072 tons, or 23.0 per cent, occurred in cargo tonnage originating in the United States in comparison with the calendar year 1931. A decrease in two important commodities—lumber and gasoline—was the chief cause of the loss suffered by that area, these two items alone declining some 1,600,000 tons. Less important decreases occurred in shipments of wheat, barley, copra, copper, zinc, and wool. Tonnage originating in South America showed a decrease of 1,464,310 tons, or 39.7 per cent, in comparison with the calendar year 1931. This heavy decrease was due principally to the decline in nitrates and iron shipments from Chile, and in a few less important commodities. Offsetting slightly this loss was a gain of 183,510 tons from Peru; slight gains were also made in the amounts originating in Ecuador and Colombia. Increased mineral oil shipments accounted for the greater tonnage from Peru. Tonnage from Asia decreased 150,394 tons, or 13.8 per cent, in comparison with 1931, while from Australasia there occurred a loss of 322,231 tons, or 42.0 per cent. From the former region (Asia), tonnage coming from the Philippine Islands made a gain of 18,753 tons, or 2.7 per cent. From China there occurred a decrease of 46,299 tons, or 43.8 per cent, while from Japan the total was approximately the same as in 1931. From other sections of Asia there occurred a decrease of 124,648 tons, or 67.7 per cent. Curtailment of the shipments of soy beans accounted for about 100,000 tons of the latter loss. The heavy loss from Australasia was due to the fact that many of the vessels which normally ply between the United Kingdom and New Zealand were diverted to other routes, said to be caused by the relatively higher cost of Canal tolls when paying with the depreciated British pound.

The percentages of the total cargo originating in the United States, South America, and Australasia were lower than in 1931, while those from Canada and Asia were higher.

Destination.—Segregated according to destination, 47.1 per cent of the cargo moving from the Pacific to the Atlantic was destined to the Atlantic and Gulf ports of the United States, and 46.5 per cent to Europe, these two areas absorbing over 93 per cent of the total tonnage routed in this direction. Cargo to the United States decreased 2,446,351 tons, or 28.2 per cent, in comparison with that destined to the United States in 1931, but to Europe the loss was relatively much smaller—168,230 tons, or 2.7 per cent. The percentage of the total tonnage to the United States was lower in 1932 than in 1931, while to Europe the proportion of the total was higher. Losses in shipments of lumber, nitrates, mineral oils, and ores were the chief factors in the heavy loss of cargo destined to the United States, while a heavy increase in wheat served to offset what otherwise would have been a pronounced loss in tonnage to Europe.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

Raw cotton, totaling 636,256 tons, was the leading class of cargo from the Atlantic to the Pacific during 1932. This was followed in

order by the major items of manufactures of iron and steel, mineral oils, paper, sulphur, and phosphates. With the exception of five items (corn, cotton, scrap metal, paper, and sugar) all the leading items routed in this direction showed decreases in comparison with the previous calendar year, owing to the continued depressed business conditions over the world. Of the five commodities that increased, the gains were: Corn, 115,280 tons, or 714.8 per cent; scrap metal, 76,633 tons, or 225.7 per cent; sugar, 15,748 tons, or 34.7 per cent; raw cotton, 112,076 tons, or 21.4 per cent; and paper and paper products, 4,561 tons, or 2.3 per cent. The larger portion of these shipments was from the United States to the Far East.

From the cargo declarations submitted it was possible to classify 90.4 per cent of the total cargo in transit from the Atlantic to the Pacific in 1932, in comparison with 88.8 per cent of the total in the calendar year 1931. Commodities which aggregated 50,000 tons or more in this direction in either the calendar year 1931 or 1932 are listed in the following tabulation, showing the increase or decrease:

Commodity.	Calendar year 1931.	Calendar year 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Ammonium compounds	70,372	63,726	-6,646
Asphalt and tar	58,420	48,733	-9,687
Automobiles (and auto trucks)	80,827	55,451	-25,376
Canned goods (fish, fruit, vegetables, etc.)	109,365	103,513	-5,852
Cement	138,118	66,246	-71,872
Chemicals	69,702	68,867	-835
Coal and coke	108,790	89,636	-19,154
Coffee	72,474	57,834	-14,640
Corn	16,127	131,407	+115,280
Cotton, raw	524,180	636,256	+112,076
Iron and steel	1,058,946	570,205	-488,741
Machinery	106,193	66,039	-40,134
Metal, scrap	33,952	110,585	+76,633
Oils, mineral	485,882	457,944	-27,938
Paper and paper products	197,354	201,915	+4,561
Phosphates	268,439	170,460	-97,979
Slag	68,028	37,904	-30,124
Sugar	45,399	61,147	+15,748
Sulphur	183,431	180,284	-3,147
Textiles	89,904	75,887	-14,017
Tinplate	197,373	121,980	-75,393
Tobacco	108,097	62,406	-45,691

The above 22 commodity groups comprised approximately 70 per cent of the cargo moving from the Atlantic to the Pacific during the calendar year 1932.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

As in the past several years, the heaviest item of cargo moving from the Pacific to the Atlantic was mineral oils, the shipments of which in the calendar year 1932 totaled 3,177,107 tons, or 24.0 per cent of the total cargo moving in this direction. Wheat, lumber, sugar, and canned goods were next in order, with 2,265,923 tons, 1,595,385 tons, 1,447,943 tons, and 852,007 tons, respectively. Five items—barley, canned goods, oats, sugar, and wheat—registered increases in comparison with 1931, the most prominent of which were in wheat, sugar, and canned goods. Shipments of mineral oils from the Pacific made a decline of 434,195 tons in comparison with the shipments in this direction in 1931. Substantial decreases were recorded also in other important bulk commodities such as ores (principally iron), lumber, nitrates, metals, and cold storage goods.

Of the cargo reported during the year it was possible to classify 98.5 per cent of the total in transit through the Canal from the Pacific to the Atlantic. Commodities which aggregated 50,000 tons or more in 1931 or 1932, with the increase or decrease, are listed below:

Commodity.	Calendar year 1931.	Calendar year 1932.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	180,077	185,293	+5,216
Beans.....	231,033	100,433	-130,600
Borax.....	71,628	69,823	-1,805
Canned goods (fish, fruit, vegetables, etc.).....	800,704	852,007	+51,303
Coffee.....	147,916	133,653	-14,263
Cold storage (food products) *.....	359,537	182,746	-176,791
Copra.....	120,933	62,275	-58,663
Cotton, raw.....	75,208	72,167	-3,041
Flour.....	149,715	123,444	-26,271
Fruit, dried.....	341,343	331,528	-9,815
Fruit, fresh.....	303,918	273,921	-29,997
Lumber.....	2,609,340	1,595,385	-1,013,955
Metals (principally copper).....	562,930	378,069	-184,861
Nitrates.....	1,222,083	225,778	-996,305
Oats.....	76,654	115,895	+39,241
Oil, coconut.....	93,685	53,722	-39,963
Oils, mineral.....	3,611,302	3,177,107	-434,195
Ores (principally iron).....	925,254	324,706	-600,548
Paper.....	107,046	101,748	-5,298
Paper pulp.....	129,208	119,606	-9,602
Rice.....	75,901	43,483	-32,418
Skins and hides.....	65,193	48,002	-17,191
Sugar.....	1,149,291	1,447,943	+298,652
Wheat.....	1,553,281	2,265,923	+712,642
Wool.....	150,613	92,787	-57,826

* Fresh fruit not included.

* Revised figure.

The above 25 commodity groups comprise almost 94 per cent of the cargo moving from the Pacific to the Atlantic during the calendar year 1932.

(Continued on next page.)

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending February 18, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				<i>Tons.</i>	<i>Tons.</i>
Bijo.....	E. E. Meyers.....	February 5	February 18	.....	1
Santa Elisa.....	Panama Mail S. S. Co.....	February 5	February 5	17	(²)
Iocoma.....	International Petroleum Co.....	February 6	February 7	985	.....
Ward.....	Roosevelt S. S. Line.....	February 7	February 8	441	.....
Rangitata.....	New Zealand Shipping Co.....	February-7	February 8	53	.....
Meigs.....	U. S. Government.....	February 12	February 12	450	32
Plus Ultra.....	Pablo Calvert & Co.....	February 12	February 17	170	.....
Chiriqui.....	United Fruit Co.....	February 12	February 12	444	16
Santa Paula.....	Panama Mail S. S. Co.....	February 13	February 14	182	1
Santa Teresa.....	Panama Mail S. S. Co.....	February 13	February 14	103	3
Republic.....	U. S. Government.....	February 14	February 14	432	208
Nuevo Panama.....	Hans Elliot.....	February 14	February 14	.....	40
Boskoop.....	Royal Netherlands S. S. Co.....	February 15	February 15	93	.....
Santa Barbara.....	Grace Line.....	February 15	February 15	159	5
Buenos Aires.....	Johnson Line.....	February 16	February 16	167	.....
Henderson.....	U. S. Government.....	February 16	February 18	35	22
Santa Maria.....	Grace Line.....	February 17	February 17	63	21
Point Lobos.....	Swayne & Hoyt.....	February 18	.....	1,446	.....
Calí.....	Hamburg-American Line.....	February 18	February 18	(¹)	.....
Salvador.....	Pacific Steam Navigation Co.....	February 18	February 18	.....	(³)

* 180 pounds.

* 300 pounds.

* 55 pounds.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Origin and Destination of Cargo Passing Through the Panama Canal, from the Atlantic to the Pacific, During the Calendar Year 1932.—Continued from page 417.
(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.					SOUTH AMERICA.						
	West coast of United States.	West coast of Canada.	West coast of Central America.	Bahia, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America.	Total, South America.
NORTH AMERICA:												
UNITED STATES—												
North Atlantic ports.....	1,146,787	2,345	4,027	4,517	91,803	1,249,479	19,014	5,352	3,855	17,983	1,397	47,601
South Atlantic ports.....	60,311				823	61,134						
Gulf ports.....	494,749	21,718		32,307	3,344	552,118	27,646	37	51	272	10	28,016
Total, United States.....	1,701,847	24,063	4,027	36,824	95,970	1,862,731	46,660	5,389	3,906	18,255	1,407	75,617
East coast of Canada.....	24,210	21,460	80	13		45,763						
East coast of Central America.....			2,828	4,831		7,659	8,575					8,575
Cristobal, C. Z. *	14,545	317	33,021	47	560	48,490	11,099	10,816	11,786	8,592	1,016	43,309
West India.....	12,157	20,392		38,643		71,192	20,350		1	3		20,354
Total, North America.....	1,752,759	66,232	39,956	80,358	96,530	2,035,835	86,684	16,205	15,693	26,850	2,423	147,855
EUROPE:												
British Isles.....	37,322	48,606	10,220	54		96,212	37,081	881	2,585	23,908	1,921	68,376
Belgium.....	92,753	9,703	5,470	296	2,484	110,706	8,638	928	1,451	5,151	2,358	18,526
Denmark.....	96	2,162	596			3,196						6,433
France.....	6,353	1,019	1,365	73	6	8,816	6,616	248	74	929	4	7,871
Germany.....	65,163	5,094	5,997	394	13,623	90,270	11,443	1,982	2,580	11,573	3,013	30,591
Holland.....	23,081	1,283		104	5,621	30,089	4,029	679	1,152	4,806	640	11,306
Italy.....	8,157	692	3,754	385	1	12,989	3,862		3	1,439		5,308
Norway and Sweden.....	50,554	871	7,114	7,651	8	66,198	10,341	1,076	4,360	2,640	1,718	20,135
Spain and Portugal.....	1,846	536	125	15	3	2,525	678			435	1	1,114
Europe *	6,946	546	2,696	258		10,446	2,001	82	239	594	12,029	14,945
Total, Europe.....	292,516	68,446	38,913	9,826	21,746	431,447	84,689	11,949	12,444	51,475	22,048	182,605
East coast of South America.....	84,357	16,905	18	2,362		103,642	12,046	2,052				14,098
Africa.....	96					26						
Egypt.....	19				1	20						
Asia.....	1,346			8	2	1,356						
Grand total, 1932.....	2,131,023	151,583	78,887	92,554	118,279	2,572,326	183,419	30,206	28,137	78,325	24,471	344,558
Grand total, 1931.....	2,672,672	198,460	112,881	100,808	153,035	3,238,456	303,495	41,145	39,149	112,383	56,174	552,346
Per cent of total cargo:												
Calendar year, 1932.....	43.6	3.1	1.6	1.9	2.4	52.6	3.8	0.6	0.6	1.6	0.5	7.1
Calendar year, 1931.....	44.9	3.3	1.9	1.6	2.5	54.2	5.1	0.7	0.6	1.9	0.9	9.2

Origin and Destination of Cargo Passing Through the Panama Canal, from the Atlantic to the Pacific, During the Calendar Year 1932.

(figures represent tons of 2,240 pounds.)

From—	AUSTRALASIA.				ASIA.				GRAND TOTAL.		Per cent of total cargo 1932.	Per cent of total cargo 1931.	
	Australia.	New Zealand.	Australasia.	Total Australasia.	Philippine Islands.	China.	Japan.	Far East.	Total, Asia.	1932.			1931.
NORTH AMERICA:													
UNITED STATES—													
North Atlantic ports.....	54,637	12,049	8,012	75,898	115,848	140,847	210,779	21,729	489,203	1,862,181	2,654,679	38.1	44.4
South Atlantic ports.....	10,287	3,051	1,127	14,465	5,035	14,748	43,567	688	64,038	139,637	140,551	2.9	2.3
Gulf ports.....	45,948	26,451	3,320	75,719	8,461	137,363	677,585	21,919	845,328	1,501,181	1,453,410	30.7	24.4
Total, United States.....	110,872	42,151	13,059	166,082	129,344	292,958	931,931	44,336	1,398,569	3,502,999	4,248,640	71.7	71.1
East coast of Canada.....	23,508	13,907	2,200	39,615			7,130		7,130	92,508	101,685	1.9	1.7
East coast of Central America.....	18,192	4,522	5,400	28,114			1,500		1,500	45,848	41,519	0.9	0.7
Cristobal, C. Z. *							77	43	120	91,919	104,275	1.9	1.7
West Indies.....	18,410	15,799		34,209	7	18,070	3,015	1	21,093	146,848	118,313	3.0	2.0
Total, North America.....	170,982	76,379	20,659	268,020	129,351	311,028	943,653	44,380	1,428,412	3,880,122	4,614,432	79.4	77.2
EUROPE:													
British Isles.....	3,329	192,172	8,543	204,044				1,272	1,272	367,904	494,470	7.5	8.3
Belgium.....	125	23,337		23,462						132,694	233,298	3.1	3.9
Denmark.....										9,629	4,337	0.2	0.1
France.....	2,225		8,773	10,998						27,685	43,671	0.6	0.8
Germany.....										120,861	138,845	2.4	2.3
Holland.....										41,395	62,667	0.8	1.0
Italy.....						432			432	18,729	25,411	0.4	0.4
Norway and Sweden.....	3,438	15,880		19,368						105,701	111,847	2.2	1.9
Norway and Portugal.....										3,639	3,750	0.1	0.1
Europe.....	6,942	237,122	17,316	261,380				1,272	1,704	28,839	81,741	0.6	1.4
Total, Europe.....										877,136	1,205,036	17.9	20.2
East coast of South America.....										129,704	146,743	2.7	2.5
Africa.....			447	447	10	81	11,873		11,964	473	7,885		0.1
Egypt.....									1	21	3		
Asia.....										1,356			
Grand total, 1932.....	177,924	313,501	38,422	529,847	129,362	311,541	955,526	45,652	1,442,081	4,888,812		100.0	
Grand total, 1931.....	141,906	406,772	49,462	598,140	132,748	428,327	849,095	174,987	1,585,157		5,974,099		100.0
Per cent of total cargo:													
Calendar year, 1932.....	3.6	6.4	0.8	10.8	2.7	6.4	19.5	0.9	29.5			100.0	
Calendar year, 1931.....	2.4	6.8	0.8	10.0	2.2	7.2	14.2	3.0	26.6				100.0

* General cargo not routed so as to allow segregation between definite ports.

* Includes both local and transit cargo.

Origin and Destination of Cargo Passing Through the Panama Canal, from the Pacific to the Atlantic, During the Calendar Year 1932.
(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						EUROPE.							
	UNITED STATES.				East coast of Canada.	East coast of Central America.	Cristobal, C. Z.	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.										
NORTH AMERICA:														
West coast of United States.....	3,908,588	74,007	315,369	4,297,964	50	6,582	27,981	138,051	4,470,628	882,989	56,148	7,474	178,465	160,063
West coast of Canada.....	53,248	75	7,665	60,988	63,795	1,322	746	26,644	153,495	1,541,487	132,422	45,406	188,372	67,538
West coast of Central America.....	2,121		3,624	5,755		1	44,301	3,126	53,183	540	126		3,095	9,990
Bahia, C. Z.....			1,655	1,655			2,261		3,916			135		350
Hawaiian Islands.....	346,420		61,829	408,249			8	19	408,276	1,021				
Total, North America.....	4,310,377	74,082	390,152	4,774,611	63,845	7,905	75,297	167,840	5,089,498	2,426,037	188,696	53,015	369,932	237,941
SOUTH AMERICA:														
Chile.....	288,918	17,579	7,238	313,735			4,706	7,413	325,854	123,427	27,708	3,963	27,255	42,141
Colombia.....	23,567		59	23,626	35		47,193	20	70,874	19		14		412
Ecuador.....	123,899			123,899			28,317	7	152,193	311	13,241		10,847	10,405
Peru.....	54,550	8,490	4,600	67,640	275,115	7	1,827	26	344,615	490,952	13,911	11,197	72,765	32,424
West coast of South America.....	2,928			2,928			516		3,444	582	497		51	113
Total, South America.....	493,832	26,069	11,897	531,793	275,150	7	82,559	7,466	896,980	615,291	55,357	15,174	110,918	85,495
AUSTRALASIA:														
Australia.....	21,221	191	2,400	23,812	64,730		357		88,899	3,500			3,250	
New Zealand.....	7,491	16		7,507	2,824		313		10,044	244,515	451		3,750	
Australasia.....	8,066			8,066					8,066	32,764	6,653		28,390	647
Total, Australasia.....	36,778	207	2,400	39,385	67,554		670		107,009	280,779	7,104		35,390	647
ASIA:														
Philippine Islands.....	635,870		84,058	719,928			87	133	720,148					
China.....	43,192	252	1,000	46,444			4,856	465	51,765					7,700
Japan.....	91,159	1,655	5	92,819			3,884	904	97,667					
Far East.....	13,218	552	862	14,662			384	7,496	22,542	23,367				5,734
Total, Asia.....	785,439	2,489	85,925	873,853			9,211	9,058	892,122	23,367				13,434
Grand total, 1932.....	5,626,426	102,847	490,374	6,219,647	406,549	7,912	167,737	184,364	6,986,209	3,345,474	251,157	68,189	516,240	337,517
Grand total, 1931.....	7,577,096	350,871	738,031	8,665,998	445,992	7,055	207,016	225,300	9,651,361	2,961,402	189,613	70,813	422,038	408,056
Per cent of total cargo:														
Calendar year, 1932.....	42.6	0.8	3.7	47.1	3.1		1.3	1.4	52.9	25.3	1.9	0.5	3.9	2.6
Calendar year, 1931.....	47.1	2.2	4.6	53.9	3.4		1.3	1.4	60.0	18.4	1.2	0.5	2.6	2.6

Origin and Destination of Cargo Passing Through the Panama Canal, from the Pacific to the Atlantic, During the Calendar Year 1932.

(Figures represent tons of 2,240 pounds.)

From—	Europe.						East coast of South America.	Asia.	Egypt.	Africa.	Grand Total.		Per cent of total cargo 1932.	Per cent of total cargo 1931.
	Greece.	Holland.	Italy.	Norway and Sweden.	Spain and Portugal.	Europe.*	Total, Europe.				1932.	1931.		
NORTH AMERICA:														
West coast of United States		83,991	25,296	40,285	1,020	285,403	1,721,124	46,542		936	6,240,667	8,103,739	47.3	50.4
West coast of Canada	7,570	106,993	6,100	52,142	25	539,430	2,637,133	22,292		1	2,863,273	2,094,209	21.7	13.0
West coast of Cen. America		3,649	16	2,819	8,599	1,728	30,962	5			83,750	93,995	0.6	0.6
Bahoa, C. Z.							350	250			4,516	1,139		
Hawaiian Islands				210			1,366				409,642	235,803	3.1	1.5
Total, North America.	7,570	194,633	31,412	95,456	9,644	826,561	4,440,897	69,689	5	937	9,601,848	10,527,885	72.7	65.5
SOUTH AMERICA:														
Chile		11,061	14,642	2,097	1,173	189,334	442,801	1,080			769,735	2,426,946	5.8	15.1
Colombia		701					1,146	242			72,262	63,715	0.6	0.4
Ecuador		744	1,311	9,479	330	5,847	52,515	41			204,749	195,284	1.6	1.2
Peru		83,547	6,667	36,365	28	70,952	823,803	3,281			1,171,704	988,194	8.9	6.2
W. coast of South America		297				4,261	5,801				9,245	17,866		0.1
Total, South America.		101,350	22,620	47,941	1,531	270,394	1,336,071	4,644			2,227,695	3,692,005	16.9	23.0
AUSTRALASIA:														
Australia						4,460	11,210				100,109	128,024	0.8	0.8
New Zealand							248,716				259,300	533,758	2.0	3.3
Australasia		600				8,049	77,103				85,169	115,087	0.6	0.7
Total, Australasia.		609				12,509	337,029				444,638	766,899	3.4	4.8
ASIA:														
Philippine Islands											720,148	701,395	5.4	4.3
China							7,700				69,465	105,793	0.4	0.7
Japan								181			97,638	86,048	0.7	0.6
Far East						7,841	36,942				59,484	131,132	0.5	1.1
Total, Asia.						7,841	44,642	181			936,945	1,037,339	7.0	6.7
Grand total, 1932.	7,570	296,583	54,032	143,397	11,175	1,117,305	6,148,039	73,914	5	937	13,211,126		100.0	
Grand total, 1931.		254,915	75,244	164,276	19,408	1,749,704	6,316,869	84,964		1,385		16,074,095		100.0
Per cent of total cargo:														
Calendar year, 1932	0.1	0.2	0.4	1.1	0.1	8.4	46.5	0.6					100.0	
Calendar year, 1931		1.6	0.5	1.0	0.1	10.9	39.4	0.5	0.1					100.0

* General cargo not routed so as to allow segregation between definite ports.

* Includes both local and transit cargo.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, February 18, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Counsellor.	11	12:50	12	6:10	12	14:41	12	15:55	British.	T. & J. Harrison.	385.5	52.5	18.0	Liverpool, England	Vancouver, B. C.	Ballast.	.....	3,857
Ripple.	10	21:00	12	6:30	12	14:34	13	17:20	American.	G. A. Mitchell.	76.7	20.0	10.0	New York, N. Y.	Los Angeles, Calif.	Ballast.	.....	5,753
Meigs.	10	21:00	12	8:45	12	15:42	13	17:20	American.	U. S. Army.	430.7	54.3	25.6	Brooklyn, N. Y.	San Francisco, Cal.	Military supplies	4,791	78
Nebraska.	11	20:50	12	8:45	12	15:42	13	17:20	British.	Royal Mail Lines, Ltd.	450.0	58.0	18.0	Rotterdam, Holland	Vancouver, B. C.	General	1,436	6,588
Manitales.	10	17:50	12	13:15	12	20:34	12	21:51	British.	Grace Line.	366.4	52.9	11.10	Cristobal, C. Z.	Guayaquil, Ecuador	General	161	741
Deftford.	12	0:20	12	13:05	12	20:34	12	21:51	British.	Ferroc Co.	216.5	32.0	14.6	Habana, Cuba	Salaverry, Peru	Ballast.	4,694	3,192
Santa Teresa.	12	8:00	13	6:00	13	14:17	13	22:35	American.	Panama Mail S. S. Co.	360.2	51.6	23.0	New York, N. Y.	San Francisco, Cal.	Coffee, general.	1,920	4,086
Portland.	12	9:20	13	6:00	13	17:02	13	17:55	German.	Hamburg-American Line	402.2	61.2	20.10	Hamburg, Germany	Vancouver, B. C.	General.	2,864	9,139
Chinese	12	22:15	13	7:15	13	18:04	13	19:10	British.	Furness-Prince Line.	441.6	60.3	26.9	Philadelphia, Pa.	Singapore, Str. Sett.	General, steel.	6,570	9,254
S-14.	13	7:30	13	7:30	13	19:10	13	19:10	American.	U. S. Navy.	231.0	21.10	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	6,265
S-15.	13	7:30	13	7:30	13	19:10	13	19:10	American.	U. S. Navy.	231.0	21.10	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....
S-17.	13	7:30	13	7:30	13	19:10	13	19:10	American.	U. S. Navy.	231.0	21.10	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....
Hidanger.	13	7:35	13	11:15	13	20:25	13	21:50	Norwegian.	Westfal, Larson & Co.	398.0	54.0	16.0	Havre, France	Los Angeles, Calif.	Ballast.	.....	5,287
Congo.	11	21:35	13	14:05	13	21:25	13	22:35	German.	Hamburg-American Line	227.2	34.4	14.0	Cristobal, C. Z.	Guayaquil, Ecuador	General.	318	1,572
Swan.	13	7:30	13	13:15	13	18:11	13	18:11	American.	U. S. Navy.	139.0	35.6	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....
Chevink.	13	7:30	13	13:15	13	18:11	13	18:11	American.	U. S. Navy.	139.0	35.6	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....
Nuevo Panama.	13	8:15	14	6:00	14	18:50	15	0:15	Panamanian.	Hans Elliot.	108.0	20.0	8.0	Bocas, R. de P.	Buenaventura, Col.	General.	110	226
Goollstan.	14	7:15	14	7:25	14	19:03	15	9:20	British.	Common Brothers.	440.0	57.5	18.0	Barry, Wales.	Vancouver, B. C.	Ballast.	.....	1,011
Lagarto.	14	5:10	14	12:35	14	20:20	14	21:50	British.	Pacific Steam Nav. Co.	385.1	52.0	20.6	Hull, England.	Corral, Chile	General.	2,454	5,848
Tsuyama Maru.	14	5:10	14	15:20	14	22:57	14	23:50	Japanese.	Nippon Yusen Kaisha.	445.0	58.0	25.0	Boston, Mass.	Yawata, Japan	General.	7,815	5,823
Pooskoop.	14	11:05	15	6:10	15	14:10	15	22:00	Dutch.	Royal Neth. S. S. Co.	400.6	58.3	19.0	Hamburg, Germany	Corral, Chile	General, steel.	885	6,087
Fairfield City.	14	15:35	15	7:15	15	15:35	15	16:45	American.	Island S. S. Lines	424.0	56.0	19.1	Baltimore, Md.	Seattle, Wash.	Steel, general.	2,147	5,450
Tremorvah.	14	22:45	15	7:25	15	17:55	15	19:00	British.	Hain S. S. Co.	400.0	52.3	16.0	Portland, Me.	Vancouver, B. C.	Ballast.	.....	4,045
Theodore.	15	1:35	15	8:15	15	19:03	15	20:10	Norwegian.	Fred Olsen & Co.	425.0	55.0	18.0	Antwerp, Belgium.	Vancouver, B. C.	General.	1,470	5,637
Ohton.	15	5:50	15	8:15	15	19:56	15	21:05	American.	Amer-Hawaiian Line.	407.7	53.7	19.6	Boston, Mass.	Seattle, Wash.	General.	2,861	7,103
Murex.	15	8:20	15	9:55	15	21:08	15	22:40	British.	Anglo-Saxon Pet. Co.	412.0	53.0	18.6	Ipswich, England.	Los Angeles, Calif.	Ballast.	.....	4,991
Hudikval.	15	8:10	15	11:15	15	22:35	16	00:30	Swedish.	Bektu S. S. Co.	397.0	31.0	14.0	Manaus, Colombia	Turaco, Colombia	Salt.	786	4,247
Badestan.	15	14:40	15	14:45	15	23:35	16	00:30	British.	Common Brothers.	395.5	54.0	18.0	St. Thomas, V. I.	Vancouver, B. C.	Ballast.	.....	5,279
A. B. O Barrio.	14	21:40	15	6:00	15	18:02	16	16:35	Panamanian.	A. A. Valdez.	57.8	19.7	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....
Tatuni.	15	13:20	16	7:45	16	19:18	16	16:35	British.	Shaw Savill & Albion.	447.8	61.1	29.0	London, England.	Wellington, N. Z.	General.	4,090	10,557
Henderson.	16	2:15	16	6:40	16	16:12	17	21:50	American.	U. S. Navy.	202.0	34.0	11.6	Philadelphia, Pa.	Manila, P. I.	General.	833	7,617
Vazabondia.	15	19:15	16	7:30	16	18:11	17	18:38	American.	W. L. Mellon.	460.0	61.0	21.1	Miami, Fla.	Cocos Island	Ballast.	.....	406
Talman.	15	21:05	16	7:45	16	18:30	16	19:54	Norwegian.	W. L. Comyn & Co.	400.6	54.2	16.0	Antwerp, Belgium.	Vancouver, B. C.	Ballast.	.....	6,558
Robert Luck- enbach.	15	21:25	16	8:30	16	19:40	16	20:50	American.	Luekenbach Line.	445.0	58.0	21.6	Boston, Mass.	Seattle, Wash.	General.	2,258	8,695
Dilworth.	15	13:20	16	13:35	16	20:44	16	21:55	American.	Shell Eastern Pet. Co.	453.0	56.0	22.0	Fall River, Mass.	Los Angeles, Calif.	Ballast.	.....	5,077

Buenos Aires *	16	14.40	16	14.50	16	21.45	17	2.57	Swedish	Johnson Line	423.0	56.0	18.3	Stockholm, Sweden	Vancouver, B. C.	General	2,197	7,501	5,661
Nassau Court	16	13.35	16	15.55	17	23.10	18	12.45	British	Salagencia	403.6	52.0	14.1	Baltimore, Md.	Arica, Chile	Ballast	5,738	3,829	
Panama	16	15.20	16	17.10	17	20.40	18	10.55	Swedish	Transatlantic Co.	408.0	57.0	19.0	Gothenburg, Swed.	Molbourne, Aus. lia.	General	1,232	8,279	6,190
Motor Sailor	16	16	16	16	16	16	16	9.47	American	U. S. Navy	403.0	52.0	14.1	Cristobal, C. Z.	Gatun, C. Z.	Ballast	5	5	6
Lady May *	16	16	16	16	16	16	16	16.45	Panamanian	G. M. Downer	403.0	52.0	14.1	Cristobal, C. Z.	Catun, C. Z.	Ballast	5	5	6
Allet *	16	16	16	16	16	16	16	16.45	Panamanian	Z. Machore	403.0	52.0	14.1	Cristobal, C. Z.	Cristobal, C. Z.	Ballast	5	5	6
Santa Maria *	16	16	16	16	16	16	16	16.45	American	Grace Line	403.0	52.0	14.1	New York, N. Y.	San Antonio, Chile	General	1,963	10,026	6,663
President Pierce	17	4.50	17	7.30	17	16.47	18	00.23	American	Dollar Line	417.0	72.2	26.3	New York, N. Y.	San Francisco, Cal.	General	2,159	5,234	10,511
Levant Arrow *	16	18.00	17	7.40	17	19.10	17	20.22	American	Sland. Vac. Transp. Co.	468.3	62.7	19.0	Providence, R. I.	Los Angeles, Calif.	Ballast	9,841	6,946	
Lieut. Col. H.	17	7.20	17	19.12	17	19.12	17	21.40	American	U. S. Army	98.0	22.0		Cristobal, C. Z.	Balboa, C. Z.	(*)			
C. Schumm *	16	20.40	17	8.30	17	20.20	17	21.40	Norwegian	Fearnley & Eger	406.0	55.0	23.4	New Orleans, La.	Shanghai, China	Cotton, rails	5,672	6,840	4,979
City of Corinth	17	12.50	17	13.00	17	21.25	18	17.17	British	American & Aust. Line	391.0	54.0	24.0	Philadelphia, Pa.	Fremantle, Aus. lia.	General	2,426	7,197	5,632
Ranlsan	17	23.10	18	6.25	18	13.46	18	15.03	British	Common Brothers	325.0	54.0	17.6	Tyne, England	Vancouver, B. C.	General	6,888	4,961	
Ibukran Maru	18	4.15	18	7.20	18	15.00	18	18.30	Japanese	Miami Busan Kaisha	385.0	51.0	24.0	New York, N. Y.	Yavata, Japan	Gen., rosin, etc.	6,556	6,242	4,449
Salvador	12	14.45	18	8.05	18	18.29	18	19.40	British	Pacific Steam Nav. Co.	215.0	63.5	14.5	Cristobal, C. Z.	Champerico, Guat.	General	394	1,270	735
Patoka	18	8.00	18	9.15	18	19.25	18	20.00	American	U. S. Navy	461.0	60.0	22.0	Guantanamo, Cuba	San Francisco, Cal.	Navy supplies	40		
Sun *	18	11.15	18	11.20	18	20.50	18	23.55	American	Sun Oil Co.	480.6	66.0	21.6	Chester, Pa.	Los Angeles, Calif.	Ballast	9,620	6,76	
Lena Luckenbach	18	15.25	18	15.40	18	23.20	19	11.50	American	Luckenbach Line	425.0	54.0	25.5	Houston, Tex.	Seattle, Wash.	Corn, general	5,375	7,217	5,295
American	18	16.00	18	17.00	19	00.01	19	1.10	American	Amr.-Hawaiian Line	404.6	54.0	19.0	Boston, Mass.	Seattle, Wash.	General	2,182	6,777	4,761
Pirate *	18		18		18	9.29			American	F. Kariger	38.3	13.6		Cristobal, C. Z.	Gatun, C. Z.	Ballast	17	17	

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Felix Taussig	11	15.10	12	4.25	12	12.50	12	12.50	American	McCormick S. S. Co.	385.0	55.1	25.0	Portland, Oreg.	Philadelphia, Pa.	General	6,239	7,056	4,964
Canadotte *	11	11.45	12	6.15	12	14.15	12	14.15	British	Imperial Oil Co.	528.0	58.2	30.0	Lobitos, Peru	Halifax, N. S.	Crude oil	15,423	11,556	6,772
Salvador	11	15.45	12	7.15	12	14.45	12	14.45	British	Pacific Steam Nav. Co.	215.0	33.5	17.2	Champerico, Guat.	Cristobal, C. Z.	General	1,004	1,270	735
Thomas H.	12	00.15	12	8.23	12	16.45	12	16.45	American	Standard Shipping Co.	425.0	57.2	28.0	Los Angeles, Calif.	Fall River, Mass.	Gasoline	9,182	7,481	5,004
Wheeler	12	14.30	12	15.06	12	22.30	13	3.15	Norwegian	Fern Line	382.7	53.4	26.4	Cebu, P. I.	U. S. At. ports	Sugar	7,500	6,112	4,265
Fernbank *	12	23.00	13	6.08	13	13.45	13	13.45	American	J. E. Kirkpatrick	22.9	6.2		Balboa, C. Z.	Cristobal, C. Z.	Ballast	3	3	2
Florence *	12	23.00	13	6.08	13	13.45	13	13.45	British	Sir W. R. Smith & Sons	400.2	54.3	26.0	Vancouver, B. C.	Queenstown, Ire. *	Wheat	8,250	6,961	5,365
Bradlyn	13	6.55	13	7.46	13	14.55	13	14.55	American	Dutton Lumber Corp.	409.8	54.2	25.0	Tacoma, Wash.	Providence, R. I.	Lumber	7,200	6,581	4,784
Herran F.	13	7.50	13	8.33	13	17.20	13	17.20	American	Suburban Oil Co.	431.0	59.2	27.0	Los Angeles, Calif.	New York, N. Y.	Furnace oil	10,206	7,646	4,729
Bidwell *	13	7.55	13	9.41	13	18.45	14	3.00	American	The Texas Co.	416.8	56.1	25.0	Los Angeles, Calif.	New York, N. Y.	Gasoline	8,329	6,931	4,971
Dingo *	13	9.00	13	10.51	13	19.50	14	10.30	Norwegian	Fred Olsen & Co.	425.0	56.0	26.4	Vancouver, B. C.	Oalo, Norway	General	7,482	8,005	5,891
Abraham	13	10.15	13	13.39	13	21.20	14	11.55	Dutch	N. Pacific Coast Line	509.0	64.6	31.0	Vancouver, B. C.	Liverpool, England	General	10,228	11,724	8,266
Defiditk *	13	10.15	13	13.39	13	21.20	14	11.55	American	Herbert Shelton	34.7	9.5		Miniflores, C. Z.	Cristobal, C. Z.	Ballast	4,238	11,14	7
Amey *	13	19.00	14	6.20	14	13.30	14	23.20	American	Grace Line	434.4	72.2	25.0	Seattle, Wash.	New York, N. Y.	General, coffee	4,873	13,943	9,217
Santa Paula	14	3.30	14	7.25	14	14.55	14	14.55	American	Luckenbach Line	448.9	60.2	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general	8,082	9,262	6,853
Harry Luckenbach	14	10.30	14	11.30	14	20.15	14	20.15	American	Luckenbach-Gulf Co.	434.4	57.7	24.0	Los Angeles, Calif.	Mobile, Ala.	General	5,715	7,977	5,726
Madaw Luckenbach	14	10.30	14	11.30	14	20.15	14	20.15	American	Luckenbach-Gulf Co.	434.4	57.7	24.0	Los Angeles, Calif.	Mobile, Ala.	General	5,715	7,977	5,726
Dago	14	13.00	14	12.10	14	20.15	14	21.35	Norwegian	American Dyeing Co.	256.9	40.0	17.0	Amapala, Hond.	Chester, Pa.	Dyeing	1,582	22	57
A. B. Obarrto	14	12.30	14	13.37	14	21.25	15	7.45	Panamanian	A. Valdez	57.8	19.7		Bayano River, R.P.	Cristobal, C. Z.	Bananas	22	57	39
Tosca *	14	12.30	14	13.30	14	21.25	15	7.45	Norwegian	Knut Knutsen	375.8	51.3	24.2	Iquique, Chile	Oalo, Norway	Nitrates, copper	6,395	5,688	3,930
Republic	14	00.30	14	14.46	14	23.05	15	10.05	American	U. S. Army	516.0	68.0	29.0	San Francisco, Cal.	Brooklyn, N. Y.	Army stores	804		

* For orders.

* Tug.

* Launch.

* Motor schooner.

* Mine sweeper.

* Submarine.

* Transport.

* Yacht.

* Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Cape Town	14	12.50	14	15.23	15	8.50	15	8.50	Japanese.	Kokusai Line.	385.0	51.0		Santo Nino, P. I.	U. S. Atl. coast.	Sugar.	7,500	6,209	4,658
Maru.	14	17.45	15	6.00	13	13.40	13	21.45	German.	Hamburg-American Line.	433.3	59.1	27.5	Vancouver, B. C.	Hamburg, Germany.	General.	7,761	8,510	6,387
Oakland																			
Lieut. Col. H. C. Schumm	14	16.30	15	6.35	15	13.20			American.	U. S. Army.	410.5	54.2	25.0	Balboa, C. Z.	Cristobal, C. Z.	General, lumber.	6,953	6,755	4,895
San Marcos.	14	5.20	15	8.59	15	14.45	15	14.45	American.	Royal Mail Lines, Ltd.	430.4	61.3	23.0	Portland, Ore.	Baltimore, Md.	Fruit, general.	3,814	9,333	5,828
Narva.	15	5.20	15	8.45	15	16.15	16	00.10	British.	Quekay Mail Lines, Ltd.	430.4	61.3	23.0	Vancouver, B. C.	Hamburg, Germany.	Grain, general.	8,104	6,035	4,138
Simonsburn.	15	6.00	15	9.33	15	19.35	15	19.35	British.	Common Brothers.	390.0	53.6	24.0	Vancouver, B. C.	London, England.	General.	2,333	10,087	6,630
Santa Barbara.	15	18.15	15	10.49	15	18.30	15	22.45	American.	Grace Line.	466.0	64.0	25.1	San Antonio, Chile	New York, N. Y.	General.			
Hakubusan																			
Maru.	15	14.00	15	14.51	15	21.35	15	21.45	Japanese.	Mitsui & Co.	435.0	56.6	26.10	Iollo, P. I.	New York, N. Y.	General.	8,172	7,420	5,040
S-42	15	16.00	16	5.00	16	11.20	16	14.40	American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.	Gasoline.	14,935	12,207	8,543
Saranac	15	22.00	16	6.07	16	10.10	16	22.15	British.	International Co., Ltd.	530.5	66.3	30.2	Talca, Peru.	Hull, England.	Gasoline.	17,696	12,514	8,427
Australia	16	6.14	16	7.10	16	22.15	16	22.15	American.	The Texas Co.	509.7	70.3	31.0	Los Angeles, Calif.	New York, N. Y.	Wheat.	8,137	6,193	4,465
Tresilian.	16	1.00	16	8.27	16	21.30	16	22.20	British.	Bunge & Co.	400.0	53.0	25.0	Vancouver, B. C.	St. Thomas, V. I.	Wheat.	7,165	6,077	4,586
Marie Bakke	16	11.00	16	11.49	16	23.15	16	23.59	Norwegian.	Knut Knutsen.	375.6	52.5	24.7	Vancouver, B. C.	Hull, England.	(18)	5,157	4,791	3,392
Alida	16	12.00	16	14.56	17	9.10	17	13.20	German.	North German Lloyd	360.6	51.0	22.0	Talcahuano, Chile	Hamburg, Germany.	General.			
S-10			17	4.45	17	12.55			American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
S-11			17	4.45	17	12.55			American.	U. S. Navy.	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
S-48			17	4.53	17	12.55			American.	U. S. Navy.	240.0	21.0		Balboa, C. Z.	Cristobal, C. Z.				
Mallard			17	5.03	17	12.55			American.	U. S. Navy.	187.0	38.0		Balboa, C. Z.	Cristobal, C. Z.				
Nurtureton.	16	22.00	17	6.08	17	14.10	17	14.10	British.	Dale & Co.	440.0	58.4	26.6	Vancouver, B. C.	London, England.	Grain, general.	9,500	6,854	4,746
Wilkeno.	17	00.55	17	7.10	17	15.30	17	15.30	American.	Williams S. S. Line	415.0	55.6	27.7	Seattle, Wash.	Providence, R. I.	Lumber, general.	10,260	7,750	5,505
Tiradentes	17	3.40	17	8.35	17	16.20	17	16.20	Norwegian.	W. L. Comyn & Sons	401.2	54.2	23.7	Seattle, Wash.	Lands End, Eng.	General.	7,694	6,994	4,937
Canadian Conqueror	17	5.00	17	10.12	17	17.55	18	1.35	British.	Can. Nat. Steamships	400.4	52.3	14.10	Auckland, N. Z.	Halifax, N. S.	General.	616	5,954	4,127
Washington	17	5.30	17	11.10	17	19.00	19	11.05	French.	French Line	493.9	61.2	27.3	Portland, Ore.	Antwerp, Belgium.	General.	9,613	10,334	7,477
Missourian	17	7.11	17	12.02	17	19.55	17	19.55	American.	Amer-Hawaiian Line	443.1	58.3	29.8	Portland, Ore.	Boston, Mass.	General.	9,288	8,567	6,020
West Camargo	17	10.45	17	15.52	18	8.50	18	8.12	American.	McCormick S. S. Co.	437.0	54.0	25.5	Powell River, Can.	Rosario, Argentina.	Lumber, general.	6,079	6,024	5,024
Nordpol	17	14.30	18	4.27	18	13.15	18	13.15	Danish.	W. L. Comyn & Sons	381.0	53.9	25.0	Los Angeles, Calif.	London, England.	Wheat, lumber.	7,630	6,252	4,558
Tacoma Star.	17	11.00	18	5.58	18	14.25	18	14.25	British.	Blue Star Line.	450.0	53.5	26.6	N. Westmer, B. C.	Liverpool, England.	Frozen, general.	4,896	8,240	5,395
Sean			18	6.19	18	14.25			American.	U. S. Navy.	187.0	34.0		Balboa, C. Z.	Cristobal, C. Z.				
J. A. Moffett, Jr.	18	4.30	18	7.13	18	16.20	18	16.20	American.	Standard Shipping Co.	499.2	68.1	29.0	Talara, Peru.	Southampton, Eng.	Crude oil.	14,065	11,016	7,974
Benavanch.	18	6.00	18	8.22	18	17.25	18	17.25	British.	Ben S. S. Lines, Ltd.	410.2	52.0	24.11	Tacoma, Wash.	Greensmouth, Eng.	General.	7,420		
Lieut. Col. H. C. Schumm	18	12.53	18	12.53	18	22.45			American.	U. S. Army.	296.0	46.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	Coffee, general.	1,656	3,848	2,606
Santa Monica.	18	13.45	18	14.31	18	21.40	20	10.00	American.	Panama Mail S. S. Co.	216.5	32.9	13.0	San Francisco, Cal.	Cristobal, C. Z.	General.	529	1,105	698
Cal.	18	15.00	18	15.47	18	22.50			German.	North German Lloyd	216.5	32.9	13.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.			
Sadie			17		17				American.	M. P. Hotel	23.0	5.0		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	1		1
Lauch.			17		17				American.	U. S. Navy.				Balboa, C. Z.	Cristobal, C. Z.				

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

Salt-Water Draft of Vessels Transiting Canal in 1932.

During the calendar year 1932, the average salt-water draft of vessels making the 2,305 commercial transits of the Panama Canal from the Atlantic to the Pacific was 19.3 feet. From the Pacific to the Atlantic, the average of the vessels in the 2,062 transits was 23.7 feet. The average draft of the total commercial transits during the year, 4,367, was 21.3 feet.

In the following tabulation is shown the salt-water draft of vessels through the Canal during 1932, separated in 1-foot intervals and segregated by direction of transit, with the averages for 1932, 1931, and 1930:

Draft.	Atlantic to Pacific.	Pacific to Atlantic.	Total.	Percentage of total.
Under 10 feet.....	117	110	227	5.20
10 to 11.....	5	10	15	.34
11 to 12.....	13	4	17	.39
12 to 13.....	29	5	34	.78
13 to 14.....	75	14	89	2.04
14 to 15.....	94	56	150	3.43
15 to 16.....	114	37	151	3.46
16 to 17.....	129	27	156	3.57
17 to 18.....	177	22	199	4.56
18 to 19.....	228	20	248	5.68
19 to 20.....	239	40	279	6.39
20 to 21.....	218	54	272	6.23
21 to 22.....	180	48	228	5.22
22 to 23.....	176	82	258	5.91
23 to 24.....	129	101	230	5.27
24 to 25.....	108	174	282	6.46
25 to 26.....	77	286	363	8.31
26 to 27.....	80	342	422	9.66
27 to 28.....	61	229	290	6.64
28 to 29.....	30	161	191	4.37
29 to 30.....	10	119	129	2.95
30 to 31.....	13	72	85	1.95
31 to 32.....	2	28	30	.69
32 to 33.....	1	7	8	.18
33 to 34.....		5	5	.11
34 to 35.....		9	9	.21
Total.....	2,305	2,062	4,367	1.00
Average, 1932.....	19.3	23.7	21.3	
Average, 1931.....	19.7	24.3	21.9	
Average, 1930.....	20.4	24.2	22.4	

The greatest draft among vessels transiting during the year 1932 was 35 feet, drawn by the Swedish motor ship *Amerikaland*, carrying iron ore from Chile to the United States. From the Atlantic to the Pacific the vessel of the greatest draft in 1932 was the *President Coolidge*, with 32.5 feet, making transit in May, bound from New York to Manila.

It will be noted that the average draft of vessels transiting the Canal from the Pacific to the Atlantic is greater than of vessels passing through in the opposite direction. This is accounted for by the fact that the Pacific to Atlantic traffic is made up to a great extent of vessels carrying capacity cargoes, such as mineral oils, wheat, sugar, etc., while the Atlantic to Pacific traffic is composed largely of vessels carrying miscellaneous manufactured goods which either are not so heavy or else do not permit the fullest use of stowage space of vessels; and by far the greater proportion of the transits in ballast are in the Atlantic to Pacific traffic.

Steamer "Santiago" Sunk off Cape Mala.

The Chilean steamer *Santiago*, which transited the Canal on February 10, 1933, en route from Cuba to Chilean ports with a cargo of 6,654 tons of sugar, leaving the Canal at 8.45 p. m. on February 10, caught fire and on February 13 sank off Cape Mala, about 100 miles from Balboa. At 7 o'clock in the morning of February 11 the Captain of the Port at Balboa received a radio message from the vessel stating that fire had been discovered in No. 2 hold and requesting fire-fighting equipment. The United States Navy survey ship *Nokomis*, which was in the vicinity, and the *Mallard*, a mine sweeper docked at Balboa, were ordered by the Commandant of the 15th Naval District to go to the aid of the distressed vessel. Early in the afternoon of the same day the Panama Canal tug *Favorite* with firemen and fire-fighting equipment was dispatched, at which time the *Mallard* was recalled.

The *Favorite* was recalled on request of the agents of the ship at 10.30 p. m. on February 11, on the information they received that the *Santiago* was sinking. The *Favorite* was at that time just arriving at the scene of the fire but, being recalled, rendered no assistance. The *Santiago* sank at about 3 o'clock in the morning of February 13. The crew, numbering 58, had been taken aboard the *Nokomis* in the evening of February 11, and were returned to Balboa, arriving there about 11 p. m., February 12.

The *Santiago* was a vessel of 4,754 gross tons, 384 feet long, owned by the Chilean Navigation Company, and under charter to Galban Lobo & Company.

Reported Record Voyage to San Francisco.

According to recent press reports, the new liner *Lurline*, of the Oceanic Steamship Company, which passed through the Canal on January 18, 1933, en route to San Francisco to be delivered to her owners, established what is said to be a new speed record for the run of 3,230 miles from the Panama Canal to the San Francisco lightship. Her time is reported as 6 days, 9 hours, and 9 minutes, making the average speed of 21.09 knots. It is reported that during the last 3 days of the voyage an average speed of better than 22 knots was attained.

The *Lurline* is the third in a program of three new vessels built for the Matson interests (owners of the Oceanic Steamship Company) for the California-Australasian trade. The other vessels, sister ships, are the *Mariposa* and the *Monterey*.

Executive Order.

REVISED BOUNDARIES OF FORT RANDOLPH AND FRANCE FIELD,
CANAL ZONE.

WHEREAS by Executive Order No. 3257, dated April 9, 1920, certain areas described therein, situated within the Canal Zone, were set apart and assigned as Fort Randolph and France Field to the uses and purposes of military reservations, to be under the control of the Secretary of War; and

WHEREAS a military necessity exists for a reduction in the area of the Fort Randolph Military Reservation and a like increase in the area of the France Field Military Reservation;

NOW, THEREFORE, the Executive Order No. 3257, dated April 9, 1920, is hereby amended and modified so as to fix the boundaries of the military reservations known as Fort Randolph and France Field as follows:

FORT RANDOLPH MILITARY RESERVATION.

Beginning at a 2-in. galvanized iron pipe monument on the shore line of Manzanillo Bay, said monument being located 22.5 ft., measured at right angles, westerly from the center line of the track of the Fort Randolph branch of the Panama Railroad; the geographic position of said monument is latitude $9^{\circ} 22'$ plus 4,674.1 ft. and longitude $79^{\circ} 52'$ plus 5,764.7 ft. (This monument is also monument "C" in the boundary of the Naval Aviation and Submarine Base.)

Thence from said initial point by metes and bounds:

In a general northerly and easterly direction including all the mainland and islands (Margarita, Palma Media, Galeta, Peña Guapa, etc.) to the Canal Zone boundary line;

In an easterly, southerly, and westerly direction along the low water line of Largo Remo Island, Droque Island, and the two small islands to the north and adjacent to Droque Island to a point in the Canal Zone boundary line;

S. $0^{\circ} 33'$ W., along the said Canal Zone boundary line to Canal Zone boundary monument No. 5, the geographic position of which is latitude $9^{\circ} 21'$ plus 2,830.6 ft. and longitude $79^{\circ} 50'$ plus 5,709.0 ft.;

Due west, 6,309.4 ft. to a $1\frac{1}{2}$ -in. galvanized iron pipe monument, the geographic position of which is latitude $9^{\circ} 21'$ plus 2,830.6 ft. and longitude $79^{\circ} 52'$ plus 5.4 ft.;

Due north, 7,891.0 ft. to a point, the geographic position of which is latitude $9^{\circ} 22'$ plus 4,674.1 ft. and longitude $79^{\circ} 52'$ plus 5.4 ft.;

Due west, 5,759.3 ft. to the place of beginning.

The directions of the lines refer to the true meridian. The tract as described contains an area of 3,691 acres, more or less. All pipe monuments are painted white and stenciled in black: -*Mil. Res.*- where the boundary lines intersect the sides of the pipe.

FRANCE FIELD MILITARY RESERVATION.

Beginning at a concrete monument inside a 4-in. corrugated iron pipe, said monument being located 22.5 ft. westerly, measured at right angles, from the center line of the track of the Fort Randolph branch of the Panama Railroad; the geographic position of said monument is latitude $9^{\circ} 21'$ plus 3,547.5 ft. and longitude $79^{\circ} 52'$ plus 5,061.6 ft. (This monument is also monument "A" of the Naval Aviation and Submarine Base.)

Thence from said initial point by metes and bounds:

N. $4^{\circ} 33' 28''$ W., 6,239.3 ft. parallel to and 22.5 ft. distant from the said center line of Panama Railroad track to a 2-in. galvanized iron pipe monument, the geographic position of which is latitude $9^{\circ} 22'$ plus 3,719.4 ft. and longitude $79^{\circ} 52'$ plus 5,557.4 ft.;

S. $81^{\circ} 37'$ W., 336 ft. to a concrete monument, the geographic position of which is latitude $9^{\circ} 22'$ plus 3,670.4 ft. and longitude $79^{\circ} 52'$ plus 5,889.4 ft.;

N. $12^{\circ} 45'$ W., 79.8 ft. to a concrete monument, the geographic position of which is latitude $9^{\circ} 22'$ plus 3,748.2 ft. and longitude $79^{\circ} 52'$ plus 5,907.0 ft.;

N. $77^{\circ} 45'$ E., 335.6 ft. to a 2-in. galvanized iron pipe monument, the geographic position of which is latitude $9^{\circ} 22'$ plus 3,819.4 ft. and longitude $79^{\circ} 52'$ plus 5,579.1 ft.;

N. $12^{\circ} 15'$ W., 874.6 ft. parallel to and 22.5 ft. distant from the aforementioned center line of track of the Fort Randolph branch of the Panama Railroad to a 2-in. galvanized iron pipe monument on the shore line of Manzanillo Bay (this monument is also monument "C" on the boundary of the Naval Aviation and Submarine Base); the geographic position of said monument is latitude $9^{\circ} 22'$ plus 4,674.1 ft. and longitude $79^{\circ} 52'$ plus 5,764.7 ft.;

Due east, 5,759.3 ft. to a point, the geographic position of which is latitude $9^{\circ} 22'$ plus 4,674.1 ft., and longitude $79^{\circ} 52'$ plus 5.4 ft.;

Due south, 10,721.6 ft. to a concrete monument, the geographic position of which is latitude $9^{\circ} 21'$ and longitude $79^{\circ} 52'$ plus 5.4 ft., a $1\frac{1}{2}$ -in. galvanized iron pipe monument being placed in line 7,891.0 ft. from beginning

of course; the geographic position of said 1½-in. galvanized iron pipe monument is latitude 9° 21' plus 2,830.6 ft. and longitude 79° 52' plus 5.4 ft.;

Due west, 3,805.3 ft. to a 1½-in. galvanized iron pipe monument on the north bank of the Majagual River; the geographic position of said monument is latitude 9° 21' and longitude 79° 52' plus 3,810.7 ft.;

In a general southwesterly direction to the mouth of the said Majagual River;

In a general northerly direction along the shore line of Manzanillo Bay to a 2-in. galvanized iron pipe monument, the geographic position of which is latitude 9° 21' plus 3,547.5 ft. and longitude 79° 52' plus 5,582.3 ft. (this monument being also monument "B" of the Naval Aviation and Submarine Base);

Due east, 520.7 ft. to the place of beginning.

The directions of the lines refer to the true meridian. The tract as described contains an area of 1,555 acres, more or less. All pipe monuments are painted white and stenciled in black: —*Mil. Res.*— where the boundary lines intersect the sides of the pipe.

Except as amended and modified by this Executive order, the Executive Order No. 3257, dated April 9, 1920, shall remain in full force and effect.

HERBERT HOOVER

THE WHITE HOUSE,
January 31, 1933.

[No. 6010]

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective February 20, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.17
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending February 18, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Bodegraven	Royal Netherlands S. S. Co.		February 5		477
Schwaben	North German Lloyd		February 5		220
Colombia	Colombian S. S. Line		February 5		638
Santa Marta	United Fruit Co.		February 5		331
Santa Cecilia	Panama Mail S. S. Co.		February 5		99
President McKinley	Dollar Line	February 5	February 5	362	1
Santa Elisa	Panama Mail S. S. Co.	February 5	February 5	204	175
Europa	Danish-East Asiatic Line	February 5	February 5	41	15½
Eisenach	North German Lloyd	February 5	February 7	160	387
San Clemente	States S. S. Line	February 6	February 6	68	(²)
Veragua	United Fruit Co.	February 6	February 6	40	104
Winnipeg	French Line	February 6	February 6	108	25
Orecoma	Pacific Steam Nav. Co.	February 6	February 7	517	(²)
Annie Johnson	Johnson S. S. Line	February 7	February 7	(¹)	76
Cefalu	Standard Fruit & S. S. Co.	February 7	February 8	302	725
Orinoco	Hamburg-American Line	February 7	February 8	39	781
Tillie Lykes	Lykes Brothers S. S. Co.	February 7	February 9	2,948	137
Cristobal	Panama Railroad S. S. Line	February 8		1,775	
Virgilio	Soc. Italia-Flotte Riunite	February 8	February 11	114	(²)
Durazzo	Hamburg-American Line		February 9		312
Este	North German Lloyd	February 9	February 9	353	270
President Lincoln	Dollar Line	February 9	February 10	(¹)	11
Quirigua	United Fruit Co.	February 10	February 10	202	79½
Ariguani	United Fruit Co.	February 10	February 10	(¹)	(²)
Zacapa	United Fruit Co.	February 19	February 11	1,335	402½
Nuevo Panama	H. Elliot	February 10	February 11	128	80
Manizales	Grace Line	February 10		649	
Sixaola	United Fruit Co.	February 11		288	
Haiti	Colombian S. S. Line	February 11		194	
Colombia	Royal Netherlands S. S. Co.	February 11		4	
Cerigo	Hamburg-American Line	February 11		1,126	
Cuba	French Line	February 11		31	
Counsellor	T. & J. Harrison	February 11		162	
Nebraska	Royal Mail Lines, Ltd.	February 11		239	
Cristobal	Panama R. R. S. S. Line		February 12		940
Manizales	Grace Line		February 12		160
Sixaola	United Fruit Co.		February 12		140
Haiti	Colombian S. S. Line		February 12		359
Colombia	Royal Netherlands S. S. Co.		February 12		231
Nebraska	Royal Mail Lines, Ltd.		February 12		22
Santa Teresa	Panama Mail S. S. Co.	February 12	February 13	317	632
Portland	Hamburg-American Line	February 12	February 13	93	164
Cerigo	Hamburg-American Line		February 13		318
Marques de Comillas	Spanish S. S. Line	February 12	February 15	145	36
Salvador	Pacific Steam Navigation Co.	February 12	February 18	1,005	394
Quirigua	United Fruit Co.	February 13	February 13	42	354
Abraham Lincoln	Fred Olsen & Co.	February 13	February 14	(¹)	650
Delftdijk	Holland-America Line	February 13	February 14	64	241
Nuevo Panama	Hans Elliot	February 13	February 14	207½	110
Dirigo	Texas Oil Co.	February 13	February 14	61	(²)
Magallanes	Spanish S. S. Line	February 13	February 15	(¹)	363½
Santa Paula	Panama Mail S. S. Co.	February 14	February 14	323	30
Cuba	French Line	February 14	February 14	(¹)	334
Lagarto	Pacific Steam Navigation Co.	February 14	February 14	26	132
Boskoop	Royal Netherlands S. S. Co.	February 14	February 15	7	128
Contessa	Standard Fruit & S. S. Co.	February 14	February 15	287	616
Oakland	Hamburg-American Line	February 15	February 15	133	214
Santa Barbara	Grace Line	February 15	February 15	346	19
Camden	United Fruit Co.	February 15	February 16	5,284	(²)
Nariva	Royal Mail Lines, Ltd.	February 15	February 16	(¹)	352
Santa Maria	Grace Line	February 16	February 17	129	341
Calamares	United Fruit Co.	February 17	February 17	243	15
Alda	North German Lloyd	February 17	February 17	15	11
Ionia	Hamburg-American Line	February 17	February 17	80	3
Atenas	United Fruit Co.	February 17	February 18	647	381
Buenaventura	Panama R. R. S. S. Line	February 17		929	
Washington	French Line	February 17		43	
Canadian Conqueror	Canadian National Steamships	February 18	February 18	(¹)	230
Pastores	United Fruit Co.	February 18		164	
Metapan	United Fruit Co.	February 18		204	
Santa Monica	Panama Mail S. S. Co.	February 18		1,846	
Cali	North German Lloyd	February 18		622½	

¹ No cargo discharged.

² No cargo laded.

³ 264 pounds.

Telegraphic Address of The Panama Canal.

The cable and radio address of The Panama Canal, on the Isthmus, is "Pancanal, Panama;" in the United States, "Pancanal, Washington."

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1933 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M. ¹	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Ancon</i>	February 15..	February 20..	February 23..	February 26..	March 1.....	March 6.
<i>Cristobal</i>	February 28..	March 5.....	March 8.....	March 12.....	March 15.....	March 20.
<i>Ancon</i>	March 14.....	March 19.....	March 22.....	March 26.....	March 29.....	April 3.
<i>Cristobal</i>	March 28.....	April 2.....	April 5.....	April 9.....	April 12.....	April 17.
<i>Ancon</i>	April 11.....	April 16.....	April 19.....	April 23.....	April 26.....	May 1.
<i>Cristobal</i>	April 25.....	April 30.....	May 3.....	May 7.....	May 10.....	May 15.
<i>Ancon</i> ²	May 9.....	May 14.....	May 17.....	May 21.....	May 24.....	May 29.
<i>Cristobal</i> ²	May 23.....	May 28.....	May 31.....	June 4.....	June 7.....	June 12.
<i>Ancon</i> ²	June 6.....	June 11.....	June 14.....	June 18.....	June 21.....	June 26.
<i>Cristobal</i> ²	June 20.....	June 25.....	June 28.....	July 2.....	July 5.....	July 10.
<i>Ancon</i> ²	July 5.....	July 10.....	July 13.....	July 16.....	July 19.....	July 24.
<i>Cristobal</i> ²	July 18.....	July 23.....	July 26.....	July 30.....	August 2.....	August 7.
<i>Ancon</i> ²	August 1.....	August 6.....	August 9.....	August 13.....	August 16.....	August 21.
<i>Cristobal</i> ²	August 15.....	August 20.....	August 23.....	August 28.....	August 31.....	September 5.
<i>Ancon</i> ²	August 29.....	September 3.....	September 6.....	September 10.....	September 13.....	September 18.
<i>Cristobal</i> ²	September 12.....	September 17.....	September 20.....	September 24.....	September 27.....	October 2.
<i>Ancon</i> ²	September 26.....	October 1.....	October 4.....	October 8.....	October 11.....	October 16.
<i>Cristobal</i>	October 10.....	October 15.....	October 18.....	October 22.....	October 25.....	October 30.
<i>Ancon</i>	October 24.....	October 29.....	November 1.....	November 5.....	November 8.....	November 13.
<i>Cristobal</i>	November 8.....	November 13.....	November 16.....	November 19.....	November 22.....	November 27.
<i>Ancon</i>	November 21.....	November 26.....	November 29.....	December 3.....	December 6.....	December 11.
<i>Cristobal</i>	December 5.....	December 10.....	December 13.....	December 18.....	December 21.....	December 26.
<i>Ancon</i>	December 19.....	December 24.....	December 27.....	December 31.....	January 3.....	January 8.

¹ Steamers sail at 4 p. m. from Pier 65, North River, foot of West 25th St., New York. Sailings are at 4 p. m., Eastern standard time, except in the period from May 1 to September 30, inclusive, when they are at 4 p. m., daylight saving time.

² Sailing from New York at 4 p. m., daylight saving time.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Lubricating Oils.

The following is a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils with a statement of the purpose for which it is generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list:

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, M-2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, H-2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, EH-2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, UH-2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive and for tempering.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4055, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Facilities for Shipping.

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, can bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from ample stocks at both ends of the Canal. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits, and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective in the course of handling large traffic through the Canal in over 17 years of operation.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., March 1, 1933. No. 31.

Canal Traffic During February, 1933.

During the month of February, 1933, 368 commercial vessels and 11 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,575,708.35, and on the launches, \$56.55, or a total tolls collection of \$1,575,764.90.

The daily average of commercial vessels was 13.14, and the daily average tolls collection was \$56,275.30, as compared with an average of 13.39 transits and \$56,864.79 in tolls for the previous month, and an average of 12.34 transits and \$56,820.59 in tolls for the month of February, 1932. The average amount of tolls paid by each of the commercial transits was \$4,281.82, as compared with \$4,602.79 for the corresponding month last year.

Although traffic in February showed a decrease of 47 transits (11.3 per cent) and \$187,100.21 in tolls (10.6 per cent) in comparison with the previous month, the daily average of these features dropped but slightly in comparison with January owing to the fewer number of days in February. The decrease in these daily averages in comparison with January was 1.9 per cent in transits and 1.0 per cent in tolls. In comparison with February, 1932, last month's traffic made an increase of 10 transits, or 2.8 per cent, while in tolls collection there was a decrease of \$72,088.71, or 4.4 per cent.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 8 months of the current fiscal year, with the daily average of transits and tolls and the totals for the first 8 months of the fiscal years 1932 and 1931:

Month.	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
July.....	326	\$1,468,728.36	10.52	\$47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
December.....	431	1,781,940.03	13.90	57,481.94
January.....	415	1,762,808.56	13.39	56,864.79
February.....	368	1,575,708.35	13.14	56,275.30
Total, first 8 months of fiscal year 1933.....	2,989	13,099,945.05	12.30	53,909.24
Total, first 8 months of fiscal year 1932.....	3,080	14,201,181.12	12.63	58,201.56
Total, first 8 months of fiscal year 1931.....	3,809	16,921,812.31	15.67	69,637.09

In comparison with the first 8 months of the fiscal year 1932, the corresponding period this year has had 91 fewer transits and \$1,101,236.07 less tolls, decreases of 3.0 per cent and 7.8 per cent, respectively; in comparison with the first 8 months of the fiscal year 1931, there occurred a decrease of 820 transits and \$3,821,867.26 in tolls, losses of 21.5 per cent and 22.6 per cent, respectively.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, February 25, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Lino. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Odenwald ¹	19	1 10	19	15 00	19	22 33	20	0 02	German	Hamburg-American Line	399.6	54.3	19.6	Hamburg, Germany	Valparaiso, Chile.	General.	1,977	6,808	4,979
Port Dundee ²	19	14 15	19	16 20	19	23 28	20	4 30	British	Comth & Dom. Line.	466.9	55.8	21.0	London, England.	Lytleton, N. Z.	General.	2,894	9,959	7,226
Lapwing ³	19	16 55	20	6 30	20	21 03	20	13 00	American	U. S. Navy.	180.0	35.6	18.0	Cristobal, C. Z.	Bahoa, C. Z.	(7)	5,946	7,482	5,143
Cathwood ⁴	19	16 55	20	6 20	20	15 08	20	16 30	American	Union Oil Co.	435.0	56.0	22.11	Philadelphia, Pa.	Los Angeles, Calif.	(8)	5,861	8,982	6,274
Tokai Maru ⁵	19	21 25	20	7 20	20	18 45	20	19 58	Japanese	Osaka Shosen Kaisha.	446.0	60.0	25.6	Boston, Mass.	Kobe, Japan.	General.	1,505	7,596	5,159
Muncaster Castle ⁶	20	5 20	20	7 35	20	19 50	20	20 20	British	Barber S. S. Line.	428.0	56.0	19.0	New York, N. Y.	Manila, P. I.	General.	1,505	7,596	5,159
Langueacrag ⁷	20	6 25	20	8 55	20	22 10	20	23 04	British	F. Carnick & Co.	416.0	55.0	15.11	Newport, Monmouth	Vancouver, B. C.	Ballast.	70	3,848	2,606
Santa Monica ⁸	18	21 40	20	10 00	20	21 15	20	22 12	American	Panama Mail S. S. Co.	296.0	45.0	17.0	Cristobal, C. Z.	San Francisco, Cal.	General.	70	3,848	2,606
Pennyworth ⁹	20	1 35	20	10 50	21	0 22	21	1 47	British	R. S. Dalehoush.	410.2	53.5	14.0	Blythe, England.	Vancouver, B. C.	Ballast.	680	5,604	3,681
Boussale ¹⁰	20	1 35	20	12 20	21	0 22	21	00 49	French	Messageries Maritimes.	330.2	52.5	18.0	Dunkerque, France	Noumea, N. Caled.	General.	2,301	6,534	4,843
Emergency Aid ¹¹	20	2 45	20	13 20	21	1 21	21	2 32	American	Pac-Avg-Brazil Line.	400.7	54.2	18.7	Buenos Aires, Arg.	San Francisco, Cal.	(9)	1,882	6,821	4,927
San Felipe ¹²	20	10 20	21	6 15	21	15 59	21	16 55	American	Quaker Line.	410.0	53.0	19.0	Philadelphia, Pa.	Portland, Oreg.	Autos, general.	497	1,805	698
Witran ¹³	21	7 55	21	8 05	21	17 03	21	18 15	German	North German Lloyd.	449.0	58.0	19.0	Bremen, Germany	Vancouver, B. C.	Ballast.	7,820	5,661	
Cal ¹⁴	18	22 50	21	11 20	21	19 18	21	20 30	German	North German Lloyd.	216.0	32.9	13.1	Cristobal, C. Z.	Guayaquil, Ecuador	General.	497	1,805	698
Sollund ¹⁵	20	20 00	21	11 40	21	19 15	21	20 30	Norwegian	Panama Mail S. S. Co.	221.6	32.3	11.1	Cristobal, C. Z.	Acajutla, Salvador.	Ballast.	980	579	
District of Columbia ¹⁶	21	15 25	21	15 35	21	22 10	21	23 09	American	Texas Oil Co.	435.0	59.2	21.6	Pt. Arthur, Texas.	Pt. San Luis, Calif.	Ballast.	8,097	5,431	
J. L. Lucken- bach ¹⁷	31	17 15	22	6 10	22	15 50	22	16 52	American	Luckenbach Line.	448.9	60.2	19.0	Boston, Mass.	Seattle, Wash.	General.	1,832	9,294	6,861
Nourmahal ¹⁸	22	0 45	22	7 30	22	17 09	23	13 05	American	Vincent Astor.	251.6	41.6	17.0	Miami, Fla.	Guayaquil, Ecuador	Ballast.	3,384	1,566	
Point Arena ¹⁹	22	3 50	22	7 30	22	17 24	22	18 30	American	Swayne & Hoyt.	324.0	46.2	14.0	Houston, Tex.	San Francisco, Cal.	Ballast.	3,384	1,566	
Inverbank ²⁰	22	1 40	22	8 45	22	18 26	22	10 18	British	Andrew Weir & Co.	420.0	53.9	15.3	Cardiff, Wales	Puget Sound, Wash.	Ballast.	7,099	5,014	
Modava ²¹	22	3 50	22	8 50	22	19 35	22	20 40	British	Donaldson Brothers.	387.0	53.7	18.3	Glasgow, Scotland	Vancouver, B. C.	General.	1,305	6,719	4,979
Midvale ²²	22	7 15	22	9 45	22	20 47	23	00 45	British	N. Z. Shipping Co.	460.0	63.0	20.3	Falmouth, England	New Zealand.	Ballast.	10,663	7,727	
Steel Ranger ²³	22	11 15	22	11 25	22	21 52	22	22 45	American	Isthmian S. S. Lines.	424.2	56.2	18.0	Baltimore, Md.	Tacoma, Wash.	Stock, general.	2,009	7,611	5,450
Taira ²⁴	21	20 10	22	7 10	22	18 30	23	00 00	Panamaian	Hans Elliot.	64.2	17.0		Cristobal, C. Z.	Bahoa, C. Z.	Ballast.	2,695	18,205	13,494
Rangitane ²⁵	21	23 00	23	6 30	23	18 35	23	20 00	British	N. Z. Shipping Co.	531.0	70.0	25.0	London, England	Auckland, N. Z.	General.	2,695	18,205	13,494
Jancia ²⁶	23	2 30	23	7 40	23	14 50	23	15 50	British	Anelo-Canadian S. S. Co.	402.0	55.0	18.7	Glasgow, Scotland	Vancouver, B. C.	Ballast.	7,452	5,199	
Deroche ²⁷	23	4 35	23	8 30	23	17 00	23	17 00	American	Union Oil Co.	435.0	56.0	20.0	Tiverton, R. I.	Los Angeles, Calif.	Ballast.	7,452	5,199	
Spencer Kel- logg ²⁸	23	4 35	23	8 40	23	16 52	23	18 00	American	Kellogg S. S. Co.	391.8	51.3	20.0	Houston, Tex.	San Francisco, Cal.	Cottonseed oil.	1,100	5,601	3,902
Charles H. Crann ²⁹	23	9 15	23	9 40	23	17 59	23	19 14	American	Argonaut S. S. Co.	404.0	54.0	18.6	New York, N. Y.	Seattle, Wash.	General.	2,766	6,755	4,750
Lauris Swen- son ³⁰	23	11 15	23	11 25	23	18 54	24	4 15	Norwegian	Fred Olsen Line.	435.0	56.0	19.0	Oslo, Norway	Vancouver, B. C.	General.	1,950	7,963	5,837
Ondana ³¹	23	3 45	23	11 55	23	20 15	23	21 30	British	Pacific Steam Nav. Co.	550.3	67.0	27.7	Liverpool, England	Valparaiso, Chile.	General.	1,414	17,146	12,015
Wulboro ³²	22	19 60	23	12 20	23	21 15	23	22 30	American	Amer-Hawaiian Line.	415.0	56.0	19.5	Philadelphia, Pa.	Seattle, Wash.	Coal, general.	3,168	7,717	5,765

John Bakke	22	21.30	23	13.15	23	22.20	23	23.25	Norwegian.	Scand.-So. Pacific Co.	390.8	54.6	16.0	Gothenburg, Swed.	Valparaiso, Chile.	General.	1,754	6,822	5,035
Mabriton	23	13.40	23	13.50	23	23.25	24	4.15	British.	R. Dale & Co.	412.6	55.5	16.6	N. Shields, Eng.	Vancouver, B. C.	Ballast.	6,823	4,797	
Pacific Ranger	23	17.00	23	17.15	24	10.30	24	11.52	British.	Furness, Withy & Co.	435.0	60.0	19.2	Cristobal, C. Z.	Vancouver, B. C.	General.	499	9,725	6,942
No. 8	23								American.	U. S. Navy					Balboa, C. Z.	Ballast.			
President McKinley	23	14.40	24	6.00	24	13.02	24	21.18	American.	Dollar Line	516.5	72.2	27.6	New York, N. Y.	Manila, P. I.	General.	1,479	15,286	10,580
Virginia	24	5.00	24	7.15	24	14.35	25	00.25	American.	Panama-Pacific Line	586.4	80.3	26.0	New York, N. Y.	San Francisco, Cal.	Express, general.	1,807	25,254	18,170
Charles Nelson	23	14.50	24	8.10	24	18.07	24	19.10	American.	Nelsen Line	380.0	53.2	18.8	New York, N. Y.	Seattle, Wash.	Rosin, steel, gen.	2,593	5,659	4,138
Northern Sun	23	20.20	24	8.25	24	17.06	24	18.10	American.	Sun Oil Co.	480.6	66.0	21.0	Chester, Pa.	Los Angeles, Calif.	Ballast.		9,644	6,552
Calendrite	24	9.00	24	9.35	24	19.10	24	20.30	British.	Imperial Oil Co.	521.0	70.4	23.0	New York, N. Y.	Talara, Peru.	Ballast.		12,339	7,717
Steel Arc	24	9.10	24	10.35	24	20.13	24	21.15	American.	Imperial S. S. Lines	395.5	55.0	21.0	Baltimore, Md.	Honolulu, T. H.	General.	3,574	7,320	5,245
Stemmesdand	24	11.10	24	14.45	24	21.33	24	22.35	Norwegian.	Penn Line	376.5	53.5	12.6	New York, N. Y.	Astoria, Oreg.	Ballast.		6,256	4,663
Real	21	20.10	24	12.20	24	22.38	24	23.30	Panamanian.	Fans Elliot.	62.2	17.1		Cristobal, C. Z.	Pedregal, Colombia	General.	9		22
Santa Lucia	24	19.40	25	6.20	25	14.03	25	20.45	American.	Panama Mail S. S. Co.	484.0	72.0	25.4	New York, N. Y.	Seattle, Wash.	Coffee, general.	3,839	13,948	9,217
Stranger	23	13.50	25	6.50	25	17.28			American.	Fred E. Lewis	143.4	22.8	11.0	Miami, Fla.	Los Angeles, Calif.	Ballast.		293	124
Point Gorda	24	22.20	25	7.05	25	17.35	25	18.43	American.	Swayne & Hoyt	324.0	46.0	13.4	Mobile, Ala.	San Francisco, Cal.	Ballast.		3,964	2,043
David	25	00.25	25	8.20	25	18.35	25	19.50	American.	Tidewater Oil Co.	430.0	59.2	18.6	New York, N. Y.	Los Angeles, Calif.	Ballast.		7,029	5,325
McKelvey	25	5.30	25	8.50	25	20.35	25	20.48	British.	Silver Line, Ltd.	456.0	62.0	20.5	New York, N. Y.	Shanghai, China.	Steel, cotton.		6,422	5,766
Silver Sandal	25	5.45	25	9.20	25	20.45	25	21.48	Japanese.	Kawasaki Kisen Kaisha	431.0	53.0	25.0	Tampa, Fla.	Yokohama, Japan.	Phosphate rock.		6,024	7,033
Norfolk Maru	25	8.30	25	10.10	25	21.55	25	23.04	British.	Anglo-Canada S. S. Co.	405.0	53.6	17.3	Barry, Wales	Vancouver, B. C.	Ballast.		5,869	4,921
Rockpool	25	11.30	25	11.40	25	22.58	25	23.54	American.	Calmar Line	399.7	56.2	22.6	Baltimore, Md.	Seattle, Wash.	Steel, general.		5,585	7,381
Alamar	24	18.15	25	15.10	25	23.57	26	1.10	German.	Panama Mail S. S. Co.	216.5	32.9	18.1	Cristobal, C. Z.	Guayaquil, Ecuador	General.		399	1,132
Manizales	24	18.15	25	15.10	25	23.57	26	1.10	German.	Panama Mail S. S. Co.	216.5	32.9	18.1	Cristobal, C. Z.	Guayaquil, Ecuador	General.		399	1,132
Montanan	25	17.35	25	20.40	26	11.04	26	12.20	American.	Amer.-Hawaiian Line	404.0	53.9	18.1	Boston, Mass.	Portland, Oreg.	General.		2,982	6,756

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

President Wilson	19	6.00	19	7.06	19	14.20	19	22.05	American.	Dollar Line	516.5	72.2	30.3	Manila, P. I.	New York, N. Y.	Silk, general.		5,421	15,286	10,580
Hearen	19	6.00	19	8.00	19	15.35	20	13.55	Dutch.	Royal Neth. S. S. Co.	372.6	50.0	22.0	Talcahuano, Chile.	Hamburg, Germany	General.		5,212	4,759	3,660
Kansas	19	7.15	19	9.16	19	16.35	19	16.35	American.	Amer.-Hawaiian Line	440.0	53.9	27.0	Seattle, Wash.	Boston, Mass.	General.		6,966	6,779	4,921
El Aleto	19	9.40	19	10.40	19	19.55	19	19.55	British.	Anglo-Canada S. S. Co.	400.0	57.6	28.0	La Libertad, Ecua.	Philadelphia, Pa.	Crude oil.		10,109	7,555	5,049
Polana	19	20.45	20	4.58	20	13.05	20	13.05	Norwegian.	Knut Knutsen	380.7	52.2	24.0	Talcahuano, Chile.	Azores	Nitrate of soda.		6,532	5,451	3,820
Dryden	19	22.30	20	6.20	20	14.20	20	14.20	American.	Lytle Bros. Ripley Co.	450.0	57.6	26.0	Legaspi, P. I.	New Orleans, La.	(*)		8,600	7,983	5,916
Sawoka	19	23.44	20	7.19	20	15.25	20	15.25	American.	Rosevelt S. S. Co.	418.0	54.0	28.0	Hilo, P. I.	New York, N. Y.	Sugar.		6,700	7,097	5,268
George Washington	20	1.00	20	8.18	20	17.40	20	20.35	Norwegian.	Fred Olsen & Co.	425.0	55.3	22.0	Vancouver, B. C.	London, England	Lumber, wheat.		8,777	7,533	5,673
Gracia	20	6.30	20	9.26	20	18.40	20	18.40	British.	Donaldson Brothers	415.5	52.1	23.0	Vancouver, B. C.	Glasgow, Scotland.	General.		6,807	6,809	4,842
Sollund	20	9.50	20	10.21	20	20.00	21	11.40	Norwegian.	Panama Mail S. S. Co.	221.6	32.2	14.0	Champerio, Guat.	Cristobal, C. Z.	Coffee.		7,794	980	5,779
Elisha Walker	20	12.00	20	13.43	20	21.45	20	23.25	American.	Standard Shipping Co.	430.0	59.2	27.0	Los Angeles, Calif.	Fall River, Mass.	Kerosene.		10,115	7,739	5,544
Nuevo Panama	20	8.45	20	13.57	20	22.00			Panamanian.	Hans Elliot	109.0	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.		191	226	101
Point Lobos	18	6.45	20	15.57	20	23.15	21	15.30	American.	Gulf Pacific Mail Line	380.1	53.1	20.0	Vancouver, B. C.	Tampa, Fla.	General.		3,321	5,663	4,260
No. 8	20	7.05	20						American.	U. S. Navy				Balboa, C. Z.	Cristobal, C. Z.					
Silveray	20	15.25	21	4.48	21	12.35	21	13.18	British.	Canadian Transp. Co.	395.7	57.0	25.0	Vancouver, B. C.	Hull, England	General.		7,783	7,660	5,925
Pennsylvania	20	9.50	21	6.21	21	13.35	21	14.20	American.	Panama-Pacific Line	586.4	80.3	26.0	San Francisco, Cal.	New York, N. Y.	General.		7,024	25,262	18,194
Harpoon	20	21.20	21	8.20	21	15.00	21	15.00	American.	Shepard S. S. Co.	402.6	53.2	28.0	San Francisco, Md.	Baltimore, Md.	Lumber, general.		8,083	6,560	4,764
Mahia	20	22.35	21	8.17	21	16.25	21	20.10	British.	Shaw Savill & Albion	477.0	62.9	26.0	Wellington, N. Z.	London, England	Frozen, general.		7,278	11,110	

* Linseed, coffee, etc.

* Launch.

* Motor schooner.

* Yacht.

* Mine sweeper.

* Motor ship.

* Sugar, copper, hemp.

* For orders.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam, water draft.		From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.				Beam.	Draft.			Nature.	Tons.	Gross.	Net.
Brighton	21	8 00	21	9 16	21	20 00	21	20 00	409.6	54.0	25.0	Vancouver, B. C.	London, England.	Wheat, general.	8,253	5,729	4,102
Villager	21	9 30	21	10 40	21	21 00	21	21 00	398.0	54.7	25.0	Vancouver, B. C.	Rotterdam, Holl'd.	Grain, fruit, gen.	7,466	6,869	5,121
Taira	21	10 50	21	11 07	21	20 10	22	7 10	62.2	20.3	3.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	28	78	49
Real	21	11 08	21	12 08	21	20 10	22	22 35	64.2	17.1	3.0	Honolulu, T. H.	Cristobal, C. Z.	Bananas.	19	46	22
Mobile City	21	9 35	21	12 25	21	22 35	21	22 35	395.5	55.0	25.0	U. S. Navy	Baltimore, Md.	Sugar, pineapples.	7,078	7,350	5,241
Lapping	21	12 38	21	12 38	21	22 40	21	22 40	405.6	55.6	25.0	Vancouver, B. C.	Cristobal, C. Z.	General.	8,782	6,989	5,251
Alington Court	21	18 55	22	5 40	22	13 20	22	15 20	513.3	68.2	30.0	Los Angeles, Calif.	Monmouth, Wales.	Gasoline.	15,356	11,719	8,619
California	22	1 55	22	6 38	22	14 50	22	16 20	471.1	59.2	24.0	Seattle, Wash.	London, England.	Lumber, general.	6,773	9,027	6,559
Standard	22	1 53	22	7 39	22	15 10	22	15 10	246.2	37.9	17.5	Yvaros, Mexico.	Boston, Mass.	Peas.	1,975	1,661	1,139
Paul Lucken- bach	22	3 05	22	8 33	22	17 15	22	18 25	403.6	56.0	25.2	Tocopilla, Chile.	Azores.	Nitrate.	9,076	6,446	4,741
Vaga	22	8 00	22	9 40	22	20 15	22	20 55	424.5	53.9	27.0	Seattle, Wash.	Boston, Mass.	General.	7,055	6,754	4,800
Istok	22	9 00	22	10 45	22	18 30	22	18 30	400.8	54.3	29.2	San Francisco, Cal.	Tiverton, R. I.	Kerosene.	8,704	6,336	4,389
Oregonian	22	11 40	22	12 25	22	13 00	23	3 25	386.8	52.2	23.0	Portland, Ore.	Mobile, Ala.	Lumber, general.	7,717	5,727	4,107
Phoenix	22	21 00	23	5 58	23	13 25	23	13 25	190.2	28.2	14.0	Callao, Peru	Malta.	Lumber, general.	6,831	6,572	4,900
Point Chico	22	9 40	23	10 25	23	18 15	23	21 10	410.5	54.3	26.0	Everett, Wash.	Philadelphia, Pa.	Lumber, general.	6,831	6,572	4,900
Retriever	23	20 00	24	6 06	24	13 55	24	13 55	210.0	20.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	General.	2,734	5,710	4,011
San Vincente	23	20 00	24	7 18	24	14 15	24	14 15	360.2	51.6	23.2	New York, N. Y.	Cristobal, C. Z.	General.	1,007	1,132	741
S-13	24	00 30	24	9 28	24	17 07	25	10 20	216.5	32.9	16.2	Guayaquil, Ecuador	Guayaquil, Ecuador	General.	5,853	5,561	5,815
Santa Ana	24	8 40	24	9 58	24	18 15	25	15 10	480.0	58.5	26.0	N. Westin er, B. C.	Newcastle, Eng.	Frozen, general.	10,911	9,204	6,367
Manizates	24	12 30	24	13 34	24	22 05	25	5 05	489.7	63.0	26.7	Talara, Peru	Rotterdam, Holl'd.	Naptha.	6,003	5,099	4,167
Royal Star	24	16 30	25	6 09	25	13 50	25	14 40	386.8	52.2	22.9	Port Angeles, Wash.	New York, N. Y.	Lumber, general.	2,773	5,099	4,167
Den Haag	24	16 30	25	6 09	25	13 50	25	14 40	445.0	60.5	21.0	Shanghai, China.	New York, N. Y.	Silk, oil, general.	8,266	7,892	5,898
Nankai Maru	24	17 35	25	7 06	25	15 00	25	15 00	420.0	58.0	26.0	Vancouver, B. C.	Dunkerque, France	General.	853	1,632	1,041
Nankai Maru	25	8 15	25	9 14	25	15 35	26	8 05	227.5	33.4	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General.	709	1,273	706
Pacific	25	10 20	25	12 20	25	20 20	27	10 30	215.7	33.6	16.3	Champurto, Guat.	Cristobal, C. Z.	General.			
Shipper	25	13 05	25	14 09	25	22 05	27	11 20									
Durazzo	25	13 20	25	14 18	25	22 05	27	11 20									
Acajutla	25	13 20	25	14 18	25	22 05	27	11 20									

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	Date.	Vessel.	Line.	For—
February 19	No. 144-M	Pan American	February 19	Ionian	Hamburg-American Line	Port Limon, Costa Rica.
February 20	Calamates	United Fruit Co.	February 19	Metapan	United Fruit Co.	New York via wayports.
February 20	No. 145-M	Uraba, Medellin & Cent. Airways	February 19	Buenaventura	Panama Railroad S. S. Line.	New York, N. Y.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
February 20...	No. 608-M ¹⁷	Pan American Airways...	Miami via wayports.	February 19...	Pastores...	Colombian S. S. Line...	New York via wayports.
February 20...	Pearl Marie ¹²	G. I. Bryan...	Bluefields, Nicaragua.	February 20...	Calamares...	United Fruit Co...	New York via wayports.
February 21...	Conte Grande.	Societa Italia...	New York via wayports.	February 20...	Pearl Marie ¹²	G. I. Bryan...	Bluefields, Nicaragua.
February 21...	Cefalu.	Standard Fruit & S. S. Co.	New Orleans via Habana.	February 21...	Anacheuna ¹⁸	A. Tagaropolos...	Colon, Rep. of Panama.
February 21...	Magdalena.	Hamburg-American Line.	Hamburg via wayports.	February 21...	No. 300-N ¹⁷	Pan American-Grace Airways...	Buenaventura, Colombia.
February 21...	Ionia.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	February 21...	Anetta I. ¹⁸	P. W. Hamilton...	Colon, Rep. of Panama.
February 21...	Venezuela.	Hamburg-American Line.	Hamburg via wayports.	February 22...	Ionia.	Hamburg-American Line.	Hamburg via wayports.
February 21...	Davisan.	Royal Netherlands S. S. Co.	Liverpool via wayports.	February 22...	Conte Grande.	Societa Italia...	New York via wayports.
February 21...	Anacheuna ¹⁸	G. I. Bryan...	Colon, Rep. of Panama.	February 22...	Cefalu.	Standard Fruit & S. S. Co.	Liverpool via wayports.
February 21...	Anetta I. ¹⁸	P. W. Hamilton...	Colon, Rep. of Panama.	February 22...	Venezuela.	Royal Netherlands S. S. Co.	New Orleans via wayports.
February 22...	Velma Lykes.	Lykes Brothers S. S. Co.	Port Arthur via wayports.	February 22...	Magdalena.	Hamburg-American Line.	Port Limon, Costa Rica.
February 22...	No. 945-M ¹⁷	Pan American-Grace Airways	Chicleyo via wayports.	February 22...	Velma Lykes.	Lykes Brothers S. S. Co.	Pro Barrios via wayports.
February 22...	No. 9685 ¹⁷	Pan American Airways	San Salvador via wayports.	February 23...	No. 660-M ¹⁷	Pan American Airways...	Sto. Domingo via wayports.
February 23...	Georgie.	White Star Line	New York via wayports.	February 23...	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways	Miami via wayports.
February 23...	Ancon.	Panama Railroad S. S. Line.	New York via wayports.	February 23...	Georgie.	White Star Line	Medellin, Colombia.
February 23...	Pan American Airways.	Pan American Airways	Miami via wayports.	February 23...	No. 144-M ¹⁷	Pan American-Grace Airways...	New York via Habana.
February 24...	Carare.	Elders & Fyffes, Ltd.	Avonmouth via wayports.	February 24...	Carare.	Elders & Fyffes, Ltd.	Chicleyo via wayports.
February 24...	Vesagua.	United Fruit Co.	New York via wayports.	February 24...	Carare.	United Fruit Co.	Avonmouth via wayports.
February 24...	Turrialba.	Uruba, Medellin & Cent. Airways	New Orleans via Habana.	February 24...	Vesagua.	United Fruit Co.	Port Limon, Costa Rica.
February 24...	No. 145-M ¹⁷	Pan American-Grace Airways	Medellin, Colombia.	February 25...	Mauritania.	Cunard Line.	New York via wayports.
February 24...	No. 22-V ¹⁷	Pan American-Grace Airways	Miami via wayports.	February 25...	Turrialba.	United Fruit Co.	New Orleans via wayports.
February 25...	Mauritania.	Cunard Line.	New York via wayports.	February 25...	Venezuela.	Royal Netherlands S. S. Co.	Amsterdam via wayports.
February 25...	Colombia.	Colombian S. S. Line.	New York via wayports.				
February 25...	Santa Marta.	United Fruit Co.	New York via Kingston.				
February 25...	Venezuela.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.				

PORT OF BALBOA.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
February 20...	No. 608-M ¹⁷	Pan American Airways...	Miami via wayports.	February 19...	Pastores...	Colombian S. S. Line...	New York via wayports.
February 20...	Pearl Marie ¹²	G. I. Bryan...	Bluefields, Nicaragua.	February 20...	Calamares...	United Fruit Co...	New York via wayports.
February 21...	Conte Grande.	Societa Italia...	New York via wayports.	February 20...	Pearl Marie ¹²	G. I. Bryan...	Bluefields, Nicaragua.
February 21...	Cefalu.	Standard Fruit & S. S. Co.	New Orleans via Habana.	February 21...	Anacheuna ¹⁸	A. Tagaropolos...	Colon, Rep. of Panama.
February 21...	Magdalena.	Hamburg-American Line.	Hamburg via wayports.	February 21...	No. 300-N ¹⁷	Pan American-Grace Airways...	Buenaventura, Colombia.
February 21...	Ionia.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	February 21...	Anetta I. ¹⁸	P. W. Hamilton...	Colon, Rep. of Panama.
February 21...	Venezuela.	Hamburg-American Line.	Hamburg via wayports.	February 22...	Ionia.	Hamburg-American Line.	Hamburg via wayports.
February 21...	Davisan.	Royal Netherlands S. S. Co.	Liverpool via wayports.	February 22...	Conte Grande.	Societa Italia...	New York via wayports.
February 21...	Anacheuna ¹⁸	G. I. Bryan...	Colon, Rep. of Panama.	February 22...	Cefalu.	Standard Fruit & S. S. Co.	Liverpool via wayports.
February 21...	Anetta I. ¹⁸	P. W. Hamilton...	Colon, Rep. of Panama.	February 22...	Venezuela.	Royal Netherlands S. S. Co.	New Orleans via wayports.
February 22...	Velma Lykes.	Lykes Brothers S. S. Co.	Port Arthur via wayports.	February 22...	Magdalena.	Hamburg-American Line.	Port Limon, Costa Rica.
February 22...	No. 945-M ¹⁷	Pan American-Grace Airways	Chicleyo via wayports.	February 22...	Velma Lykes.	Lykes Brothers S. S. Co.	Pro Barrios via wayports.
February 22...	No. 9685 ¹⁷	Pan American Airways	San Salvador via wayports.	February 23...	No. 660-M ¹⁷	Pan American Airways...	Sto. Domingo via wayports.
February 23...	Georgie.	White Star Line	New York via wayports.	February 23...	No. 145-M ¹⁷	Uruba, Medellin & Cent. Airways	Miami via wayports.
February 23...	Ancon.	Panama Railroad S. S. Line.	New York via wayports.	February 23...	Georgie.	White Star Line	Medellin, Colombia.
February 23...	Pan American Airways.	Pan American Airways	Miami via wayports.	February 23...	No. 144-M ¹⁷	Pan American-Grace Airways...	New York via Habana.
February 24...	Carare.	Elders & Fyffes, Ltd.	Avonmouth via wayports.	February 24...	Carare.	Elders & Fyffes, Ltd.	Chicleyo via wayports.
February 24...	Vesagua.	United Fruit Co.	New York via wayports.	February 24...	Carare.	United Fruit Co.	Avonmouth via wayports.
February 24...	Turrialba.	Uruba, Medellin & Cent. Airways	New Orleans via Habana.	February 24...	Vesagua.	United Fruit Co.	Port Limon, Costa Rica.
February 24...	No. 145-M ¹⁷	Pan American-Grace Airways	Medellin, Colombia.	February 25...	Mauritania.	Cunard Line.	New York via wayports.
February 24...	No. 22-V ¹⁷	Pan American-Grace Airways	Miami via wayports.	February 25...	Turrialba.	United Fruit Co.	New Orleans via wayports.
February 25...	Mauritania.	Cunard Line.	New York via wayports.	February 25...	Venezuela.	Royal Netherlands S. S. Co.	Amsterdam via wayports.
February 25...	Colombia.	Colombian S. S. Line.	New York via wayports.				
February 25...	Santa Marta.	United Fruit Co.	New York via Kingston.				
February 25...	Venezuela.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.				

¹ Tanker. ¹² Motor schooner. ¹³ Tug. ¹⁴ Motor ship. ¹⁵ Submarine. ¹⁶ For orders. ¹⁷ Air mail carrier. ¹⁸ Motor boat. ¹⁹ Towing barge.
²⁰ Cable ship. * Other than ships passing through the Canal.

Radio Bearings Furnished by Naval Direction Finder Station NQB.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 18, 1933.

Notice to steamship owners and agents:

The following information is quoted from a letter recently received from the Commandant, Fifteenth Naval District:

It has recently come to my attention that, in plotting the radio bearings given them upon request by Naval Direction Finder Station NQB at Toro Point, Canal Zone, certain merchant ships apparently have used as the point of reference the location of either the Department of Commerce radio beacon on the Cristobal Mole, or of the Naval Transmitting Station at Darien, from which station Toro Point transmits, by remote control. This procedure on the part of merchant ships manifestly results in wide errors in their plotted positions.

In order to insure that ships understand the exact location of the receiver, station NQB hereafter, in sending bearings, has been directed to precede each bearing with the statement, "This bearing is from the direction finder house at Station NQB, latitude 9° 22' 31" N., longitude 79° 56' 58" W."

To completely clarify matters, it is suggested that the local agents be requested to notify their ships that they should plot their bearings from Toro Point, and not from Cristobal Mole or Darien. Attention should also be invited to the fact that the radio beacon at Cristobal Mole, in latitude 9° 21' 25" N., longitude 79° 55' 05" W., and the Naval Transmitting Station at Darien, in latitude 9° 07' 00" N., longitude 79° 46' 00" W., are entirely separate and distinct from the Naval Direction Finder Station at Toro Point, as is indicated in "Radio Aids to Navigation."

Every effort is being made by the Naval Direction Finder stations of this district to give accurate bearings to local shipping. Following each bearing furnished, an inquiry is made as to its accuracy. It is requested that the local agents be informed that the Commandant will appreciate it if all merchant ships approaching Toro Point and Cape Mala request bearings as a matter of routine, as is now the practice with all naval vessels approaching this area.

J. L. SCHLEY,
Governor.

Notices to Mariners and Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 21, 1933.

No. 20.

Panama Canal, Pacific entrance, bombing practice. The Commandant, Fifteenth Naval District is the authority for the following information:

A pyramid target, about 20 feet on each side and painted white, has been anchored in latitude 8° 48' 26" N., longitude 79° 41' 35" W., for bombing practices of the aircraft squadrons attached to the Fleet Air Base, Coco Solo.

It is proposed to bomb this target daily, except Sundays, from this date (February 21, 1933) until March 31, 1933.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 23, 1933.

No. 21.

The Panama Canal, Mount Hope, new water tank constructed. A new million-gallon steel water tank, 135 feet high, base elevation 75 feet above sea level and painted aluminum and black squares, has just been completed alongside the present one. (See Notice to Mariners and Aviators No. 925, dated Balboa Heights, C. Z., August 13, 1931.)

Its position is latitude 9° 20' + 343.48 feet N., longitude 79° 54' + 264.43 feet W.

These two towers are visible from a considerable distance at sea, and each has a cluster of four red lights on its peak as a warning to aviators.

J. L. SCHLEY,
Governor.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 27, 1933.

No. 23.

Colombia, south coast, Buenaventura, port regulations and restrictions. A cablegram received by Panama Canal authorities from the Captain of the Port at Buenaventura, Colombia, reads as follows:

Please inform captains of boats sailing for Buenaventura that orders from Colombian military authorities state that no boat may enter the bay after 6 p. m.

It is necessary to obtain a pilot at Soldado Point.

The Government will not be responsible for damages resulting from the noncompliance of this rule.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending February 25, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged	Laded.
				Tons.	Tons.
Buenaventura.....	Panama R. R. S. S. Line.....	.....	February 19	.....	401
Pastores.....	Colombian S. S. Line.....	.....	February 19	.....	641
Metapan.....	United Fruit Co.....	.....	February 19	.....	399
President Wilson.....	Dollar Line.....	February 19	February 19	516	(²)
Odenwald.....	Hamburg-American Line.....	February 19	February 19	294	176
Tokai Maru.....	Osaka Shosen Kaisha.....	February 19	February 20	(¹)	63
Haarlem.....	Royal Netherlands S. S. Co.....	February 19	February 20	16	287
Pearl Marie.....	R. Feuillebois.....	February 20	February 20	(¹)	24
Santa Monica.....	Panama Mail S. S. Co.....	.....	February 20	.....	68
Emergency Aid.....	McCormick S. S. Co.....	February 20	February 20	18	92
Calamares.....	United Fruit Co.....	February 20	February 20	44	333 ¹ / ₂
Point Lobos.....	Gulf-Pacific Line.....	February 20	February 21	296	(²)
San Felipe.....	Quaker S. S. Line.....	February 20	February 21	190	(²)
Sollund.....	Panama Mail S. S. Co.....	February 20	February 21	770	(²)
Nuevo Panama.....	Hans Elliot.....	February 20	.....	154	.....
Cali.....	North German Lloyd.....	.....	February 21	.....	574
Cefalu.....	Standard Fruit & S. S. Co.....	February 21	February 22	224	452
Magdalena.....	Hamburg-American Line.....	February 21	February 22	106	10
Ionia.....	Hamburg-American Line.....	February 21	February 22	(¹)	830
Venezuela.....	Royal Netherlands S. S. Co.....	February 21	February 22	122	(²)
Mahia.....	Shaw, Savill & Albion.....	February 21	February 22	31	(²)
Daviesian.....	Leyland S. S. Line.....	February 21	February 22	214	1
Real.....	Hans Elliot.....	February 21	February 24	15	11
Velma Lykes.....	Lykes Brothers S. S. Co.....	February 22	February 22	354	121
Ancon.....	Panama R. R. S. S. Line.....	February 23	.....	1,404	.....
Orduna.....	Pacific Steam Navigation Co.....	February 23	February 23	139	157
Charles Nelson.....	Nelson S. S. Line.....	February 23	February 24	272	(¹)
Veragua.....	United Fruit Co.....	February 24	February 24	299	3
Turrialba.....	United Fruit Co.....	February 24	February 25	927	136
Santa Ana.....	Panama Mail S. S. Co.....	February 24	February 25	690	679
Santa Lucia.....	Panama Mail S. S. Co.....	February 24	February 25	275	212
Manizales.....	Grace Line.....	February 24	February 25	1,100	499
Acajutla.....	Pacific Steam Navigation Co.....	February 25	.....	710	.....
Los Angeles.....	Hamburg-American Line.....	February 25	.....	79	.....
Durazzo.....	Hamburg-American Line.....	February 25	.....	1,057	.....
Nankai Maru.....	Osaka Shosen Kaisha.....	February 25	.....	176	.....
Venezuela.....	Royal Netherlands S. S. Co.....	February 25	February 25	2	525
Dinteldijk.....	Holland-America Line.....	February 25	.....	170 ¹ / ₂	.....
Colombia.....	Colombian S. S. Line.....	February 25	.....	36	.....
Santa Marta.....	United Fruit Co.....	February 25	.....	608	.....

* No cargo discharged.

* No cargo laded.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective February 28, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.17
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.03
Paint, zinc oxide, dry.....	Lb.	.03
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Tolls Charges for Transit of the Panama Canal.

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement..... .72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton..... .50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessel to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton..... 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake or original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in the current tariff or supplements thereto.

Trips Through the Canal.

The following lines operating passenger vessels through the Canal carry local passengers from one terminal to the other: Dollar Line, Grace Line, Hamburg-American Line, Johnson Line, Navigazione Generale Italiana, North German Lloyd, Pacific Steam Navigation Co., Panama Mail Steamship Co. The Panama Pacific Line carries such passengers from Balboa to Cristobal only. The Hamburg-American Line, North German Lloyd, Panama Mail Line, Dollar Line, Grace Line, and Johnson Line, charge \$6 for the trip, the others \$10 for first-class passage. The Panama Pacific Line has also a rate of \$6 for tourist class. The several services together afford about 4 transits of the Canal each way every week.

Information from American Consuls.

The Consular officers of the United States at seaports all over the world are *ex officio* representatives of The Panama Canal for the purpose of furnishing information to shipping and allied interests as to conditions, charges, etc., at the Panama Canal affecting the operation of ships. The current publications of The Panama Canal of interest to shipping are furnished to the Consular officers and filed for reference.

It is not desired that inquiries of a general nature be addressed to the Consular officers, or that they be burdened with requests which should be made direct to The Panama Canal; but ships' operators who may not be sufficiently advised as to charges, supplies, facilities, etc., at the Canal will always save time by applying to the nearest American Consul.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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Entered as second-class matter, February 6, 1918, at the Post Office
at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., March 8, 1933. No. 32.

Traffic by Nationality for February, 1933.

The following tabulation shows the commercial traffic through the Canal during the month of February, 1933, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for February, 1932 and 1931:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$4,530.24	66,060
British.....	54	297,556	214,696	355,472	218,762	235,400.92	6,654
Chilean.....	1	3,629	2,870	4,574	2,860	3,597.50	608
Colombian.....	1	307	302	405	308	308.40	5,425
Danish.....	5	17,548	11,147	18,238	11,099	12,313.99	3,687
Dutch.....	2	13,648	8,906	14,937	9,134	11,132.50	1,543
French.....	2	11,273	7,731	13,502	8,109	9,663.75	16,260
German.....	15	47,867	31,147	53,053	31,716	37,742.98	1,019
Italian.....	2	19,129	13,088	24,669	14,775	16,360.00	66,106
Japanese.....	12	64,115	48,647	78,357	48,678	59,701.35	21,424
Norwegian.....	14	63,929	37,883	64,813	38,487	46,618.86	492
Panamanian.....	11	641	604	833	550	654.70	4,215
Swedish.....	4	17,532	10,273	17,553	12,966	12,646.46	144,756
United States.....	74	422,261	316,375	518,731	313,922	359,485.50	
Total, February, 1933....	198	985,727	708,663	1,172,953	717,124	810,217.15	338,249
Total, February, 1932....	183	965,643	690,210	1,150,241	692,797	813,922.50	526,838
Total, February, 1931....	212	1,072,493	780,220	1,300,803	787,854	912,045.02	465,126

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
British.....	41	216,061	160,501	262,670	19,508	\$199,902.32	279,043
Chilean.....	1	4,167	3,268	5,689	3,034	4,055.00	6,568
Danish.....	4	21,869	13,912	23,722	14,684	17,390.00	33,217
Dutch.....	5	29,170	20,916	35,009	21,135	26,145.00	36,037
French.....	1	7,477	4,382	7,706	4,591	5,477.50	9,613
German.....	11	31,494	20,552	36,132	21,344	25,690.00	37,886
Japanese.....	6	33,038	27,584	42,320	27,242	34,315.80	40,421
Norwegian.....	21	92,054	60,098	100,526	60,325	75,122.50	145,092
Panamanian.....	11	562	525	1,007	583	639.95	602
Swedish.....	4	16,277	9,623	16,501	12,168	11,827.61	21,238
United States.....	64	389,961	288,251	472,804	286,127	360,248.02	477,820
Yugoslav.....	1	4,741	3,718	5,908	3,714	4,647.50	9,076
Total, February, 1933....	170	846,921	613,230	1,009,994	614,455	765,491.20	1,096,613
Total, February, 1932....	175	912,574	666,744	1,115,861	675,704	833,874.56	1,113,555
Total, February, 1931....	219	1,062,373	790,930	1,313,445	798,100	1,003,857.76	1,465,093

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$4,530.24	.....
British.....	95	513,617	375,197	618,142	378,270	435,303.24	345,103
Chilean.....	2	7,796	6,146	10,263	5,894	7,682.50	13,222
Colombian.....	1	307	302	405	308	368.40	608
Danish.....	9	39,417	25,059	41,960	25,783	29,703.99	38,642
Dutch.....	7	42,818	29,822	49,946	30,269	37,277.50	39,724
French.....	3	18,750	12,113	21,208	12,700	15,141.25	11,156
German.....	26	79,361	51,699	89,185	53,060	63,432.98	54,146
Italian.....	2	19,129	13,088	24,669	14,775	16,360.00	1,019
Japanese.....	18	97,213	76,231	120,677	75,920	94,017.15	106,527
Norwegian.....	35	155,983	97,981	165,339	98,812	121,741.36	166,516
Panamanian.....	22	1,203	1,129	1,840	1,133	1,294.65	1,094
Swedish.....	8	33,809	19,896	34,054	25,134	24,474.07	25,453
United States.....	138	812,222	604,626	991,535	600,049	719,733.52	622,576
Yugoslav.....	1	4,741	3,718	5,908	3,714	4,647.50	0,076
Total, February, 1933....	368	1,832,658	1,321,993	2,182,947	1,331,579	1,575,708.35	1,434,862
Total, February, 1932....	358	1,878,177	1,356,954	2,266,102	1,368,501	1,647,797.06	1,645,393
Total, February, 1931....	431	2,134,866	1,571,150	2,614,248	1,585,954	1,915,902.78	1,930,219

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 2, 1933.

No. 24.

The Panama Canal, Pacific entrance, aids to navigation. Gas buoy No. 17, Pacific entrance, has been temporarily moved to Station 2298, about 600 feet south on prism line of its original position, due to dredging operations.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 2, 1933.

No. 25.

Panama, Panama Bay, off Cape Mala, shipwreck information amended. The commanding officer of the U. S. S. *Nokomis* reports minimum soundings obtained over the wreckage of the S. S. *Santiago* to be six fathoms at mean low water. (See Notice to Mariners No. 19, Balboa Heights, dated February 14, 1933.)

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 4, 1933.

No. 27.

The Panama Canal, Pacific entrance, gas buoy reestablished. Gas buoy No. FB, on the east prism line, south of the ferry slip, Balboa harbor, was reestablished on March 3, 1933.

Notice to Mariners No. 7, dated Balboa Heights, C. Z., January 13, 1933, is hereby canceled.

J. L. SCHLEY,
Governor.

Tanker Traffic Through the Panama Canal in February, 1933.

During the month of February, 1933, 52 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 309,715, on which tolls of \$274,953.42 were paid. Cargo amounted to 312,492 tons, comprised of 311,392 tons of mineral oils and 1,100 tons of cottonseed oil.

In point of net tonnage, tanker traffic increased by 82,486 tons, or 36.3 per cent compared with the corresponding month a year ago, and cargo tonnage increased by 69,378 tons, or 28.5 per cent.

Tank ships comprised 14.1 per cent of the total commercial transits through the Canal during February, 1933; made up 16.9 per cent of the total Panama Canal net tonnage; were the source of 17.5 per cent of the total tolls collected; and carried 21.8 per cent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of February, 1933, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for February, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	4	25,670	\$18,482.40	.....
United States.....	21	121,351	90,191.57	* 7,046
Total, February, 1933.....	25	147,021	108,673.97	7,046
Total, January, 1933.....	34	207,709	152,963.89	8,220
Total, December, 1932.....	32	185,483	135,344.61	10,345
Total, February, 1932.....	19	118,699	92,100.66	38,680
<i>Pacific to Atlantic.</i>				
British.....	5	27,674	29,534.45	51,738
Dutch.....	1	6,365	6,528.75	10,911
Norwegian.....	4	23,465	23,717.50	41,688
United States.....	17	105,190	106,493.75	201,100
Total, February, 1933.....	27	162,694	166,279.45	305,446
Total, January, 1933.....	27	157,011	159,532.54	283,589
Total, December, 1932.....	27	169,551	174,836.25	327,071
Total, February, 1932.....	19	108,530	114,265.75	204,434

* Includes 1,100 tons cottonseed oil.

The following tabulation shows the tanker traffic through the Canal during February, 1933, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	20	113,377	\$84,450.29	* 7,046
United States to South America.....	2	15,691	11,297.52	.....
Europe to United States.....	1	4,361	3,139.92	.....
Europe to South America.....	2	13,592	9,786.24	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	15	88,597	90,077.50	171,688
United States to West Indies.....	1	4,533	4,106.25	6,196
United States to Europe.....	4	26,818	27,713.75	49,036
South America to United States.....	1	5,049	5,493.75	10,109
South America to Canada.....	1	6,772	7,468.75	15,423
South America to West Indies.....	1	1,560	1,123.20	.....
South America to Europe.....	4	29,365	30,296.25	52,994

* Includes 1,100 tons cottonseed oil.

Of the tanker traffic through the Canal in February, 1933, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for February, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
February, 1933.....	15	87,125	\$64,355.79	5,946
January, 1933.....	15	90,985	65,509.20	.....
December, 1932.....	20	114,812	82,664.64	.....
February, 1932.....	11	67,174	48,365.23	.....
<i>From Los Angeles.</i>				
February, 1933.....	13	79,789	80,508.75	151,236
January, 1933.....	12	71,176	71,953.75	134,475
December, 1932.....	16	98,456	109,018.75	191,554
February, 1932.....	7	40,903	41,921.25	76,849

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, March 4, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charter or operator).	Length.	Salt water draft.		From—	Port—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.				Beam.	Drift.			Nature.	Tons.	Gross.	Net.
Nuevo Panama ²	20	22 00	26	6 20	26	14 31	26	16 00	Panamanian	Hans Elliot.	108 0	20 0	8 6	Cristobal, C. Z.	Buenaventura Col.	General	100	226	101
Kirishima	26	1 10	26	7 10	26	14 41	26	16 00	Japanese	Kokusa Kisen Kaisha.	440 0	60 0	26 0	Baltimore, Md.	Yokohama, Japan.	(*)	6,857	8,912	6,504
Maru ²	25	18 55	26	8 15	26	16 00	26	17 15	Dutch.	Holland-America Line.	485 0	57 0	22 6	Rotterdam, Holl'd	Vancouver, B. C.	General	2,676	10,780	7,551
Peter Maersk ²	26	7 35	26	9 45	26	16 52	26	18 05	Danish.	Isbrandtsen Moller Co.	441 0	57 0	22 7	Boston, Mass.	Hilo, P. I.	General	5,425	7,723	5,964
Los Angeles ²	25	14 05	26	13 40	26	20 22	26	21 16	German	North German Lloyd.	432 0	59 0	19 9	Hamburg, Germany	Portland, Ore.	General	2,122	8,454	6,241
Crisar ² , No. 6 ³	26	20 05	26	20 05	26	20 05	26	21 16	Costa Rican.	E. Puget.	46 0	54 0	15 6	Cristobal, C. Z.	Gatun, C. Z.	Ballast	31	19	3
Porto Bello ⁴	26	14 55	26	17 55	27	11 59	27	13 10	Panamanian	A. Tagaropoulos.	46 0	54 0	15 6	San Blas, R. P.	Panama, R. P.	(*)	1,009	6,289	4,723
Hakonian	26	23 45	27	6 20	27	13 18	27	14 25	Japanese	Mitsui Bussan Kaisha.	437 0	56 5	26 0	Buenos Aires, Arg.	Vancouver, B. C.	General	8,125	7,414	5,055
Point Sur	27	1 15	27	7 20	27	14 58	27	16 00	American	Swayne & Hoyt.	324 0	46 0	19 4	Houston, Tex.	Seattle, Wash.	Coke, general	2,871	3,984	2,612
New Orleans ²	27	1 20	27	7 30	27	14 58	27	16 00	American	Roosevelt S. S. Co., S. B.	395 5	55 0	18 7	Baltimore, Md.	Shanghai, China.	General	1,428	7,209	5,172
Point Palmas	27	6 30	27	8 30	27	17 18	27	18 35	American	Swayne & Hoyt.	386 6	52 0	18 8	Beaumont, Tex.	Tacoma, Wash.	General	2,033	5,708	4,138
City of Little ⁴	27	9 30	27	10 15	27	18 27	27	20 00	British	Elberian Line, Ltd.	447 0	58 0	21 6	New York, N. Y.	Dairen, China.	General	2,679	8,560	6,167
Durazo.	25	22 05	27	11 20	27	19 08	27	20 00	German	Hamburg-American Line	226 0	34 0	13 3	Cristobal, C. Z.	Guaymas, Durango	General	156	1,683	1,041
John Jay	27	21 20	28	6 20	28	15 28	28	16 35	American	Albers Brothers	439 6	60 0	29 1	Frederick, Tex.	Seattle, Wash.	Sulphur, grain	11,728	8,963	6,491
Silveritz ²	27	21 20	28	6 20	28	15 28	28	16 35	British	Canadian Transport Co.	375 0	52 0	14 6	London, England	N. Westm or, B. C.	Cresote	1,000	7,035	4,676
Nevada ²	28	00 35	28	7 20	28	18 25	28	20 30	American	The Texas Co.	434 8	46 2	18 4	New York, N. Y.	Los Angeles, Calif.	Ballast	2,450	5,156	3,156
Jakob Maersk.	28	12 00	28	12 15	28	20 12	28	21 35	Danish	Isbrandtsen Moller Co.	284 9	52 3	11 6	Curacao, D. W. I.	Arica, Chile.	Ballast	7,465	1,716	1,716
Syria.	27	23 20	28	12 55	28	20 18	28	21 35	German	Hamburg-American Line	309 6	44 0	18 5	Hamburg, Germany	Champerco, Guat	General	1,656	3,350	2,232
Gaelstar.	28	16 45	28	16 55	28	16 55	28	17 30	British	Blue Star Line.	389 0	53 0	16 6	Liverpool, England	Los Angeles, Calif.	Ballast	6,014	4,492	4,492
Oregon ²	28	17 20	28	16 00	28	19 20	28	20 35	French	French Line.	473 0	61 0	21 3	Harve, France.	Vancouver, B. C.	General	2,917	7,150	5,024
Minnesotan.	28	18 10	28	17 20	28	20 18	28	21 30	American	Amer-Hawaitian Line.	407 0	53 0	18 6	Boston, Mass.	Seattle, Wash.	General	2,307	10,334	7,468
Inman ²	1	4 00	1	8 25	1	21 30	1	22 45	Swedish	Transatlantic S. S. Co.	340 0	60 0	12 0	Baltimore, Md.	San Francisco, Calif.	Ballast	4,327	2,917	2,917
Java Arrow ¹	1	6 30	1	9 10	1	22 40	1	23 52	American	Stand. Vac. Transp. Co.	468 0	62 0	19 6	New York, N. Y.	Los Angeles, Calif.	Ballast	10,084	7,888	7,888
Real ⁵	1	8 35	1	11 55	1	21 30	1	22 28	Panamanian	Hans Elliot.	108 0	21 0	6 0	Cristobal, C. Z.	Balboa, C. Z.	Sugar	10	182	106
Baru ⁵	1	8 35	1	11 10	1	21 30	1	22 28	Panamanian	A. A. Valdez.	68 2	17 6	6 0	Cristobal, C. Z.	Pedregal, R. P.	Flour	9	46	22
Ant. Obarrro ¹	28	8 55	1	8 15	1	19 20	1	20 35	American	U. S. Army.	57 8	19 0	7 0	Cristobal, C. Z.	Balboa, C. Z.	Ballast	57	29	29
Bonzo ²	1	17 10	2	7 30	2	18 40	2	20 02	Norwegian.	Reidar Rod.	468 0	60 0	22 6	Rotterdam, Holl'd	Balboa, C. Z.	Ballast	8,748	5,763	5,763
Bringer ²	1	22 15	2	8 30	2	19 33	2	20 50	Norwegian.	Incrocan S. S. Corp.	398 0	54 0	14 0	Rotterdam, Holl'd	Los Angeles, Calif.	Ballast	6,853	5,246	5,246
Julia Luckenbach.	2	00 05	2	8 35	2	22 00	2	23 00	American	Luckenbach Line.	436 0	58 0	24 0	Boston, Mass.	Seattle, Wash.	General, auto	3,003	8,543	6,402
Granton.	2	4 30	2	9 35	2	23 15	3	00 04	British	K. Chapman & Son.	430 0	58 0	17 6	Newcastle on Tyne	Vancouver, B. C.	Ballast	6,823	4,827	4,827
Tsurushira	2	7 00	2	10 10	2	21 00	2	22 24	Japanese	Uwajin S. S. Co.	360 0	51 0	23 7	Boca Grande, Fla.	Osaka, Japan.	Phosphate rock.	5,414	4,684	3,460
Santa Cecilia.	2	2 20	2	11 55	2	20 42	3	2 25	American	Panama Mail S. S. Co.	360 0	51 0	21 6	New York, N. Y.	San Francisco, Cal.	General	1,314	5,797	4,188

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Susan V. Luckenbach.	28	9 15	28	10 15	28	18 05	American	Luckenbach Line.	434.3	57.7	23.0	Seattle, Wash.	Boston, Mass.	General.	4,615	7,947	5,670
Sirius.	27	20 45	28	11 29	28	20 40	11 50	U. S. Navy.	401.0	54.0	20.0	San Diego, Calif.	Norfolk, Va.	Navy stores.	3,075		
A. B. Obarrio.	28	12 07	28	20 55	1	19 10	Panamanian	A. Valdez.	57.8	19.7		Darien, R. P.	Cristobal, C. Z.	Bananas.	38	57	29
Comet.	28	14 30	28	15 15	28	22 50	American	Standard Vacuum Corp.	480.5	66.0	30.0	Los Angeles, Calif.	New York, N. Y.	Fuel oil.	13,450	9,820	6,750
Baru.	28	17 36	1	8 35	1	11 55	Panamanian	Hans Elliot.	108.6	21.6		Darien, R. P.	Cristobal, C. Z.	Bananas.	51	182	105
Real.	28	17 15	28	17 15	28	11 10	Panamanian	A. Valdez.	62.2	17.6		Darien, R. P.	Cristobal, C. Z.	Bananas.	36	46	22
Tremont.	28	22 20	1	2 50	1	13 20	11 50	Kerr, Gifford & Co.	400.0	52.3	25.0	Vancouver, B. C.	St. Thomas, A. S.	Wheat.	7,650	5,778	4,033
Hoysan Maru.	28	23 10	1	3 50	1	13 45	13 45	Mitsui & Co.	407.2	50.8	26.0	Mikie, Japan.	New York, N. Y.	Sugar, silk, gen.	7,161	6,488	4,786
Drehtidk.	1	1 20	1	4 54	1	14 30	1 15	N. Pacific Coast Line.	485.5	62.3	29.0	Victoria, B. C.	Rotterdam, Holland.	Sugar, gen.	9,520	10,793	7,619
King James.	1	1 30	1	6 32	1	15 15	17 00	Canadian Transp. Co.	400.0	59.0	26.0	Vancouver, B. C.	Southampton, Eng.	Grain, general.	8,853	7,569	5,592
Elmworth.	1	2 00	1	7 22	1	15 40	16 10	Canadian Transp. Co.	400.0	53.2	25.3	Vancouver, B. C.	Southampton, Eng.	Grain, lumber.	7,560	5,958	4,114
Albert Vogler.	1	6 00	1	8 08	1	16 40	1 20 20	Hamburg-American Line.	409.8	53.8	23.0	Valparaiso, Chile.	Amunouthe, Eng.	General.	6,993	7,173	5,514
Santa Clara.	1	5 59	1	9 41	1	17 10	1 20 05	Grace Line.	483.3	63.9	24.0	San Antonio, Chile.	Hamburg, Germany.	General.	4,500		
Columbian.	1	4 00	1	10 44	1	18 20	1 38 20	Ancor-Hawaiian Line.	404.6	53.9	23.0	Seattle, Wash.	New Orleans, La.	General.	10,013	8,696	6,316
Scotsburg.	1	4 45	1	12 07	1	20 15	1 30 15	Jykes Bros., Ripley Co.	436.1	56.3	31.0	Nasugbu, P. I.	Azores Is.	Nitrate.	7,400	5,748	4,056
Nemaia.	1	10 00	1	12 47	1	21 40	1 23 05	Nitrate Corp. of Chile.	400.3	52.3	24.8	Tacopilla, Chile.	New Orleans, La.	General.	7,250	6,162	4,433
Willmote.	1	11 00	1	13 56	1	22 45	1 22 45	Williams S. S. Line.	390.0	54.2	26.0	Seattle, Wash.	New York, N. Y.	General.	5,175	4,358	3,073
Porto Bello.	1	8 00	1	15 25	2	9 05	2 12 20	A. Tazopoulos.	46.0	15.6		Balboa, C. Z.	New York, N. Y.	Lumber, pump.	7,407	7,729	5,975
Eastern Guide.	28	13 30	2	5 01	2	12 05	3 7 00	Prudential S. S. Corp.	344.9	50.2	24.0	Everett, Wash.	Boston, Mass.	General.	4,632	6,754	4,997
Richmond.	1	13 35	2	6 28	2	13 30	2 20 00	U. S. Navy.	550.0	55.0	18.6	Los Angeles, Calif.	Buenos Aires, Arg.	Sugar.	7,500	6,082	4,336
West Maersk.	1	13 35	2	6 28	2	13 30	2 20 00	Isbrandtsen Moller Co.	441.5	57.0	27.0	Cebu, P. I.	London, England.	Grain, general.	8,369	5,843	4,268
West Ivis.	2	4 30	2	7 22	2	14 55	2 14 55	McCormick S. S. Co.	410.4	54.8	22.0	Powell River, Wash.	London, England.	General.	7,498	9,870	6,967
Skranstad.	2	10 55	2	11 41	2	20 15	2 20 15	Fern Line.	381.6	53.6	26.6	Cebu, P. I.	London, England.	General.	8,819	10,267	7,252
Holystone.	2	11 45	2	12 37	2	21 20	2 21 30	Anglo-Canadian Co.	397.4	54.0	24.1	Vancouver, B. C.	London, England.	General.	7,407	7,729	5,975
Tai Shan.	2	8 30	2	13 55	2	22 45	3 4 15	Barber Line.	484.0	60.0	26.4	Pulungan, P. I.	New York, N. Y.	General.	8,369	5,843	4,268
Vancouver.	2	14 00	2	15 01	3	00 15	3 9 35	North German Lloyd.	499.6	62.0	27.0	Vancouver, B. C.	Hamburg, Germany.	General.	8,819	10,267	7,252
S-17.	3	4 35	3	4 35	3	12 00	3 12 00	U. S. Navy.	470.3	61.2	24.5	Balboa, C. Z.	Cristobal, C. Z.	General.	8,191	10,459	7,110
Wisconsin.	3	12 30	3	5 59	3	13 30	3 23 10	French Line.	470.3	61.2	24.5	N. Westm., B. C.	Bordeaux, France.	General.	8,191	10,459	7,110
Deford.	3	12 30	3	7 20	3	15 20	3 25 15	Watts, Watts & Co.	368.4	52.0	22.8	Salaverry, Peru.	Land's End, Eng.	Sugar.	6,312	4,694	3,192
Esperance.	3	7 00	3	8 10	3	17 10	3 22 15	French Line.	351.0	52.5	20.8	Nouance, N. Calif.	Havre, France.	General.	3,660	3,470	2,743
Bakcha.	3	7 15	3	9 32	3	17 40	3 22 15	Shaw, Savill & Albion.	493.0	63.0	26.11	Wangai, N. Z.	London, England.	Frozen, general.	6,913	11,018	8,057
Warpool.	3	7 20	3	10 09	3	20 20	3 23 40	Beeching & Hayward.	390.0	55.6	25.0	Vancouver, B. C.	London, England.	Cereals, lumber.	8,140	5,920	4,318
Salsais.	3	9 15	3	14 51	3	23 20	4 12 25	Anglo-Saxon Pet. Co.	413.0	56.1	26.6	San Francisco, Cal.	Cristobal, C. Z.	Stove oil.	6,468	6,069	4,436
New Jersey.	3	13 45	4	4 50	4	12 25	4 12 25	The Texas Co.	416.8	56.7	21.4	Los Angeles, Calif.	Newburgh, N. Y.	Gasoline.	8,060	6,951	4,982
Kelsonoor.	3	14 20	4	6 30	4	15 00	4 15 45	Moor Line, Ltd.	330.1	47.1	21.4	Taitai, Chile.	Azores Is.	Nitrate.	5,040	3,551	2,551
Tomislay.	3	18 30	4	7 18	4	16 25	4 17 15	Pacific Coast Line.	403.0	58.4	24.2	Quique, Chile.	Dunkergue, France.	General.	8,064	5,926	4,189
Granville.	4	1 00	4	8 14	4	17 20	4 17 20	Robt Olsen Line, Oslo.	426.4	55.5	25.0	Vancouver, B. C.	Oslo, Norway.	Nitrate.	7,595	8,388	6,025
Vanice Maru.	4	5 05	4	9 06	4	17 40	4 17 40	Kubo Asatara.	405.0	53.0	16.6	Kobe, Japan.	New York, N. Y.	General.	5,472	7,025	5,159
Taira.	4	6 15	4	10 29	4	18 45	4 18 45	Shaw, Savill & Albion.	494.0	63.0	22.11	Lyttleton, N. Z.	London, England.	Frozen, general.	7,779	11,192	8,043
Cerigo.	4	8 59	4	13 06	4	21 00	4 21 00	Hamburg-American Line.	227.2	34.4	13.0	Guayaquil, Ecuador.	Cristobal, C. Z.	Frozen, general.	750	1,572	1,011
Covena.	4	13 45	4	14 37	4	23 10	6 10	Hammond Lumber Co.	253.4	43.7	23.1	Los Angeles, Calif.	New Orleans, La.	Lumber, potash.	3,536	2,815	1,783

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

Date.	* ARRIVALS.			* DEPARTURES.		
	Vessel.	Line.	From—	Date.	Vessel.	Line.
February 26.	Reliance.	Hamburg-American Line.	New York via wayports.	February 26.	Santa Maria.	United Fruit Co.
February 26.	No. 9073.	Pan American Airways.	San Salvador via wayports.	February 26.	Acon.	Panama R. R. S. S. Line.
February 26.	No. 300-N.	Pan American-Grace Airways.	Talara via wayports.	February 26.	Reliance.	Hamburg-American Line.
February 26.	Anacuena.	A. Tagaropulos.	Colon, R. P.	February 26.	Colombia.	Colombian Line.
February 27.	Veragua.	United Fruit Co.	Port Limon, Costa Rica.	February 27.	Veragua.	United Fruit Co.
February 27.	Kingsholm.	Swedish-American Line.	New York via wayports.	February 27.	Kingsholm.	Swedish-American Line.
February 27.	No. 145-M.	Uraba, Medellin & Cent. Airways.	Medellin, Colombia.	February 28.	No. 945-M.	Pan American-Grace Airways.
February 27.	No. 609-M.	Pan American Airways.	Barranquilla, Colombia.	February 28.	Camden.	United Fruit Co.
February 28.	Annetta J.	P. W. Hamilton.	Colon, R. P.	February 28.	Inapaquina.	A. Tagaropulos.
February 28.	Inapaquina.	A. Tagaropulos.	Colon, R. P.	March 1.	Contessa.	Standard Fruit & S. S. Co.
February 28.	Camden.	United Fruit Co.	Curacao, D. W. I.	March 1.	No. 609-M.	Pan American Airways.
February 28.	Macoris.	French Line.	New Orleans via wayports.	March 2.	No. 145-M.	Uraba, Medellin & Cent. Airways.
March 1.	No. 144-M.	Pan American-Grace Airways.	Hayre via wayports.	March 2.	Macoris.	French Line.
March 1.	No. 414-H.	Pan American Airways.	Chiclayo via wayports.	March 2.	Maranon.	Pan American-Grace Airways.
March 2.	Guayaquil.	Pan American Airways.	Salvador via wayports.	March 3.	No. 144-M.	United Fruit Co.
March 2.	Gritholm.	Swedish-American Line.	New York, N. Y.	March 3.	Gritholm.	Swedish-American Line.
March 3.	No. 609-M.	Pan American Airways.	Miami via wayports.	March 3.	Quirigua.	Pan American Airways.
March 3.	Quirigua.	United Fruit Co.	New Orleans via Habana.	March 4.	No. 414-H.	Pan American Airways.
March 3.	United Fruit Co.	United Fruit Co.	New York via Habana.	March 4.	No. 145-M.	Costa Rica.
March 3.	Costa Rica.	Royal Netherlands S. S. Co.	Amsterdam via wayports.	March 4.	Trivex.	United Fruit Co.
March 3.	No. 145-M.	Pan American Airways.	Medellin via wayports.			
March 4.	Haiti.	Colombian Line.	New York via wayports.			
March 4.	Skaola.	United Fruit Co.	New York via wayports.			

PORT OF BALBOA.

Date.	* ARRIVALS.			* DEPARTURES.		
	Vessel.	Line.	From—	Date.	Vessel.	Line.
February 26.	Reliance.	Hamburg-American Line.	New York via wayports.	February 26.	Talamanca.	United Fruit Co.
February 26.	No. 9073.	Pan American Airways.	San Salvador via wayports.	February 26.	Tutra.	Lafargue Brothers.
February 26.	No. 300-N.	Pan American-Grace Airways.	Talara via wayports.	February 28.	Rakuyo Maru.	Nippon Yusen Kaisha.
February 26.	Anacuena.	A. Tagaropulos.	Colon, R. P.	March 3.	Nuevo Panama.	Haus Eliot.
February 27.	Veragua.	United Fruit Co.	Port Limon, Costa Rica.	March 4.		
February 27.	Kingsholm.	Swedish-American Line.	New York via wayports.			
February 27.	No. 145-M.	Uraba, Medellin & Cent. Airways.	Medellin, Colombia.			
February 27.	No. 609-M.	Pan American Airways.	Barranquilla, Colombia.			
February 28.	Annetta J.	P. W. Hamilton.	Colon, R. P.			
February 28.	Inapaquina.	A. Tagaropulos.	Colon, R. P.			
February 28.	Camden.	United Fruit Co.	Curacao, D. W. I.			
February 28.	Macoris.	French Line.	New Orleans via wayports.			
March 1.	No. 144-M.	Pan American-Grace Airways.	Hayre via wayports.			
March 1.	No. 414-H.	Pan American Airways.	Chiclayo via wayports.			
March 2.	Guayaquil.	Pan American Airways.	Salvador via wayports.			
March 2.	Gritholm.	Swedish-American Line.	New York, N. Y.			
March 3.	No. 609-M.	Pan American Airways.	Miami via wayports.			
March 3.	Quirigua.	United Fruit Co.	New Orleans via Habana.			
March 3.	United Fruit Co.	United Fruit Co.	New York via Habana.			
March 3.	Costa Rica.	Royal Netherlands S. S. Co.	Amsterdam via wayports.			
March 3.	No. 145-M.	Pan American Airways.	Medellin via wayports.			
March 4.	Haiti.	Colombian Line.	New York via wayports.			
March 4.	Skaola.	United Fruit Co.	New York via wayports.			

* Tanker. ¹⁵ Motor schooner. ¹⁶ Motor ship. ¹⁷ Submarine. ¹⁸ For orders. ¹⁹ General, lumber, and Diesel oil.

²⁰ Coffee, nuts, and hals.

²¹ Air mail carrier.

²² Motor boat.

²³ Other than ships passing through the Canal.

²⁴ Wheat, flour, fruit, and general.

San Francisco, Calif.
Panama Bay, R. P.
Valparaiso, Chile.
Buenaventura, Colombia.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending March 4, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Nuevo Panama.....	Hans Elliot.....	.....	February 26	.....	171
Ancon.....	Panama R. R. S. S. Line.....	.....	February 26	.....	419
Los Angeles.....	Hamburg-American Line.....	.....	February 26	.....	76
Nankai Maru.....	Osaka Shosen Kaisha.....	.....	February 26	.....	62
Colombia.....	Colombian S. S. Line.....	.....	February 26	.....	728
Santa Marta.....	United Fruit Co.....	.....	February 26	.....	68½
Hoyanger.....	Westfal Larsen & Co.....	February 26	February 26	(¹)	½
Durazzo.....	Hamburg-American Line.....	.....	February 27	.....	156
Veragua.....	United Fruit Co.....	February 27	February 27	12	82
Syra.....	Hamburg-American Line.....	February 28	February 28	60	256
Margaret Johnson.....	Johnson S. S. Line.....	February 28	February 28	(²)	273
Santa Rosa.....	Panama Mail S. S. Co.....	February 28	February 28	389	53
Camden.....	United Fruit Co.....	February 28	February 28	3,629	6
Contessa.....	Standard Fruit & S. S. Co.....	February 28	March 1	193	584
Oregon.....	French Line.....	February 28	March 1	140	(³)
Santa Clara.....	Grace Line.....	March 1	March 1	163	125
Albert Voegler.....	Hamburg-American Line.....	March 1	March 1	166	15
Drechtijk.....	Holland-America Line.....	March 1	March 2	(³)	403
Macoris.....	French Line.....	March 1	March 2	51	323
Niederwald.....	Hamburg-American Line.....	March 2	March 3	41	259
Anna Maersk.....	Isbrandtsen Moller Co.....	March 2	March 2	8	60
Santa Cecilia.....	Panama Mail S. S. Co.....	March 2	March 2	31	13
Guayaquil.....	Panama R. R. S. S. Line.....	March 2	.....	869	.....
Vancouver.....	Hamburg-American Line.....	March 2	March 3	66	2
Santa Barbara.....	Grace Line.....	March 2	March 3	139	571
Tai Shau.....	Barber S. S. Line.....	March 2	March 3	397	(³)
Wisconsin.....	French Line.....	March 3	March 3	17	(³)
President Monroe.....	Dollar Line.....	March 3	March 3	2	(³)
Quirigua.....	United Fruit Co.....	March 3	March 3	229	22
Salsaas.....	Anglo-Saxon Petroleum Co.....	March 3	.....	6,468	.....
Tivives.....	United Fruit Co.....	March 3	March 4	565	158
Costa Rica.....	Royal Netherlands S. S. Co.....	March 3	March 4	123	(³)
Cerigo.....	Hamburg-American Line.....	March 4	.....	930	.....
Acajutla.....	Pacific Steam Navigation Co.....	.....	March 4	.....	710
Sixola.....	United Fruit Co.....	March 4	.....	479	.....
Haiti.....	Colombian S. S. Line.....	March 4	.....	179	.....

¹ No cargo discharged.

² No cargo laded.

³ Six cases.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending February 25, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Pennsylvania.....	Panama-Pacific Line.....	February 20	February 21	.....	118
Nuevo Panama.....	Hans Elliot.....	February 20	February 20	60	.....
Laurits Swenson.....	Fred Olsen & Co.....	February 23	February 23	375	.....
Santa Ana.....	Panama Mail S. S. Co.....	February 24	February 24	31	50
Virginia.....	Panama-Pacific Line.....	February 24	February 24	.....	62
Acajutla.....	Pacific Steam Navigation Co.....	February 25	February 25	1	.....
Santa Lucia.....	Panama Mail S. S. Co.....	February 25	February 25	153	97

Official Circular.

Aviation.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., February 28, 1933.

To all concerned:

The following is published for the information and guidance of all concerned:

1. The Senior Aeronautical Inspector is hereby designated as the official to represent the Governor of The Panama Canal in matters pertaining to aviation in the Canal Zone.

2. The Marine Superintendent is hereby designated as the official to represent the Governor of The Panama Canal in carrying out the provisions of Chapter III, Entrance and Clearance of Aircraft, and Chapter IX, Air Traffic Rules, of the Regulations to Govern Air Navigation in the Canal Zone.

J. L. SCHLEY,
Governor.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of the Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.

The Hydrographic Office at Cristobal maintain at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometric comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

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The Panama Canal, Washington, D. C.

Entered as second-class matter, February 6, 1918, at the Post Office
at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI. Balboa Heights, C. Z., March 15, 1933. No. 33.

Cargo Through the Canal During February, 1933.

On pages 452 and 453 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in February, 1933. This cargo, segregated according to direction as compared with February, 1932, and the differences, are shown in the following tabulation:

	February, 1932.	February, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	526,838	338,249	-188,589
Pacific to Atlantic.....	1,118,555	1,096,613	-21,942
Total.....	1,645,393	1,434,862	-210,531

Total cargo through the Canal in the past month made a decline of 210,531 tons, or 12.8 per cent, in comparison with February, 1932. The larger part of this loss occurred in the Atlantic to Pacific movement, tonnage in that direction decreasing 188,589 tons, or 35.8 per cent. In the Pacific to Atlantic movement there was a decline of 21,942 tons, or 2.0 per cent. In the Atlantic to Pacific movement a heavy loss in the movement of cotton and less important losses in several other commodities, notably mineral oils, were the chief reasons for the marked decline in that direction.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Of the 338,249 tons originating in the Atlantic areas the cargo coming from the United States amounted to 256,589 tons, or 75.9 per cent of the total moving from the Atlantic to the Pacific during the month. This was a decrease of 158,902 tons, or 38.2 per cent, in comparison with the tonnage coming from the east coast of the United States in February, 1932. Cargo tonnage from Europe, amounting to 53,656 tons, or 15.9 per cent of the total moving from the Atlantic to the Pacific during the past month, registered a decline of 23,002 tons, or 30.0 per cent, in comparison with February, 1932. Tonnage from the United States and Europe made up almost 92 per cent of the total moving from the Atlantic to the Pacific in February, 1933. The proportion of the total tonnage originating in the United States in the past month was slightly lower than that in February, 1932, while from Europe it was a little higher.

Destination.—Segregated with respect to destination, Pacific-bound tonnage through the Canal in February, 1933, was reported as follows: 137,987 tons, or 40.8 per cent, to the United States; 118,184 tons, or 34.9 per cent, to Asia; 33,401 tons, or 9.9 per cent, to Australasia; and 26,235 tons, or 7.8 per cent, to South America. Tonnage to all these areas declined in comparison with February, 1932, as follows: To

the United States, 47,513 tons, or 25.6 per cent; to Asia, 90,375 tons, or 43.3 per cent; to Australasia, 20,917 tons, or 38.5 per cent; and to South America, 8,716 tons, or 24.9 per cent. The percentage of the total cargo destined to the United States made an increase in comparison with that in the corresponding month a year ago, as did that to South America, while the percentages to Asia and Australasia declined.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in February, 1933, 517,954 tons, or 47.2 per cent of the total, originated in the United States; 254,012 tons, or 23.2 per cent, in Canada; 161,851 tons, or 14.8 per cent, in South America; 89,319 tons, or 8.1 per cent in Asia; and 31,985 tons, or 2.9 per cent, in Australasia. Tonnage from the United States made an increase of 90,432 tons, or 21.2 per cent, in comparison with February, 1932. Small increases also were recorded as follows: From Canada, 1,690 tons, or 0.7 of one per cent, and from Asia, 770 tons, or 0.9 of one per cent. From South America there occurred a decrease of 64,270 tons, or 28.4 per cent, and from Australasia there was a loss of 51,425 tons, or 61.7 per cent. The areas showing increases in actual tonnage made gains in the percentage of the total cargo as compared with February, 1932, while from the regions where decreases were noted there occurred proportionate corresponding declines in percentage of total. An increase in mineral oil shipments was the chief reason for the increase in tonnage from the United States. The heavy loss from South America was due to smaller shipments of nitrate and discontinuance of iron ore shipments. The loss from Australasia was probably due in part to the transfer to other routes of a number of vessels plying between Europe and New Zealand.

Destination.—Segregated according to destination, 509,453 tons, or 46.5 per cent of the cargo moving from the Pacific to the Atlantic, were reported destined to ports on the east coast of the United States, and 539,098 tons, or 49.3 per cent, to European ports. These two areas absorbed 95.8 per cent of the total cargo moving from the Pacific to the Atlantic in the past month. Cargo destined to the United States made an increase of 36,861 tons, or 7.8 per cent, in comparison with February, 1932, while to Europe there occurred a loss of 33,374 tons, or 5.8 per cent. The percentage of the total to the United States also registered an increase in comparison with February, 1932, while that to Europe was slightly less.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify approximately 92 per cent of the total cargo in transit through the Canal from the Atlantic to the Pacific during the month of February, 1933. The remaining 8 per cent consisted, for the most part, of manufactured articles in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 5,000 tons for February, 1932, or February, 1933, are listed in the following tabulation, showing the differences:

Commodity.	February, 1932.	February, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Ammonium compounds.....	12,395	4,317	-8,078
Asphalt and tar.....	969	6,129	+5,160
Automobiles and parts.....	9,702	7,488	-2,214
Canned goods (fish, fruit, vegetables, etc.).....	12,086	7,698	-4,388
Chemicals.....	5,230	4,531	-699
Corn.....	8,508	9,353	+845
Coal and coke.....	9,777	3,443	-6,334
Coffee.....	5,133	3,812	-1,321
Cotton, raw.....	123,594	39,461	-84,133
Manufactures of iron and steel.....	54,111	37,813	-16,298
Machinery.....	7,808	3,791	-4,017
Metal scrap.....	2,938	18,999	+16,061
Nitrates.....	6,358	6,174	-184
Oils, mineral.....	54,457	18,782	-35,675
Paper.....	17,129	18,218	+1,089
Phosphates.....	26,671	15,501	-11,170
Slag.....	11,670	273	-11,397
Sugar.....	195	7,136	+6,941
Sulphur.....	20,135	12,330	-7,805
Textiles.....	5,038	5,184	+146
Tinplate.....	11,270	8,492	-2,778

The above 21 commodity groups for February, 1933, comprise about 71 per cent of the total cargo moving from the Atlantic to the Pacific. Six of the items made gains in comparison with February, 1932, while the balance decreased.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 per cent of the cargo moving from the Pacific to the Atlantic during February, 1933. Commodities which aggregated more than 5,000 tons either during the past month or February, 1932, are listed below, showing the differences:

Commodity.	February, 1932.	February, 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	4,849	18,710	+13,861
Beans, edible, dry.....	12,924	10,054	-2,870
Borax.....	7,076	4,997	-2,079
Canned goods (fish, fruit, vegetables, etc.).....	52,098	51,824	-274
Coffee.....	15,621	19,723	+4,102
Cold storage and refrigerated products *.....	42,342	22,621	-19,721
Flour.....	13,228	16,828	+3,600
Fruit, dried.....	19,182	20,868	+1,686
Fruit, fresh.....	29,944	30,561	+617
Lumber.....	156,358	108,351	-48,007
Metals, principally copper.....	34,449	23,189	-11,260
Nitrates.....	64,260	33,259	-31,001
Oats.....	11,884	4,742	-7,142
Oil, coconut.....	13,834	1,000	-12,834
Oil, mineral.....	191,702	307,027	+115,325
Ores.....	38,265	9,596	-28,669
Paper.....	9,711	6,003	-3,708
Rice.....	9,622	1,418	-8,204
Sugar.....	102,992	121,085	+18,093
Wheat.....	195,678	211,626	+15,948
Wood pulp.....	8,003	4,554	-3,449
Wool.....	15,081	9,791	-5,290

* Does not include fresh fruit.

The above 22 commodity groups for February, 1933, comprise almost 95 per cent of the cargo tonnage moving from the Pacific to the Atlantic. Eight of the items showed increases and the balance decreases in comparison with February, 1932. A heavy increase was recorded in shipments of mineral oils, and less important gains in barley, sugar, and wheat. The most important losses were registered in shipments of lumber, nitrates, and cold storage and refrigerated products.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, February, 1933.
(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						SOUTH AMERICA.						AUSTRALASIA.				ASIA.				Grand total.	Per cent of total cargo.	
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Peru.	West coast of South America. †	Total, South America.	Australia.	New Zealand.	Australasia. ‡	Total, Australasia.	Philippine Islands.	China.	Japan.	Far East. †			Total, Asia.
NORTH AMERICA:																							
UNITED STATES—																							
North Atlantic ports.....	70,291		311		252,939	80,251	1,174	646	315	1,222		3,357	5,600	1,228		6,828	9,104	10,169	42,355	418	62,046	152,482	45.1
South Atlantic ports.....	2,912					2,912							272			272	109	312	3,764		4,185	7,369	2.2
Gulf ports.....	38,063				165	38,228							5,997		1,519	7,516	2,147	10,158	37,409	1,280	50,994	96,738	28.6
Total, United States.....	111,266		311		252,939	81,391	1,174	646	315	1,222		3,357	11,889	2,747		14,616	11,360	20,639	83,528	1,698	117,225	256,589	75.9
East coast of Canada.....																							
Cristobal, C. Z. †.....	585		1,811	10		2,406	937	1,790	1,146	500	10	4,383	4,460	382	696	7,194				51		7,194	2.1
West Indies.....	104	218				322	6,654					6,654										6,840	2.0
Total, North America.....	111,955	218,212			262,952	124,119	8,765	2,436	1,461	1,722	10	10,134	16,329	2,785	2,696	21,810	11,360	20,639	83,579	1,698	117,276	277,599	82.1
EUROPE:																							
British Isles.....	2,032	5,524				7,556	1,172	303	495	1,672		3,042				8,739	940	9,679				20,877	6.2
Belgium.....	3,334	326	2,026			5,686	1,114	2	140	366		1,622										7,308	2.2
Denmark.....	5,497					5,497																5,497	1.6
France.....	349	43				392	17			65		82				680						1,154	0.3
Germany.....	5,013	67	387	117		5,584	652	69	373	975	2,069											7,653	2.3
Holland.....	1,484	211		5		1,700	141	27	59	80	18	325										2,025	0.6
Italy.....	485	31				538	225		138			363										901	0.3
Norway.....	1,319		425	752		2,496	193		80	100		373	810			810						3,679	1.1
Spain and Portugal.....							61			35		96										96	0.0
Sweden.....	1,993	6	182			2,181	1,104	55	110	112	1,381	482	422			422						3,984	1.2
Europe †.....							3	4		4	471	482										482	0.1
Total, Europe.....	21,506	6,208	3,042	874		31,630	4,682	460	1,257	3,547	489	10,435	1,232	8,739	1,620	11,591						53,656	15.9
East coast of South America.....																							
Asia.....	4,501	154				4,655		1,406				1,406							908		908	6,969	2.0
Grand total.....	137,987	6,580	5,164	1,136	9,562	160,429	13,447	4,302	2,718	5,209	499	26,235	17,561	11,524	4,316	33,401	11,360	20,639	84,487	1,698	118,184	338,249	100.0
Per cent of total cargo:																							
February, 1933.....	40.8	2.0	1.5	0.3	2.8	47.4	4.0	1.3	0.8	1.6	0.1	7.8	5.2	3.4	1.3	9.9	3.3	6.1	25.0	0.5	34.9	100.0	.....
February, 1932.....	35.2	2.3	0.8	2.4	2.8	43.5	4.0	0.4	0.4	1.5	0.3	6.6	4.4	5.7	0.2	10.3	2.0	6.4	30.1	1.1	39.6	100.0	.....
February, 1931.....	48.7	4.0	2.9	0.5	2.1	58.2	5.9	0.6	0.3	1.8	1.2	9.8	1.6	10.6	0.4	12.6	2.4	3.6	4.4	9.0	19.4	100.0	.....

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, February, 1932.

(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.						EUROPE.													Grand total.	Per cent of total cargo.					
	UNITED STATES.						Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Spain and Portugal.	Sweden.	Europe, 1	Total, Europe.			East coast of South America.	Asia.	Africa.		
	North Atlantic ports.	South Atlantic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Central America.																			Cristobal, C. Z., 2	West Indies.
NORTH AMERICA:																										
West coast of U. S.	330,576	5,672	36,659	372,907	168	1,646	8,432	383,153	68,579	6,802	221,15	924	12,856	9,999		132	2801	7,7514	796131	3642	706	500	231			
W. coast Canada.	22		780	802	125	73	2,602	3,602	168,335	11,152	9,170	3,825	6,895	9,035		1,760		25,385	126,248	323	2,087					
W. coast C. Amer.	1,600			1,600		6,062	233	7,895	472	7	57	463	5,317	190			1,975	1,563	2	9,846						
Bahia, C. Z.				253		253		253																		
Hawaiian Islands.	21,939			1,529	23,468			23,468																		
Total, N. A.	354,137	5,672	38,968	398,777	293	8,064	11,267	418,401	237,386	17,961	9,448	20,212	25,068	19,224		1,892	2,2553	1,6352	924	389,533	4,793	500	231			
SOUTH AMERICA:																										
Chile.	8,030			8,030		122	390	8,542	10,358	879		6,650	4,182	2,194			291	514	22,204	48,010						
Colombia.	1,392			1,392		4,090	79	5,561					92							92						
Ecuador.	10,116			10,116		1,619	10	11,745	56	13,083			11							13,100						
Peru.	2,100			2,100		223	15	17,761	42,902	2,454		55	122	11,463						56,997						
W. coast S. Amer.				20		20		20												23						
Total, S. A.	21,638			21,638		6,074	494	43,629	53,316	13,912	2,454	6,705	4,407	13,657			291	515	22,227	118,222						
AUSTRALASIA:																										
New Zealand.	301			301		26		642	31,343											31,343						
Total, Aust. Asia.	301			301		26		642	31,343											31,343						
ASIA:																										
Philippine Islands.	71,352			8,600				79,952																		
China.	3,358			3,358		233	8	3,599																		
Japan.	4,348			4,348		253	88	4,689																		
Far East.	1,079			1,079				1,079																		
Total, Asia.	80,137			8,600		486	96	89,319																		
Grand total.	456,213	5,672	47,568	509,453	15,738	293	14,650	11,857	551,991	322,045	31,873	11,902	26,917	29,475	32,881		1,892	2,284	4,678	75,151	539,098	4,793	500	231		
Per cent of total cargo:																										
February, 1932.	41.6	0.5	4.4	46.5	1.4	1.3	1.1	50.3	29.4	2.9	1.1	2.5	2.7	3.0		0.2	0.2	0.4	6.9	49.3	0.4					
February, 1932.	39.1	0.3	3.3	42.7	3.1	1.5	1.4	48.7	26.1	2.8	0.9	1.8	3.3	1.9	0.5	1.3	0.2	12.4	51.2	0.1	0.1					
February, 1931.	47.4	5.6	5.3	58.3	0.5	1.9	0.5	61.2	16.4	1.7	0.7	2.8	2.4	1.5	0.2	1.5		11.0	38.2	0.6	0.6					

1. General cargo not routed so as to allow segregation between definite ports.
2. Includes both local and transit cargo.
3. Includes Sweden.

* General cargo not routed so as to allow segregation between definite ports.

* Includes both local and transit cargo.

* Includes Sweden.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, March 11, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Somersby	4	17 05	5	6 15	5	17 49	5	19 14	British.	R. Ropner & Co.	421.2	54.0	17.1	Habana, Cuba.	Vancouver, B. C.	Ballast.	1,834	6,352	4,628
Tai Yang	4	22 20	5	7 20	5	18 45	5	20 05	Norwegian.	Wih. Wilhelmsen	461.4	60.6	19.0	New York, N. Y.	Shanghai, China.	General.	2,550	10,009	7,075
Rialto	5	10 50	5	15 07	5	22 12	6	16 20	Italian.	Nav. Libera Italiana.	430.8	55.0	16.5	Trieste, Italy.	Vancouver, B. C.	General.	3,300	7,817	6,012
Peter Kerr	5	15 10	6	6 10	6	12 57	6	14 05	American.	Quaker S. S. Line.	415.0	55.7	18.6	New York, N. Y.	Tacoma, Wash.	General.	225	7,704	5,696
Cerigo	6	21 00	6	11 30	6	20 53	6	22 00	German.	Hamburg-American Line	227.2	34.4	13.4	Cristobal, C. Z.	Guayaquil, Ecuador	General.	225	1,572	1,011
Schiffbek	6	10 20	6	11 55	6	20 45	6	22 00	German.	Knorr & Burchard	281.0	44.0	13.0	Savannah, Ga.	Yavaros, Mexico.	Ballast.	2,571	1,822	1,011
Trevellyn	6	3 05	6	13 30	6	21 48	6	23 00	British.	Hain S. S. Co.	400.7	52.3	13.0	Portland, Me.	Vancouver, B. C.	Ballast.	5,835	4,100	4,100
Canadian Highlander	6	20 55	7	6 05	7	19 14	7	20 25	British.	Can. Nat. Steamships	400.0	52.0	19.11	Halifax, N. S.	Melbourne, Aus'tia.	General, paper.	3,100	6,192	4,402
S-12	7	7 15	7	7 15	7	19 15	7	20 25	American.	U. S. Navy	231.0	21.1		Cristobal, C. Z.	Balboa, C. Z.	Ballast.	1,844		
Republic	7	7 15	7	7 35	7	16 35	8	11 45	American.	U. S. Army	599.5	68.2	30.9	Brooklyn, N. Y.	Honolulu, T. H.	General.	3,267	7,611	5,365
Steel Trader	7	4 10	7	9 40	7	20 22	7	21 30	American.	Isthmian S. S. Lines	424.2	56.2	21.0	Portland, Me.	Vancouver, B. C.	General.	1,155	4,321	3,111
Jason	7	5 05	7	11 20	7	21 30	7	22 45	Dutch.	Royal Neth. S. S. Co.	346.4	49.0	16.3	Amsterp, Belgium.	San Antonio, Chile.	General.	1,638	9,258	6,944
Mexican	7	12 50	7	13 05	7	22 30	7	23 47	American.	Amer-Hawaiian Line.	472.3	57.2	19.0	Boston, Mass.	Tacoma, Wash.	General.			
Cuyama	6	14 45	8	6 00	8	13 42	8	15 00	American.	U. S. Navy	455.0	56.0	22.3	Cristobal, C. Z.	Los Angeles, Calif.	Ballast.			
E. T. Bedford	8	3 05	8	7 20	8	16 15	8	17 30	American.	Standard Shipping Co.	499.2	68.0	20.0	New York, N. Y.	Talara, Peru.	Ballast.	10,994		7,893
Mentor	8	7 40	8	8 45	8	17 20	8	18 30	British.	Blue Funnel Line.	455.0	56.2	24.0	Boston, Mass.	Yokohama, Japan.	General.	2,254	8,153	5,842
West Nilus	7	23 55	8	10 00	8	18 25	8	19 35	American.	McCormick S. S. Co.	410.3	54.3	19.0	Buenos Aires, Arg.	Vancouver, B. C.	General.	3,105	6,583	5,095
Lochkatrine	7	19 25	8	11 20	8	19 20	8	20 35	British.	Royal Mail Lines, Ltd.	485.4	62.0	20.0	London, England.	Vancouver, B. C.	Coffee, chalk.	1,960	10,802	7,595
Lapwing	8	14 15	8	6 00	8	13 45	8	14 55	American.	U. S. Navy	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.			
City of Canada	8	14 15	8	14 35	8	22 00	9	00 50	British.	Ellerman Lines, Ltd.	454.0	52.0	22.0	New York, N. Y.	Melbourne, Aus'tia.	General.	2,086	9,194	6,915
Canadian	7	1 20	8	15 10	8	22 55	9	00 12	British.	Can. Nat. Steamships	400.3	52.4	17.4	Halifax, N. S.	Dunedin, N. Z.	Paper, auto, gen.	1,002	5,891	4,114
Real	7	18 35	8	10 25	8	19 30			Panamanian	Hans Elliot	62.2	17.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast.		46	22
Dorothy Luckenbach	8	18 48	9	6 40	9	19 16	9	20 15	American.	Luckenbach Line.	448.9	60.2	21.0	Boston, Mass.	Seattle, Wash.	General.	2,875	9,294	6,861
San Valerio	9	2 35	9	7 30	9	20 35	10	00 33	British.	Eagle Oil & Ship. Co.	420.0	55.0	24.6	Pro. Mexico, Mex.	Valparaiso, Chile.	(+)	8,950	6,672	4,339
Steel Inventor	5	13 05	9	9 30	9	21 30	9	22 35	American.	Isthmian S. S. Lines	424.2	56.2	20.6	Hopewell, Va.	Honolulu, T. H.	General.	3,221	7,611	5,450
Sollund	5	13 05	9	10 30	9	22 50	9	23 57	Norwegian.	Panama Mail S. S. Co.	222.0	32.0	11.2	Cristobal, C. Z.	Acajutla, Salvador.	Ballast.	980	980	579
Hudkiss	9	7 20	9	12 15	9	23 53	10	5 13	Swedish.	M. Velez	200.0	31.0	14.6	Rio Hacha, Colom.	Tumaco, Colombia	Ballast.	630	800	488
Jeff Davis	9	12 50	9	13 00	9	23 53	10	5 13	American.	Rosevelt S. S. Co.	395.6	55.0	26.0	Philadelphia, Pa.	Yavaros, Mexico.	Salt.	4,857	7,329	5,233
Porto Bello	9	16 05	9	16 05	9	21 35	10	21 35	Panamanian	A. Tagaropoulos	46.0	15.6		San Blas, R. P.	Panama, R. P.	Coconuts	20	31	19
President Wilson	9	16 05	10	6 05	10	14 41	10	21 35	American.	Dollar Line.	516.5	72.2	27.8	New York, N. Y.	San Francisco, Cal.	General, autos.	2,391	15,286	10,568
Accl Johnson	9	14 15	10	7 10	10	15 49	10	21 56	Swedish.	Johnson Line.	409.6	55.2	18.9	Stockholm, Sweden	Vancouver, B. C.	(+)	1,858	6,642	4,800
Endurance	10	7 20	10	7 20	10	15 55	10	16 15	Panamanian	Esteban Garcia.	60.0	14.6		San Blas, R. P.	Panama, R. P.	Coconuts		36	24
La Plata Maru	9	18 15	10	8 30	10	19 55	10	20 00	Japanese.	Osaka Shosen Kaisha.	430.0	56.0	22.0	Buenos Aires, Arg.	Kobe, Japan.	Cotton, general.	3,928	7,875	5,821

Pennsylvania...	10	8 15	10 10	10 00	10 18	45 11	1 13	American.	Panama-Pacific Line.	586 4	80 3	27 7	San Francisco, Cal.	2 753 25	267 18	193.
Tacoma.	9	6 20	10 05	10 05	10 21	08 10	22 15	German.	Hamburg-America Line.	477 6	63 0	22 6	General.	2 888 10	277 7	304.
Kennerly II.	6	11 20	10 10	10 55	10 22	10 10		American.	K. C. Smith.	169 4	25 5	10 6	Ballast.	2 888 10	277 7	304.
William A.	9	15 50	10 11	10 25	10 23	30 10	23 55	American.	McCormick S. S. Co.	395 0	55 0	16 0	Tacoma, Wash.	1 800	6 993	5 099
McKenney.	9	15 15	10 11	10 40	10 23	27 11	00 44	French.	French Line.	424 0	54 0	16 3	Iron, exp., gen.	1 861	7 503	5 242
Steel Navt- gator.	10	11 30	10 12	10 35	11 00	40 11	6 30	American.	Isthmian S. S. Lines.	424 2	56 2	23 0	General.	5 629	7 611	5 454
Cal.	9	15 25	10 13	10 55	11 20	00 11		German.	North German Lloyd.	216 5	33 0	12 7	General.	1 105	698	
El Aleto	10	14 20	10 14	10 35	11 17	47 11	2 54	British.	Anglo-Berand. Oil Co.	440 0	57 6	21 0	Ballast.	7 555	5 049	
10-10	10				10 9	42		American.	U. S. Army.				Ballast.			
No. 101.	10				10 9	42		American.	U. S. Army.				Ballast.			
San Francisco.	10	18 15	11 6	15 11	13 23	11	30 25	American.	Panama Mail S. S. Co.	484 0	72 0	24 0	General.	2 506	13 948	9 217
San Francisco.	10	18 15	11 7	15 11	13 23	11	30 25	American.	Shaw, Savill & Albion.	500 0	63 0	26 0	General.	1 870	13 590	9 233
Matamor.	10	16 15	11 7	15 11	13 23	11	30 25	British.	Shaw, Savill & Albion.	400 0	63 0	26 0	General.	3 058	7 334	5 037
Loreto.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 30	11 8	15 11	18 26	10 30	20 00	British.	United Steam Nav. Co.	405 2	54 3	19 3	General.	3 058	7 334	5 037
Alondra.	10	20 3														

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

14	30	5	4	8	5	13	05	5	14	05	Norwegian.	Panama Mail S. S. Co.	221.6	32.2	15.2	Acajutla, Salvador.	Cristobal, C. Z.	1,088	980	
4	21	00	5	6	01	5	14	05	5	14	05	British.	Dale & Co.	390.0	53.5	25.0	Vancouver, B. C.	London, England.	8,210	5,612
5	00	45	5	7	21	5	14	45	5	14	45	American.	Sun Oil Co.	480.5	66.0	29.1	Los Angeles, Calif.	Chester, Pa.	13,937	9,716
5	2	00	5	8	19	5	16	40	5	16	40	American.	The Texas Co.	465.2	60.0	28.0	Los Angeles, Calif.	Pt. Arthur, Tex.	12,193	8,488
5	8	20	5	9	28	5	17	30	5	21	05	American.	Dollar Line	516.5	72.2	28.3	San Francisco, Cal.	New York, N. Y.	4,542	15,299
5	4	30	5	10	28	5	18	45	5	18	45	American.	Amer.-Hawaiian Line.	414.5	53.7	26.4	Portland, Ore.	Boston, Mass.	4,500	10,585
5	6	30	5	11	36	5	20	15	5	23	00	British.	British Tanker Co.	430.5	57.0	26.3	Estero Bay, Calif.	De Bonc, France	9,808	7,174
5	11	00	5	13	11	5	21	15	5	23	00	American.	Sun Oil Co.	480.5	66.0	29.0	Los Angeles, Calif.	Perth Amboy, N. J.	13,496	9,713
5	12	00	5	14	13	5	22	20	5	22	20	American.	Calmar S. S. Corp.	409.8	54.2	26.0	Seattle, Wash.	Baltimore, Md.	7,700	6,581
5	13	00	5	15	15	5	23	00	5	23	00	American.	U. S. Army.	155.0	32.0	5.0	Pedro Miguel, C. Z.	Cristobal, C. Z.		1
5	14	00	5	16	16	5	24	00	5	24	00	American.	D. M. Welker.	153.5	31.0	5.0	Miraflores Lake.	Baiba, C. Z.		1
6	4	00	6	17	17	6	25	00	6	25	00	American.	U. S. Navy.	455.0	56.2	29.0	San Diego, Calif.	Coco Solo, C. Z.	7,100	410
6	6	30	6	19	19	6	27	00	6	27	00	Colombian.	Tagaropolis Bros.	150.0	27.0	9.5	Buenaventura, Col.	Santa Marta, Col.	300	307
6	2	15	6	21	21	6	29	00	6	29	00	American.	Shell Oil Co.	425.0	57.2	29.0	San Francisco, Cal.	River, Mex.	10,714	5,095
6	16	22	6	22	22	6	30	00	6	30	00	Panamaian.	Robert Wilcox.	48.0	11.0	8.0	Baiba, C. Z.	Cristobal, C. Z.		27
6	11	45	7	13	25	7	14	05	7	14	05	American.	Panama-Pacific Line.	574.4	80.6	30.0	San Francisco, Cal.	New York, N. Y.	7,210	24,500
7	5	20	7	15	10	7	20	35	7	20	35	German.	Hamburg-American Line	401.5	61.1	26.3	Vancouver, B. C.	Hamburg, Germany	7,565	17,565
5	13	45	7	16	15	5	23	00	5	23	00	British.	A. Coolidge.	90.0	21.9	13.0	Galapagos Island.	Gloester, Eng.	7,601	9,267
6	17	30	7	18	15	7	23	00	6	23	00	American.	Heart Product Co.	431.0	59.2	28.0	San Francisco, Cal.	New York, N. Y.	9,150	7,863
7	1	30	7	19	09	7	24	00	7	24	00	British.	Roper Shipping Co.	390.0	55.6	24.0	Vancouver, B. C.	London, England.	7,973	5,930
7	6	45	7	19	58	7	24	00	7	24	00	British.	Furness, Withy & Co.	450.0	60.1	27.3	Vancouver, B. C.	Glasgow, Scotland.	8,178	9,644
7	9	45	7	20	35	7	25	00	7	25	00	Panamaian.	Hans Elliot.	62.0	17.6		Darien, R. P.	Cristobal, C. Z.	32	46
7	10	00	7	21	00	7	26	00	7	26	00	American.	Mine sweeper.							
7	11	00	7	22	00	7	27	00	7	27	00	American.	Paper, cement, and kerosene.							
7	12	00	7	23	00	7	28	00	7	28	00	American.	Transport.							
7	13	00	7	24	00	7	29	00	7	29	00	American.	Sail boat.							
7	14	00	7	25	00	7	30	00	7	30	00	British.	Motor ship.							
7	15	00	7	26	00	7	31	00	7	31	00	British.	Submarine.							
7	16	00	7	27	00	7	32	00	7	32	00	British.	Sail boat.							
7	17	00	7	28	00	7	33	00	7	33	00	British.	Motor ship.							
7	18	00	7	29	00	7	34	00	7	34	00	British.	Submarine.							
7	19	00	7	30	00	7	35	00	7	35	00	British.	Sail boat.							
7	20	00	7	31	00	7	36	00	7	36	00	British.	Motor ship.							
7	21	00	7	32	00	7	37	00	7	37	00	British.	Sail boat.							
7	22	00	7	33	00	7	38	00	7	38	00	British.	Motor ship.							
7	23	00	7	34	00	7	39	00	7	39	00	British.	Sail boat.							
7	24	00	7	35	00	7	40	00	7	40	00	British.	Motor ship.							
7	25	00	7	36	00	7	41	00	7	41	00	British.	Sail boat.							
7	26	00	7	37	00	7	42	00	7	42	00	British.	Motor ship.							
7	27	00	7	38	00	7	43	00	7	43	00	British.	Sail boat.							
7	28	00	7	39	00	7	44	00	7	44	00	British.	Motor ship.							
7	29	00	7	40	00	7	45	00	7	45	00	British.	Sail boat.							
7	30	00	7	41	00	7	46	00	7	46	00	British.	Motor ship.							
7	31	00	7	42	00	7	47	00	7	47	00	British.	Sail boat.							
7	32	00	7	43	00	7	48	00	7	48	00	British.	Motor ship.							
7	33	00	7	44	00	7	49	00	7	49	00	British.	Sail boat.							
7	34	00	7	45	00	7	50	00	7	50	00	British.	Motor ship.							
7	35	00	7	46	00	7	51	00	7	51	00	British.	Sail boat.							
7	36	00	7	47	00	7	52	00	7	52	00	British.	Motor ship.							
7	37	00	7	48	00	7	53	00	7	53	00	British.	Sail boat.							
7	38	00	7	49	00	7	54	00	7	54	00	British.	Motor ship.							
7	39	00	7	50	00	7	55	00	7	55	00	British.	Sail boat.							
7	40	00	7	51	00	7	56	00	7	56	00	British.	Motor ship.							
7	41	00	7	52	00	7	57	00	7	57	00	British.	Sail boat.							
7	42	00	7	53	00	7	58	00	7	58	00	British.	Motor ship.							
7	43	00	7	54	00	7	59	00	7	59	00	British.	Sail boat.							
7	44	00	7	55	00	7	60	00	7	60	00	British.	Motor ship.							
7	45	00	7	56	00	7	61	00	7	61	00	British.	Sail boat.							
7	46	00	7	57	00	7	62	00	7	62	00	British.	Motor ship.							
7	47	00	7	58	00	7	63	00	7	63	00	British.	Sail boat.							
7	48	00	7	59	00	7	64	00	7	64	00	British.	Motor ship.							
7	49	00	7	60	00	7	65	00	7	65	00	British.	Sail boat.							
7	50	00	7	61	00	7	66	00	7	66	00	British.	Motor ship.							
7	51	00	7	62	00	7	67	00	7	67	00	British.	Sail boat.							
7	52	00	7	63	00	7	68	00	7	68	00	British.	Motor ship.							
7	53	00	7	64	00	7	69	00	7	69	00	British.	Sail boat.							
7	54	00	7	65	00	7	70	00	7	70	00	British.	Motor ship.							
7	55	00	7	66	00	7	71	00	7	71	00	British.	Sail boat.							
7	56	00	7	67	00	7	72	00	7	72	00	British.	Motor ship.							
7	57	00	7	68	00	7	73	00	7	73	00	British.	Sail boat.							
7	58	00	7	69	00	7	74	00	7	74	00	British.	Motor ship.							
7	59	00	7	70	00	7	75	00	7	75	00	British.	Sail boat.							
7	60	00	7	71	00	7	76	00	7	76	00	British.	Motor ship.							
7	61	00	7	72	00	7	77	00	7	77	00	British.	Sail boat.							
7	62	00	7	73	00	7	78	00	7	78	00	British.	Motor ship.							
7	63	00	7	74	00	7	79	00	7	79	00	British.	Sail boat.							
7	64	00	7	75	00	7	80	00	7	80	00	British.	Motor ship.							
7	65	00	7	76	00	7	81	00	7	81	00	British.	Sail boat.							
7	66	00	7	77	00	7	82	00	7	82	00	British.	Motor ship.							
7	67	00	7	78	00	7	83	00	7	83	00	British.	Sail boat.							
7	68	00	7	79	00	7	84	00	7	84	00	British.	Motor ship.							
7	69	00	7	80	00	7	85	00	7	85	00	British.	Sail boat.							
7	70	00	7	81	00	7	86	00	7	86	00	British.	Motor ship.							
7	71	00	7	82	00	7	87	00	7	87	00	British.	Sail boat.							
7	72	00	7	83	00	7	88	00	7	88	00	British.	Motor ship.							
7	73	00	7	84	00	7	89	00	7	89	00	British.	Sail boat.							
7	74	00	7	85	00	7	90	00	7	90	00	British.	Motor ship.							
7	75	00	7	86	00	7	91	00	7	91	00	British.	Sail boat.							
7	76	00	7	87	00	7	92	00	7	92	00	British.	Motor ship.							
7	77	00	7	88	00	7	93	00	7	93	00	British.	Sail boat.							
7	78	00	7	89	00	7	94	00	7	94	00	British.	Motor ship.							
7	79	00	7	90	00	7	95	00	7	95	00	British.	Sail boat.							
7	80	00	7																	

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Gross.	Net.
Lillian Luckenbach.	7	9 30	7	11 25	7	20 30	7	21 45	American.	Luckenbach Line.	449 0	60 2	29 0	Portland, Oreg.	Boston, Mass.	General, lumber.	7,195	9,294	6,865
S. A. Perkins.	7	12 15	7	15 30	7	22 55	7	22 55	American.	Swayne & Hoyt.	380 5	53 2	22 5	Seattle, Wash.	Tampa, Fla.	General.	5,137	5,659	4,059
Capt. Harry.	7	17 15	8	4 58	8	13 00	8	23 12	American.	U. S. Army.	436 6	55 4	28 0	Balboa, C. Z.	Cristobal, C. Z.	General.	8,740	7,823	6,029
Felipe.	7	18 00	8	6 20	8	13 50	8	13 50	Italian.	Nav. Labera Triestina.	410 0	52 3	23 0	N. Westminster, B. C.	Trieste, Italy.	General.	6,841	6,235	4,245
Auditor.	7	19 30	8	7 21	8	15 05	8	17 30	British.	T. & J. Harrison.	465 4	62 2	29 0	Vancouver, B. C.	Liverpool, England.	General.	9,341	11,060	8,076
America.	7	22 30	8	8 41	8	15 50	8	15 50	Danish.	East Asiatic Co.	407 7	53 7	24 0	Vancouver, B. C.	Copenhagen, Den.	General, grain.	5,346		
lowat.									American.	Amer-Hawaiian Line.	405 0	55 5	26 0	Seattle, Wash.	Boston, Mass.	General.	8,730	7,075	5,308
Crossington.	8	12 30	8	13 02	8	20 10	8	20 10	British.	Canadian Transp. Co.	407 0	55 5	26 0	Vancouver, B. C.	Avonmouth, Eng.	Grain.	8,730	7,075	5,308
S-14.			9	4 32	9	12 05			American.	U. S. Navy.	231 0	20 0		Balboa, C. Z.	Cristobal, C. Z.				
S-15.			9	4 32	9	12 05			American.	U. S. Navy.	231 0	20 0		Balboa, C. Z.	Cristobal, C. Z.				
Chamont.	7	14 45	9	6 37	9	14 34	10	7 00	American.	U. S. Navy.	448 0	58 2	23 0	Balboa, C. Z.	Hampton Rds., Va.	Navy stores.	450		
Cal.	9	3 40	9	7 15	9	15 25	10	13 55	German.	North German Lloyd.	216 5	32 9	13 4	San Francisco, Cal.	Cristobal, C. Z.	General.	813	1,105	698
Silverwillow.	9	5 30	9	8 45	9	16 25	9	16 25	British.	Silver Line.	450 9	61 3	21 0	Guayaquil, Ecuador.	Cristobal, C. Z.	Coconut oil, gen.	1,985	9,311	6,524
Albion Star.	9	5 45	9	9 45	9	16 55	9	16 55	British.	Blue Star Line.	450 0	58 5	25 0	Calcutta, India.	New Orleans, La.	Frozen, general.	4,866	8,317	5,531
Laponia.	9	9 00	9	10 53	9	18 45	9	18 45	Swedish.	Anglo-Canadian Co.	399 0	53 5	26 2	N. Westminster, B. C.	Newcastle-on-Tyne.	General.	7,812	6,135	4,288
Gregalia.	9	9 25	9	11 55	9	20 05	10	1 00	British.	Donaldson Bros.	425 0	56 0	28 0	Vancouver, B. C.	Leith, Scotland.	General.	7,770	7,827	5,442
Herainger.	9	9 45	9	12 43	9	21 20	9	21 20	Norwegian.	Intercean S. S. Co.	398 1	54 8	27 0	Victoria, B. C.	Glasgow, Scotland.	General.	7,612	6,864	5,260
Nuevo.									Panamanian.	Hans Elliot.	108 9	20 6	9 0	Buenaventura, Col.	Cristobal, C. Z.	Coffee.	213	226	101
Panama.	9	12 30	9	13 08	9	21 35	10	19 50	American.	The Texas Co.	465 0	60 2	25 0	Wilmington, Calif.	Port Arthur, Tex.	Fuel oil.	11,068	8,473	6,104
Swiftgate.	9	13 20	9	14 16	9	23 15	9	23 15	British.	Empire Shipping Co.	406 9	52 3	25 0	Victoria, B. C.	United Kingdom.	Wheat.	7,759	5,738	4,081
Dalvegan.	9	17 10	9	15 01	10	11 15	10	11 15	Japanese.	Nippon Yusen Kaisha.	445 0	58 0	25 3	London, P. I.	New York, N. Y.	Sugar, general.	8,577	9,792	5,686
Takeoyo Maru.	9	20 15	10	4 31	10	16 10	10	19 40	American.	Mitsui & Co.	435 0	58 0	26 0	London, P. I.	New York, N. Y.	General.	8,340	8,299	5,916
Shohai Maru.	9	20 15	10	6 18	10	17 20	10	17 20	Japanese.	U. S. Navy.	180 0	35 6		Balboa, C. Z.	Cristobal, C. Z.	(*)			
Chewink.			10	7 22	10	16 00			Yugoslav.	I. Viebrade.	409 0	55 1	27 0	Talca, Chile.	Cristobal, C. Z.	Nitrate.	8,200	6,584	4,370
Gundule.	5	4 00	10	9 40	10	19 30	10	19 30	American.	U. S. Navy.	409 0	55 1	27 0	Balboa, C. Z.	Cristobal, C. Z.				
Obatacu.									American.	U. S. Army.	448 0	58 0	25 0	Honolulu, T. H.	New York, N. Y.	Army general.	1,127		
Thierry.	9	9 30	10	10 21	10	17 30	11	11 05	German.	Grace Line.	216 5	32 9	14 0	Guayaquil, Ecuador.	Cristobal, C. Z.	General.	1,161	1,132	741
Manizales.	10	8 15	10	11 25	10	20 40	12	8 55	American.	Spec. Italia-Flotte Runita.	482 8	61 8	25 0	Kahului, T. H.	Genoa, Italy.	General.	2,898	12,941	9,329
Virgilio.	10	14 50	10	15 45	10	23 10	12	6 30	Italian.	Spec. Italia-Flotte Runita.	482 8	61 8	25 0	Kahului, T. H.	Genoa, Italy.	Sugar, pineapples.	6,613	7,611	5,450
Steel Engineer.	10	13 45	11	3 58	11	14 19	11	14 00	American.	Ischmian S. S. Lines.	424 0	56 2	26 0	Baltimore, Md.	Baltimore, Md.	General.	3,267	5,957	4,325
Santa Elisa.	10	14 28	11	4 52	11	13 05	12	15 05	American.	Grace Line.	360 3	51 7	24 0	San Francisco, Cal.	New York, N. Y.	General.	5,956	11,911	8,994
Remera.	11	3 00	11	6 13	11	15 30	11	23 55	British.	N. Z. Shipping Co.	485 0	62 3	27 4	Auckland, N. Z.	London, England.	Frozen, general.	5,956	11,911	8,994
Henry D.	10	12 30	11	7 15	11	15 35	11	15 35	American.	Dutton Lumber Co.	356 0	51 6	26 0	Longview, Wash.	Poughkeepsie, N. Y.	Lumber.	5,300	5,367	2,900
Whitton.	11	3 30	11	7 30	11	15 55			British.	Pacific Steam Nav. Co.	215 0	33 5	17 1	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver.	994	1,270	735
Salvador.	10	13 00	11	8 20	11	16 20	11	16 20	British.	Pacific Steam Nav. Co.	406 3	56 0	25 1	Victoria, B. C.	Liverpool, England.	General.	9,234	6,997	4,955
Appledore.	10	18 15	11	9 17	11	17 50	11	17 50	American.	Maritime Ship. & Trad.	410 0	54 0	24 0	Portland, Oreg.	Philadelphia, Pa.	Lumber, general.	7,504	6,484	4,675
Reina del.	11	9 10	11	13 49	11	21 45	12	10 15	British.	Pacific Steam Nav. Co.	550 0	76 3	28 0	Valparaiso, Chile.	Liverpool, England.	General.	4,289	18,871	13,099
Pacific.	11	13 00	11	14 50	12	00 50	12	4 10	American.	Ischmian S. S. Lines.	442 1	56 2	26 0	Honolulu, T. H.	New Orleans, La.	Sugar.	8,546	7,611	5,450
Bessemer City.																			

All hours are expressed on the 24 hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
March 5.....	Bögenland.....	Red Star Line.....	New York via wayports.	March 5.....	Sixaola.....	United Fruit Co.....	New York via wayports.
March 5.....	No. 945-M ¹⁹	Pan American-Grace Airways.....	Talara via wayports.	March 5.....	Guayaquil.....	Panama R. R. S. S. Line.....	New York via Haiti.
March 5.....	No. 9688 ¹⁹	Pan American Airways.....	San Salvador via wayports.	March 5.....	Haiti.....	Colombian Line.....	New York via wayports.
March 6.....	Quirigua.....	United Fruit Co.....	Port Limon, Costa Rica.	March 5.....	Belgenland.....	Red Star Line.....	New York via Kingston.
March 6.....	No. 145-M ¹⁹	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia.	March 6.....	Anachucuna ²⁰	A. Tagaropulos.....	Colon, Rep. of Panama.
March 6.....	No. 9673 ¹⁹	Guatemala via wayports.	Guatemala via wayports.	March 6.....	No. 660-M ¹⁹	Pan American Airways.....	Barranquilla, Colombia.
March 6.....	No. 660-M ¹⁹	Pan American Airways.....	Miami via wayports.	March 6.....	Quirigua.....	United Fruit Co.....	Talara via wayports.
March 7.....	Cefalu.....	Standard Fruit & S. S. Co.....	New Orleans via wayports.	March 7.....	No. 945-M ¹⁹	Pan American-Grace Airways.....	Talara via wayports.
March 7.....	Dorclan.....	Leyland Line.....	Liverpool via wayports.	March 7.....	No. 945-M ¹⁹	Leyland S. S. Line.....	Savanna-La-Mar, Jamaica.
March 7.....	Magdalena.....	Hamburg-American Line.....	Puerto Barrios.	March 8.....	Cefalu.....	Standard Fruit & S. S. Co.....	New Orleans via wayports.
March 7.....	Thille Lykes.....	Lykes Brothers S. S. Co.....	Houston via wayports.	March 8.....	Magdalena.....	Hamburg-American Line.....	Hamburg via wayports.
March 7.....	Amelia I. ²⁰	P. W. Hamilton.....	Colon, Rep. of Panama.	March 8.....	Inapaquina ²⁰	French Line.....	Colon, Rep. of Panama.
March 8.....	Cristobal.....	Panama R. R. S. S. Line.....	New York via Haiti.	March 9.....	Lafayette.....	Pan American Airways.....	New York via Habana.
March 8.....	Lafayette.....	French Line.....	San Salvador via wayports.	March 9.....	No. 660-M ¹⁹	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia.
March 8.....	No. 9685 ¹⁹	Pan American Airways.....	Talara via wayports.	March 9.....	No. 145-M ¹⁹	Pan American Airways.....	Guatemala via wayports.
March 8.....	No. 945-M ¹⁹	Pan American-Grace Airways.....	Colon, Rep. of Panama.	March 9.....	Thille Lykes.....	Lykes Brothers S. S. Co.....	San Domingo via wayports.
March 8.....	Inapaquina ²⁰	A. Tagaropulos.....	Miami via wayports.	March 10.....	Cavina.....	United Fruit Co.....	Avonmouth via wayports.
March 9.....	No. 670-M ¹⁹	Pan American Airways.....	Avonmouth via wayports.	March 10.....	Peten.....	Elders & Fyffes, Ltd.....	Port Limon, Costa Rica.
March 10.....	Zacapa.....	United Fruit Co.....	New Orleans via wayports.	March 10.....	No. 22-V ¹⁹	Pan American-Grace Airways.....	Chetumal via wayports.
March 10.....	Peten.....	United Fruit Co.....	New York via wayports.	March 11.....	Pearl Marie ²¹	G. I. Bryan.....	Bluefields, Nicaragua.
March 10.....	Klondyke ²¹	Maxwell Newball.....	San Andres, Colombia.	March 11.....	Mauritania.....	Cunard Line.....	New Orleans via wayports.
March 10.....	No. 145-M ¹⁹	Anglo-Saxon Petroleum Co.....	Medellin, Colombia.	March 11.....	Zacapa.....	United Fruit Co.....	New Orleans via wayports.
March 10.....	Herbhorn.....	Royal Netherlands S. S. Co.....	Curacao, D. W. I.				
March 11.....	Costa Rica.....	Cunard Line.....	Port Limon, Costa Rica.				
March 11.....	Mauritania.....	Colombian Line.....	New York via wayports.				
March 11.....	Pastores.....	United Fruit Co.....	New York via wayports.				
March 11.....	Metapan.....	G. I. Bryan.....	Colon, Rep. of Panama.				
March 11.....	Pearl Marie ²¹						

* DEPARTURES.

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
March 5.....	Velero III.....	G. Allan Hancock.....	La Libertad, Ecuador.	March 8.....	Velero III.....	G. Allan Hancock.....	Los Angeles, Calif.
¹ Tanker.	¹³ Launch.	¹⁶ Motor ship.	¹⁷ Submarine.	¹⁹ Air mail carrier.	²⁰ Motor boat.	²¹ Schooner.	²² Motor schooner.
²³ For orders.	²⁴ Towing barge.						

* Other than ships passing through the Canal.

Commercial Traffic Through the Panama Canal in February, 1933, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of February, 1933, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for February, 1932 and 1931. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States net equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	57	325,208	245,556	399,745	243,347	\$273,471.18	105,051
Europe to Canada:							
Belgian.....	1	6,292	4,986	7,816	5,758	4,530.24	.....
British.....	21	105,177	75,492	122,967	75,766	79,132.95	5,339
Danish.....	1	4,790	2,720	4,605	2,785	3,400.00	.....
Dutch.....	1	7,551	5,776	9,399	5,814	7,220.00	2,676
French.....	1	7,592	4,635	8,379	5,031	5,793.75	863
German.....	5	31,212	20,243	33,835	20,648	24,112.98	8,064
Italian.....	1	9,800	7,912	12,951	8,025	9,890.00	545
Norwegian.....	3	16,575	11,180	18,916	11,286	13,788.85	2,716
Swedish.....	1	5,661	3,406	5,642	4,320	4,257.50	2,197
Total.....	35	194,650	136,350	224,510	139,433	152,126.27	22,400
United States to Far East:							
British.....	4	22,943	14,604	25,323	14,706	18,255.00	19,544
Japanese.....	11	58,294	44,477	71,090	44,291	54,488.85	62,542
Norwegian.....	2	12,042	6,423	11,772	6,618	8,028.75	7,383
United States.....	4	22,636	16,994	27,245	16,999	21,242.50	16,820
Total.....	21	115,915	82,498	135,430	82,614	102,015.10	106,289
Europe to South America:							
British.....	5	33,557	27,136	44,995	27,692	27,792.68	3,868
Dutch.....	1	6,097	3,130	5,538	3,320	3,912.50	1,011
German.....	2	8,349	5,525	9,257	5,542	6,906.25	4,598
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	474
Norwegian.....	1	5,035	2,776	4,746	2,865	3,470.00	1,754
Total.....	10	62,367	43,743	76,254	46,169	48,551.43	11,705
Europe to Australasia:							
British.....	5	43,555	30,401	51,244	31,717	35,573.21	9,679
French.....	1	3,681	3,096	5,123	3,078	3,870.00	680
Swedish.....	1	6,190	3,278	5,841	4,083	4,097.50	1,232
Total.....	7	53,426	36,775	62,208	38,878	43,540.71	11,591
Europe to United States:							
British.....	3	13,867	10,193	16,574	10,086	9,984.24	.....
Danish.....	1	3,651	2,468	4,150	2,506	2,628.72	.....
Norwegian.....	3	15,763	9,029	14,942	9,190	11,286.25	8,471
Swedish.....	1	5,193	3,147	5,293	4,032	3,738.96	.....
Total.....	8	38,474	24,837	40,959	25,814	27,638.17	8,471
United States to Philippine Islands:							
British.....	3	17,030	12,449	20,398	12,672	15,561.25	5,016
Danish.....	1	5,964	3,165	5,339	3,341	3,956.25	5,425
United States.....	1	10,580	8,435	14,127	8,401	10,543.75	1,479
Total.....	5	33,574	24,049	39,864	24,414	30,061.25	11,920
United States to South Amer- ica:							
British.....	2	11,546	9,055	16,167	8,785	8,313.12	.....
United States.....	5	24,128	16,668	29,895	16,484	18,325.57	4,252
Total.....	7	35,674	25,723	46,062	25,269	26,638.69	4,252
United States to Australasia:							
British.....	4	26,487	16,597	26,823	18,676	20,746.25	14,616
Around the world:							
United States.....	2	18,954	14,620	24,658	14,588	18,275.00	4,503

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States net equivalent.	Registered gross.	Registered net.		
United States to Hawaiian Islands:							
United States.....	2	10,695	7,308	11,875	7,272	\$9,135.00	7,316
Canada to Australasia:							
British.....	2	9,752	7,720	12,512	7,655	9,650.00	7,194
South America to Canada:							
Norwegian.....	1	4,723	2,728	4,624	2,765	3,410.00	1,100
United States.....	1	4,842	3,426	5,466	3,452	4,282.50	2,394
Total.....	2	9,565	6,154	10,090	6,217	7,692.50	3,494
Foreign vessels in ballast—							
U. S. intercoastal:							
Norwegian.....	2	8,633	4,641	7,931	4,649	5,801.25	.....
West Indies to South America:							
British.....	1	3,192	2,451	4,040	2,443	2,298.24	.....
Chilean.....	1	3,629	2,878	4,574	2,860	3,597.50	6,654
Danish.....	1	1,716	1,336	2,245	1,348	1,235.52	.....
Total.....	3	8,537	6,665	10,859	6,651	7,131.26	6,654
United States to Canada:							
British.....	1	4,045	3,176	5,243	3,180	2,912.40	.....
United States.....	1	2,612	2,018	3,286	2,030	2,522.50	2,871
Total.....	2	6,657	5,194	8,529	5,210	5,434.90	2,871
Cristobal to South America:							
German.....	7	6,014	4,015	7,602	4,170	5,018.75	1,972
Panamanian.....	2	202	206	406	202	242.40	270
Total.....	9	6,216	4,221	8,008	4,372	5,261.15	2,242
South America to Far East:							
Japanese.....	1	5,821	4,170	7,267	4,387	5,212.50	3,564
West Indies to United States:							
British.....	1	4,964	4,136	6,888	4,080	3,574.08	.....
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	804
Norwegian.....	2	1,158	1,106	1,882	1,114	833.76	.....
Panamanian.....	2	44	48	90	58	52.80	32
Total.....	6	2,643	2,440	4,270	2,476	2,494.06	836
Cristobal to United States:							
United States.....	1	2,606	1,350	2,434	1,349	1,687.50	70
Europe to Central America:							
German.....	1	2,292	1,364	2,359	1,356	1,705.00	1,626
United States to Central America:							
Danish.....	1	1,427	1,458	1,899	1,119	1,093.50	.....
South American intercoastal:							
Colombian.....	1	307	302	405	308	368.40	608
Swedish.....	1	438	442	777	531	552.50	786
Total.....	2	795	744	1,182	839	920.90	1,394
Cristobal to Balboa:							
Panamanian.....	6	294	247	134	189	238.30	10
Central America to South America:							
Panamanian.....	1	101	103	203	101	121.20	180
Grand total, February, 1933..	198	985,727	708,663	1,172,953	717,124	810,217.15	338,249
Grand total, February, 1932..	183	965,643	690,210	1,150,241	692,797	813,922.50	526,838
Grand total, February, 1931..	212	1,072,493	780,220	1,300,803	787,854	912,045.02	465,126

PACIFIC TO ATLANTIC.

United States intercoastal:							
United States.....	48	299,544	223,474	365,773	222,803	\$279,342.50	373,999
Canada to Europe:							
British.....	23	115,836	83,142	131,938	81,128	103,927.50	167,926
Danish.....	4	21,869	13,912	23,722	14,684	17,390.00	33,217
Dutch.....	1	8,266	6,197	10,220	6,385	7,746.25	10,228
French.....	1	7,477	4,382	7,706	4,591	5,477.50	9,613
German.....	3	19,387	12,394	21,425	12,946	15,492.50	25,502
Norwegian.....	8	43,407	24,954	41,691	25,417	31,192.50	62,066

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States net equivalent.	Registered gross.	Registered net.		
Canada to Europe—Continued:							
Swedish.....	3	15,789	9,181	15,724	11,637	\$11,476.25	21,238
United States.....	1	5,245	3,843	6,188	3,822	4,803.75	8,328
Total.....	44	237,276	158,005	258,614	160,610	197,506.25	338,118
South America to Europe:							
British.....	6	27,312	22,724	36,662	22,274	28,260.37	40,666
Dutch.....	3	16,043	10,644	18,201	10,663	13,305.00	24,078
German.....	1	3,392	2,550	4,177	2,588	3,187.50	5,143
Norwegian.....	3	14,233	10,868	18,117	10,865	13,585.00	25,960
United States.....	1	7,974	6,111	9,482	5,923	7,638.75	14,065
Yugoslav.....	1	4,741	3,718	5,908	3,714	4,647.50	9,076
Total.....	15	73,695	56,615	92,547	56,027	70,624.12	118,988
Philippine Islands to United States:							
Japanese.....	5	26,613	22,379	33,911	22,125	27,809.55	37,648
Norwegian.....	3	13,976	7,677	13,214	7,650	9,596.25	23,087
United States.....	4	26,999	20,438	32,018	19,398	25,547.50	27,921
Total.....	12	67,588	50,494	79,143	49,173	62,953.30	88,656
Australasia to Europe:							
British.....	5	48,202	33,509	57,209	35,242	41,886.25	31,369
United States to Europe:							
British.....	1	5,750	4,854	8,208	4,817	6,067.50	11,221
Norwegian.....	2	12,449	10,291	17,164	10,251	12,863.75	22,459
United States.....	1	8,619	7,026	11,247	6,953	8,782.50	15,356
Total.....	4	26,818	22,171	36,619	22,021	27,713.75	49,036
South America to United States:							
British.....	1	5,049	4,395	7,203	4,382	5,493.75	10,109
Chilean.....	1	4,167	3,268	5,689	3,034	4,085.00	6,568
United States.....	2	13,296	7,733	16,175	7,733	9,666.25	5,397
Total.....	4	22,512	15,396	29,067	15,149	19,245.00	22,074
Hawaiian Islands to United States:							
United States.....	3	15,928	11,152	18,040	11,100	13,940.00	21,864
South America to Canada:							
British.....	1	6,772	5,975	11,309	5,781	7,468.75	15,423
Far East to United States:							
Japanese.....	1	6,485	5,205	8,409	5,117	6,506.25	2,773
South America to Cristobal:							
German.....	6	5,273	3,396	6,551	3,530	4,245.00	5,047
Panamanian.....	2	202	206	406	202	243.60	319
Total.....	8	5,475	3,602	6,957	3,732	4,488.60	5,366
Canada to South America:							
United States.....	1	5,024	3,731	5,835	3,730	4,663.75	6,079
Around the world:							
Dutch.....	1	4,861	4,075	6,588	4,087	5,093.75	1,731
Central America to Europe:							
German.....	1	3,442	2,212	3,979	2,280	2,765.00	2,194
Norwegian.....	1	1,139	977	1,615	944	1,221.25	1,975
Total.....	2	4,581	3,189	5,594	3,224	3,986.25	4,169
United States to West Indies:							
Norwegian.....	1	4,533	3,285	5,236	3,150	4,106.25	6,196
Canada to United States:							
United States.....	1	4,260	3,072	4,757	2,991	3,840.00	3,321
Australasia to Canada:							
British.....	1	4,139	3,254	5,448	3,336	4,067.50	616
United States to Cristobal:							
United States.....	1	2,606	1,350	2,434	1,349	1,687.50	1,490
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,713
Norwegian.....	2	1,158	1,106	1,882	1,114	1,382.50	1,767
Total.....	4	2,599	2,392	4,180	2,418	2,990.00	3,480
Central America to United States:							
Norwegian.....	1	1,159	940	1,607	934	1,175.00	1,582
United States.....	1	466	321	855	325	335.52	.....
Total.....	2	1,625	1,261	2,462	1,259	1,510.52	1,582

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States net equivalent.	Registered gross.	Registered net.		
South America to West Indies:							
British	1	1,560	1,362	2,395	1,244	\$1,123.20	.....
South American intercoastal:							
Swedish	1	488	442	777	531	351.36	.....
Balboa to Cristobal:							
Panamanian	9	360	319	601	381	396.35	283
Grand total, February, 1933 ..	170	846,931	613,330	1,009,994	614,455	765,491.20	1,096,613
Grand total, February, 1932 ..	175	912,534	666,744	1,115,861	675,704	833,874.56	1,118,555
Grand total, February, 1931 ..	219	1,062,373	790,930	1,313,445	798,100	1,003,857.76	1,465,093

Traffic by Commodities for February, 1933.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of February, 1933, 1932, and 1931. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. These figures represent tons of 2,240 pounds.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts	12	.....	116	10
Agricultural implements	535	.....	790	.....
Alfalfa meal .....	.....	1,030	.....	1,030
Ammonium compounds	139	.....	4,317	.....
Animal foods ¹	5	283	5	319
Apparel, wearing (hats, shoes, clothing, etc.)	128	19	128	69
Asbestos	22	.....	1,371	.....
Asphalt and tar	178	4	6,129	310
Automobiles (and auto trucks)	2,042	5	4,291	5
Automobile parts and accessories	421	.....	3,197	.....
Bags and bagging, textile	71	230	1,135	230
Bananas .....	.....	.....	.....	262
Barks, miscellaneous .....	.....	.....	.....	109
Barley .....	.....	25	.....	18,710
Beans, edible, dry	116	7,381	117	10,054
Beverages, nonalcoholic	66	.....	90	.....
Bones and bone meal .....	.....	.....	302	.....
Books and printed matter	124	.....	124	24
Borax .....	.....	849	.....	4,997
Bran and pollards .....	.....	.....	.....	1,986
Bricks and tile	126	.....	138	.....
Camphor .....	.....	3	.....	169
Canned and preserved goods:				
Fish	999	5,651	1,341	7,430
Fruit	1,076	17,338	1,077	27,727
Meat	27	.....	708	106
Milk .....	.....	409	109	476
Soup	1,309	.....	1,329	31
Vegetables	1,266	3,094	1,286	3,112
Miscellaneous and unclassified	1,740	12,634	1,843	12,942
Carbon black	320	.....	1,029	.....
Celite .....	.....	460	.....	514
Cement	126	.....	4,574	115
Chalk .....	.....	.....	.....	100
Charcoal	95	43	220	43
Chemicals ¹	2,151	1,293	4,531	1,498
Clay, china and fire	101	175	1,296	187
Clay, filtering .....	.....	40	.....	40
Coal	1,100	.....	1,893	.....

¹ Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Cocoa and cacao beans.....	186		780	426
Coconuts and products ¹	6	36	6	131
Coffee.....	147	113	3,812	19,723
Coke.....	505		1,550	
Cold storage and refrigerated products:				
Dairy products.....	10		171	12,793
Eggs.....		194		241
Fish.....		123	132	820
Lard.....	433	18	443	18
Meats.....			64	8,517
Poultry.....		23		23
Vegetables.....				36
Other and unclassified.....	36		50	173
Confectionery.....	789	18	893	18
Copra.....				3,036
Copra meal and cake.....				621
Corn.....	9,254		9,353	
Cotton, raw.....	28	2,143	39,461	3,047
Creosote.....			1,060	
Dextrine.....			20	
Drugs and medicines.....	939	16	1,134	16
Dyes.....			853	
Earthenware.....	10	2	52	2
Eggs, dried.....		63		140
Electrical apparatus and appliances.....	320	64	520	117
Explosives.....	37		379	41
Extract, quebracho.....			558	
Fertilizers ¹	313	68	491	68
Fish, salted or dry cured.....			21	231
Fish meal.....				554
Floor coverings.....	343	479	343	651
Flour.....	292	7,873	543	16,828
Fruit, dried.....		13,554	5	20,868
Fruit, fresh ¹	4	2,381	12	30,561
Furniture and household goods.....	108	51	123	70
Gallnuts.....				51
General.....	11,361	6,508	25,787	12,320
Glass and glassware.....	1,342	17	2,228	134
Glue.....	51	66	51	86
Groceries.....	1,593		1,736	
Gums.....			3	96
Hair, all kinds.....		54		54
Hay.....		684		690
Hemp, unmanufactured.....		618	9	1,154
Honey.....		92		124
Hops.....		10		10
Horns and hoofs.....				31
Infusorial earth.....		223		352
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	18,569	347	37,813	378
Ivory nuts.....		34	74	1,178
Jute, unmanufactured.....				34
Lard substitute.....	427		427	
Lime.....			51	
Liquors.....	83		679	250
Lumber (including manufactured mill products).....	2,388	77,574	2,537	108,351
Machinery.....	2,225	307	3,791	521
Malt.....	21		169	
Manufactured goods ¹	2,854	166	4,295	623
Marble and granite.....	7		48	
Matches.....	346	21	376	125
Metals:				
Chromc.....	78		78	
Copper.....		3,290	270	14,658
Gold and silver.....			12	9
Iron.....			632	
Lead.....			5	6,643
Scrap.....	20	50	18,999	143
Tin.....	50	81	50	342
Zinc.....	38		717	1,364
Other and unclassified.....	83	169	162	173
Milk, powdered.....	21	336	25	498
Molasses and syrups.....	375		390	
Nitrates.....			6,174	33,259
Nuts, edible (including meats).....	75	234	82	393
Oats.....	2,130		2,150	4,742
Oils, mineral:				
Crude.....	296		296	64,432
Gas and fuel.....	48	94,724	48	105,945
Gasoline, benzine, and naphtha.....	7	58,071	404	116,220
Kerosene.....		18,819	267	19,681
Lubricating and greases.....	8,338	236	17,767	749

¹ Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Oils, vegetable:				
Coconut.....				1,000
Cottonseed.....	1,157		1,280	28
Linseed.....			34	
Olive.....			360	
Rapeseed.....				73
Wood.....		30		1,378
Other and unclassified.....	147	11	486	334
Oil, fish.....		1,719		1,734
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		234	3,015	295
Oilseed cake and meal.....				2,857
Ores:				
Copper.....				2,592
Gold and silver.....				2,764
Lead.....				502
Manganese.....			150	
Tin.....				3,734
Zinc.....			50	
Other and unclassified.....				4
Paints and varnishes.....	389	79	531	79
Paper and paper products ¹	4,199	4,367	18,218	6,003
Paper scrap.....		610	458	610
Peanuts.....	489	512	489	512
Peas, dry.....		57		2,077
Peatmoss.....			61	
Phosphates.....	329		15,501	
Porcelain ware.....	210	162	352	812
Potash.....		500		500
Pyrethrum flowers.....				39
Rags and waste.....	66	121	246	121
Railroad material.....	78		2,286	
Rice.....	733	116	1,142	1,418
Rope and twine.....	161	56	186	58
Rosin.....	350		3,953	
Rubber:				
Manufactured.....	388	176	824	176
Raw.....				15
Scrap.....		6		15
Salt.....	115		2,114	
Sand.....			2,350	
Seeds (except oilseeds).....	8	805	801	881
Shells, oyster.....	1,101		1,101	
Silk, raw.....		348	54	882
Skins and hides.....		1,325	107	2,522
Slag.....	13		273	
Soaps and products.....	1,708	292	1,921	339
Soda and sodium compounds.....	885		1,365	27
Soy beans.....	62		110	29
Sugar.....	18	14,661	7,136	121,085
Sulphur.....	11,830		12,330	1,573
Talc.....		251	23	281
Tallow.....		40		1,076
Tea.....			34	470
Textiles ²	2,908	11	5,184	927
Tinplate.....	1,819		8,492	
Tobacco and manufactures.....	546		4,963	7
Toilet preparations.....	333	2	339	2
Turpentine.....	35		248	
Vegetables, dry ¹			7	229
Wall board.....		122	11	1,186
Wax, paraffin.....	89		1,043	64
Wheat.....			73	211,626
Wines.....		198	295	1,144
Wood pulp.....	219	4,220	2,976	4,554
Wool.....		955	255	9,791
Total, February, 1933.....	111,266	372,907	338,249	1,096,613
Total, February, 1932.....	153,371	303,333	526,838	1,118,555
Total, February, 1931.....	171,229	492,442	465,126	1,465,093

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 9, 1933.

No. 29.

Panama, Panama Bay, sounding operations, signals to be displayed. The following dispatch was received from the commanding officer of the U. S. S. *Hannibal*:

U. S. S. *Hannibal* will be engaged in dynamic sounding operations covering the entire area of the Gulf of Panama for a period of about three weeks commencing March 9, 1933. During periods in which the ship is lying to with sounding apparatus down, the international "Not under command" signals will be displayed by day and night. Request vessels be notified.

J. L. SCHLEY,
Governor.

Notices to Aviators.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 10, 1933.

No. 30.

Emergency landing field discontinued. Effective April 1, 1933, the emergency landing field at Fort Clayton, Canal Zone, will be discontinued.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 14, 1933.

No. 32.

Canal Zone, Coco Solo, Fleet Air Base, emergency field only. The following order was issued by the Commandant of the Fifteenth Naval District under date of March 10, 1933:

Effective immediately, the Fleet Air Base at Coco Solo, Canal Zone, is available as an emergency landing field only.

J. L. SCHLEY,
Governor.

**Report of Cargo Discharged and Laded by Vessels Entering and Clearing
from Port of Balboa, C. Z., for Two Weeks Ending March 11, 1933.**

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Talamanca	United Fruit Co.	February 26	February 26	547	112
Sirius	U. S. Government	February 27	February 28	1	
Santa Rosa	Panama Mail S. S. Co.	February 27	February 28	64	6
Santa Clara	Grace Line	March 1	March 1	58	21
Anna Maersk	Isbrandtsen-Moller Co.	March 1	March 2	96	
Tai Shan	Barber S. S. Line	March 2	March 2	186	
Santa Cecilia	Panama Mail S. S. Co.	March 2	March 2	37	20
Rakuyo Maru	Nippon Yusen Kaisha	March 3	March 3	28	
President Monroe	Dollar Line	March 3	March 3	4	
Santa Barbara	Grace Line	March 3	March 3	199	14
Cerigo	Hamburg-American Line	March 4	March 4	2	
Nuevo Panama	Hans Elliot	March 4	March 4	236	
Rialto	Navigazione Libera-Triestina	March 5	March 6	240	
S. C. T. Dodd	Standard Oil Co., of Calif.	March 6	March 6	600	
California	Panama-Pacific Line	March 6	March 7	9	
Republic	U. S. Government	March 7	March 8	437	2
Chaumont	U. S. Government	March 7	March 9	5	
Chateau Thierry	U. S. Government	March 9	March 10	339	
Cal.	North German Lloyd	March 9	March 9	1	
Axel Johnson	Johnson Line	March 10	March 10	144	
President Wilson	Dollar Line	March 10	March 10	6	

Provisions Required by Ships.

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

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Volume XXVI. Balboa Heights, C. Z., March 22, 1933. No. 34.

Comparison of Canal Traffic in February, 1933, with February Traffic in Previous Years.

Commercial traffic through the Canal during the month of February, 1933, showed an increase in comparison with February, 1932, with respect to the number of transits, while the aggregate net tonnage (Panama Canal measurement) and cargo tonnage decreased. The increase in the number of transits was 10, or 2.8 per cent, and the decrease in net tonnage was 45,519, or 2.4 per cent, and in cargo tonnage, 210,531, or 12.8 per cent. In comparison with February, 1931, the past month's traffic showed decreases in all features considered above, as follows: In transits, 63, or 14.6 per cent; in net tonnage (Panama Canal measurement), 302,208, or 14.2 per cent; and in cargo tonnage, 495,357, or 25.7 per cent.

The peak month of February traffic since the opening of the Canal was in 1928, when 547 commercial vessels, aggregating 2,460,111 net tons (Panama Canal measurement), and carrying 2,660,425 long tons of cargo, were passed through. In comparison with these high figures last month's traffic was lower by 32.7 per cent in transits, 25.5 per cent in net tonnage (Panama Canal measurement), and 46.0 per cent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage, Panama Canal measurement, and the tons of cargo carried through the Canal during the month of February each year from 1915 to 1933, inclusive, and for comparison, the monthly averages for the corresponding fiscal year ending on June 30, following:

Calendar year.	Month of February.			Fiscal year.	Average per month for fiscal year.		
	Commercial transits.	Panama Canal net tonnage.	Tons of cargo.		Commercial transits.	Panama Canal net tonnage.	Tons of cargo.
1915.....	91	317,397	423,597	1915.....	102	361,197	465,567
1916.....	4	694	.....	1916.....	63	199,687	257,843
1917.....	134	462,957	547,436	1917.....	150	483,213	583,213
1918.....	155	487,162	473,368	1918.....	172	547,839	627,669
1919.....	155	512,078	563,357	1919.....	169	510,416	576,385
1920.....	208	703,462	780,488	1920.....	206	712,170	781,208
1921.....	241	916,838	952,904	1921.....	241	951,323	966,601
1922.....	212	886,535	838,071	1922.....	228	951,455	907,075
1923.....	326	1,529,547	1,563,278	1923.....	331	1,550,482	1,630,656
1924.....	418	2,108,879	2,243,616	1924.....	436	2,179,073	2,249,559
1925.....	379	1,789,447	1,839,619	1925.....	389	1,904,596	1,998,570
1926.....	424	1,991,127	2,139,207	1926.....	433	2,064,549	2,169,787
1927.....	449	2,201,328	2,230,107	1927.....	456	2,185,651	2,312,351
1928.....	547	2,460,111	2,660,425	1928.....	538	2,454,886	2,469,226
1929.....	522	2,428,530	2,550,498	1929.....	534	2,468,483	2,555,250
1930.....	491	2,369,255	2,377,900	1930.....	515	2,498,385	2,502,519
1931.....	431	2,134,866	1,930,219	1931.....	461	2,316,012	2,090,233
1932.....	358	1,878,177	1,645,393	1932.....	376	1,968,785	1,650,667
1933.....	368	1,832,658	1,434,862	(*).....	374	1,901,109	1,448,787

* Canal opened August 15, 1914.

* Average for 10½ months.

* Average for 8 months of fiscal year.

CANAL WORK IN FEBRUARY, 1933.

The following is the report of the Governor to the Secretary of War, of Canal work in the month of February, 1933.

BALBOA HEIGHTS, C. Z., March 16, 1933.

The Honorable, The Secretary of War,
Washington, D. C.

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of February, 1933:

TRANSITS AND TOLLS.

During the month, 368 commercial vessels and 11 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 39 vessels belonging to the United States Army and Navy, on which no tolls were collected, making a total of 418 transits for the month, or a daily average on all traffic of 14.93.

Tolls on the 368 commercial vessels amounted to \$1,575,708.35, and on the launches to \$56.55, a total of \$1,575,764.90, or a daily average on all traffic of \$56,277.32. In comparison with the previous month (January, 1933), commercial traffic in February declined by 47 transits and \$187,100.21 in tolls, losses of 11.3 per cent and 10.6 per cent, respectively. This loss was due largely, however, to the smaller number of days in February; the decrease in the daily averages in comparison with January, 1933, was 1.9 per cent in transits and 1.0 per cent in tolls collection. In comparison with February, 1932, last month's traffic made an increase of 10 transits, or 2.8 per cent, while in tolls collection there occurred a decrease of \$72,088.71, or 4.4 per cent.

In comparison with the first 8 months of the fiscal year 1932, commercial traffic this year shows a decrease of 3.0 per cent in transits, 6.1 per cent in net tonnage (Panama Canal measurement), 15.0 per cent in cargo tonnage, and 7.8 per cent in tolls collection; in comparison with the first 8 months of the fiscal year 1931, there was a decline of 21.5 per cent in transits, 20.1 per cent in net tonnage (Panama Canal measurement), 33.7 per cent in cargo tonnage, and 22.6 per cent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of February in the two preceding years and in 1933 are shown in the following tabulation:

	February, 1931.	February, 1932.	February, 1933.
Commercial vessels.....	431	358	368
Launches (under 20 tons measurement).....	2	7	11
Noncommercial vessels:			
United States Government.....	86	98	39
For repairs.....	3		
Total.....	522	463	418

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North-bound.	South-bound.	Total.
Gatun.....	3	2	5
Pedro Miguel.....	8	7	15
Miraflores.....	11	7	18
Total.....	22	16	38

COMMERCIAL TRAFFIC.¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, from the commercial traffic transiting the Canal each month from the beginning of the fiscal year 1933 to the end of February, 1933, as compared with the same months in the previous year:

Month.	Number of vessels.		Panama Canal tonnage.		Tons of cargo.		Tolls.	
	1931-32	1932-33	1931-32.	1932-33.	1931-32.	1932-33.	1931-32.	1932-33.
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September...	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October.....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November...	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December...	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,640.03
January.....	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
February...	358	368	1,878,177	1,832,658	1,645,393	1,434,862	1,647,797.06	1,575,708.35
Total.....	3,080	2,989	16,196,723	15,208,869	13,638,967	11,590,294	14,201,181.12	13,099,945.05

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for February in the years 1931, 1932, and 1933, and comparison with the monthly averages for the calendar year 1932:

	February, 1931.	February, 1932.	February, 1933.	Average per month for calendar year 1932.
Number of vessels.....	431	358	368	364
Panama Canal net tonnage.....	2,134,866	1,878,177	1,832,658	1,886,345
United States net tonnage.....	1,571,150	1,356,954	1,321,993	1,367,686
Registered gross tonnage.....	2,614,248	2,266,102	2,182,947	2,277,608
Registered net tonnage.....	1,585,954	1,368,501	1,331,579	1,381,155
Tolls.....	\$1,915,902.78	\$1,647,797.06	\$1,575,708.35	\$1,640,472.65
Tons of cargo carried.....	1,930,219	1,645,393	1,434,862	1,508,323

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day.			Average per day for calendar year 1932.
	February, 1931.	February, 1932.	February, 1933.	
Number of transits.....	15.39	12.34	13.14	11.93
Panama canal net tonnage.....	76,245	64,765	65,452	61,947
Tolls.....	\$68,425.10	\$56,820.59	\$56,275.30	\$53,785.99
Tons of cargo.....	68,936	56,738	51,245	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL.

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of February in 1931, 1932, and 1933, are shown in the following tabulation:

	Average per vessel.			Average per vessel for calendar year, 1932.
	February, 1931.	February, 1932.	February, 1933.	
Panama Canal net tonnage.....	4,965	5,246	4,980	5,195
United States net tonnage.....	3,654	3,790	3,592	3,767
Registered gross tonnage.....	6,080	6,330	5,932	6,273
Registered net tonnage.....	3,688	3,823	3,618	3,804
Tolls.....	\$4,445.25	\$4,602.79	\$4,281.82	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,489	4,596	3,899	4,154
Tons of cargo (laden vessels only).....	5,347	5,291	4,931	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS.

Fifteen nationalities were represented in the commercial traffic through the Canal in February, 1933, in comparison with 15 in the previous month, and 18 in February, 1932. Vessels of United States registry, with 138, led in the number of transits in the past month, while those flying the British flag, with 95, were second. Vessels of these two nationalities made up 63.3 per cent of the total transits for the month. Transits of vessels of Norwegian, German, and Panamanian registry were next in numerical importance with 35, 26, and 22, respectively. With respect to net tonnage (Panama Canal measurement), vessels of the United States, with 812,222 tons, made up 44.3 per cent of the aggregate; British, with 513,617 tons, made up 28.0 per cent; Norwegian, with 155,983 tons, made up 8.5 per cent; Japanese, with 97,213 tons, made up 5.3 per cent; and German, with 79,361 tons, made up 4.3 per cent.

CARGO AND PRINCIPAL COMMODITIES.

The total cargo through the Canal during the month of February, 1933, was 1,434,862 tons, a decrease of 210,531 tons, or 12.8 per cent, in comparison with February, 1932. Cargo from the Atlantic to Pacific aggregated 338,249 tons, compared with 349,560 tons in the previous month, and 526,838 tons in February, 1932. From the Pacific to the Atlantic cargo amounted to 1,096,613 tons, as compared with 1,113,943 tons in the previous month and 1,118,555 tons in February, 1932. The combined cargo movement in February, 1933, was 28,641 tons, or 2.0 per cent, less than the tonnage passing through in the previous month.

From the Atlantic to the Pacific, raw cotton comprised the leading commodity, with shipments totaling 39,461 tons, followed by manufactures of iron and steel with 37,813 tons, scrap metal with 18,999 tons, mineral oils with 18,782 tons, paper with 18,218 tons, phosphates with 15,501 tons, and sulphur with 12,330 tons. Increases occurred in the shipments of scrap metal and paper, while the balance of the above items decreased in comparison with February, 1932.

From the Pacific to the Atlantic, mineral oils, totaling 307,027 tons, formed the leading commodity, followed by wheat with 211,626 tons, sugar with 121,085 tons, lumber with 108,351 tons, canned goods with 51,824 tons, nitrates with 33,259 tons, and fresh fruit with 30,561 tons. A heavy increase occurred in shipments of mineral oils, also smaller gains in sugar, wheat, and fresh fruit. Shipments of lumber and nitrates made rather severe decreases in comparison with February, 1932. Canned goods registered a slight decrease.

The larger portion of the decrease in cargo tonnage in comparison with February, 1932, occurred in the Atlantic to Pacific movement which declined 188,589 tons, or 35.8 per cent, while in the opposite direction the decrease was but 21,942 tons, or 2.0 per cent.

TOLLS.

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.890 per net ton (Panama Canal measurement), and tolls on vessels in ballast averaged \$0.718 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of February, 1933, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality.	Tolls actually collected under present dual system.	Tolls that would have been collected under proposed rates of \$1 laden and 60c. ballast on basis of Panama Canal net tonnage.	Difference.		Pro rata of tolls actually collected per Panama Canal net ton.	
			Increase.	Decrease.	Laden.	Ballast.
Belgian.....	\$4,530.24	\$3,775.20	.....	\$755.04	.....	\$0.720
British.....	435,303.24	456,790.20	\$21,486.96	.....	\$0.896	.720
Chilean.....	7,682.50	7,796.00	113.50	.....	.985	.....
Colombian.....	368.40	307.00	.....	61.40	1.200	.....
Danish.....	29,703.99	34,783.40	5,079.41	.....	.767	.721
Dutch.....	37,277.50	42,818.00	5,540.50	.....	.871	.....
French.....	15,141.25	18,750.00	3,608.75	.....	.808	.....
German.....	63,432.98	74,777.40	11,344.42	.....	.813	.720
Italian.....	16,360.00	19,129.00	2,769.00	.....	.855	.....
Japanese.....	94,017.15	95,913.00	1,895.85	.....	.976	.720
Norwegian.....	121,741.36	148,119.80	26,378.44	.....	.793	.692
Panamanian.....	1,294.65	1,127.80	.....	166.85	1.139	.736
Swedish.....	24,474.07	31,536.60	7,062.53	.....	.725	.720
United States.....	719,733.52	704,125.60	44,392.08	.....	.915	.720
Yugoslav.....	4,647.50	4,741.00	93.50	.....	.980	.....
Total.....	1,575,708.35	1,704,490.00	129,764.94	983.29	.890	.718
Net increase for all traffic.....	.....	.....	128,781.65	.....	.....	.....

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$28,030.72
United States foreign trade.....	14,524.36
United States Canal Zone trade.....	1,837.00
Total.....	44,392.08

RATIO OF CARGO TONNAGE TO NET TONNAGE.

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in February, 1933, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality.	Atlantic to Pacific.	Pacific to Atlantic.	Total.
British.....	.42	1.30	.93
Chilean.....	1.83	1.58	1.70
Colombian.....	1.98	.....	1.98
Danish.....	.91	1.52	1.39
Dutch.....	.27	1.24	.93
French.....	.14	1.29	.59
German.....	.45	1.20	.80
Italian.....	.05	.....	.05
Japanese.....	1.09	1.22	1.13
Norwegian.....	.48	1.58	1.22
Panamanian.....	1.09	1.07	1.08
Swedish.....	.34	1.35	.90
United States.....	.48	1.23	.90
Yugoslav.....	.....	1.91	1.91
Average, February, 1933.....	.51	1.30	.95
Average, February, 1932.....	.68	1.23	.98
Average, February, 1931.....	.60	1.39	1.05

CLASSIFICATION OF VESSELS.

A further classification of vessels passing through the Canal during the month of February, 1933, is as follows:

Class.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Panama Canal net tonnage.	Tolls.	No. of ships.	Panama Canal net tonnage.	Tolls.
Cargo-carrying ships:						
Tank ships—						
Ballast.....	23	137,976	\$99,342.72	1	1,560	\$1,123.20
Laden.....	2	9,045	9,331.25	26	161,134	165,156.25
All others—						
Ballast.....	46	177,370	127,167.95	1	488	351.36
Laden.....	123	659,122	572,781.15	140	682,937	598,275.75
Noncargo-carrying ships:						
Yachts.....	4	2,214	1,594.08	1	466	335.52
Others.....	.....	.....	.....	1	346	249.12
Total.....	198	985,727	810,217.15	170	846,931	765,491.20
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	126	649,714	550,797.80	102	526,670	489,746.61
Motor.....	59	333,154	257,165.77	57	319,089	274,763.60
Motor schooner.....	9	645	659.50	9	360	396.35
Other craft (yachts, naval, etc.)—						
Miscellaneous.....	4	2,214	1,594.08	2	812	584.64
Total.....	198	985,727	810,217.15	170	846,931	765,491.20

Of the 228 steam driven vessels, 152 were oil burning, 75 coal burning, and 1 burned either oil or coal.

NONCOMMERCIAL VESSELS.

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of February, 1933. It tolls had

been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality.	Atlantic to Pacific.			Pacific to Atlantic.		
	No. of ships.	Tonnage.	Tolls.	No. of ships.	Tonnage.	Tolls.
U. S. Naval vessels:						
Cargo ships.....	1	³ 10	\$7.50	1	³ 3,454	\$4,317.50
Cranes.....	1	¹ 1,215	607.50	1	¹ 1,215	607.50
Destroyers.....	2	³ 20	15.00			
Launches.....	5	¹ 4,750	2,375.00	6	¹ 5,700	2,850.00
Minesweepers.....	7	¹ 6,249	3,124.50	5	¹ 4,497	2,248.50
Submarines.....	1	¹ 6,210	7,452.00			
Tankers.....	1	³ 3,992	4,990.00	1	³ 16,192	20,240.00
Transports.....						
U. S. Army vessels:						
Launches.....	4	³ 40	30.00			
Transports.....	1	³ 5,310	6,637.50			
Tugs.....	1	³ 92	115.00	1	³ 92	69.00
Total.....	24		25,354.00	15		30,332.50

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of February, 1933, carried cargo as follows: Atlantic to Pacific, 5,664 tons; Pacific to Atlantic, 3,879 tons; total, 9,543 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT.

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of February, 1933. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	Number of transits.	Panama Canal net tonnage.	Tolls.
Atlantic to Pacific.....	8	53	\$48.30
Pacific to Atlantic.....	3	10	8.25
Total.....	11	63	56.55

STATEMENT OF TERMINAL OPERATIONS.

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of February, 1933, are shown in the following tabulation:

	Cristobal.	Balboa.	Total.
Local cargo arriving..... tons..	34,578	6,731	41,309
Local cargo shipped..... tons..	3,625	542	4,167
Cargo received for transshipment..... tons..	24,744	596	25,340
Cargo transhipped..... tons..	23,146	508	23,654
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	75	30	105
Number of releases issued.....	627	301	928
Tons received.....	431	257	688
Tons withdrawn.....	525	336	861
Packages received.....	8,186	2,582	10,768
Packages withdrawn.....	8,953	3,137	12,090
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	22		22
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,932		3,932
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	31	4	35
U. S. Army, including vessels..... tons..	36	7	43
Individuals and companies..... tons..	18		18
Transferred to Navy..... tons..	11		11
Total sales and issues..... tons..	4,028	11	4,039

		Cristobal.	Balboa.	Total.
Coal on hand, February 1, 1933.....	tons	22,762		22,762
Coal on hand, March 1, 1933.....	tons	18,734		18,734
Coal received from Navy.....	tons		11	11
Fuel oil issued from Panama Canal tanks:				
Panama Canal departments.....	bbls.	3,852.02	10,223.84	14,075.86
Panama Railroad Company.....	bbls.	15,313.25	438.00	15,751.25
U. S. Army and Navy.....	bbls.	528.50	92.61	621.11
Individuals and companies.....	bbls.		150.31	150.31
Total sales and issues.....	bbls.	10,633.77	10,904.76	30,598.53
Fuel oil received during February, 1933.....	bbls.	65,548.00		65,548.00
Fuel oil on hand March 1, 1933.....	bbls.	72,576.59	78,470.13	151,046.72
Diesel oil issued during February, 1933.....	bbls.	26.19	2,716.19	2,742.38
Diesel oil on hand March 1, 1933.....	bbls.	3,839.54	12,027.05	15,866.59
Miscellaneous transfers.....	bbls.	458.73	898.88	1,357.61
Gasoline and kerosene pumped for The Panama Canal.....	bbls.	2,701.60	12,472.43	15,174.03
Gasoline pumped for individuals and companies.....	bbls.	905.19	14,073.52	14,978.71
Oil pumped for individuals and companies:				
Receipts.....	bbls.	60,938.93		60,938.93
Issues.....	bbls.	128,127.17	53,426.91	181,554.08
Oil pumped for U. S. Navy.....	bbls.	204.00	12,642.00	12,746.00
Total fuel oil, gasoline, and kerosene handled.....	bbls.	278,603.58	107,034.69	385,638.27
Admeasurement of vessels:				
U. S. equivalent certificates issued.....		8	4	12
Measured for Panama Canal net tonnage.....		4	1	5
Remeasured for Panama Canal net tonnage.....		8	3	11
Panama Canal net tonnage corrected.....		8	2	10
U. S. equivalent tonnage corrected.....		13	4	17
Services of harbor equipment:				
Tugs, total operating hours.....		224½	84½	308½
Launches, total operating hours.....		921½	972	1,893½
Revenue from tug service, pilotage, etc.:				
Tug revenue.....		\$7,848.75	\$2,896.25	\$10,745.00
Pilotage.....		14,362.00	4,438.00	18,800.00
Seamen.....		8,818.00	7,632.00	16,450.00
Launch service.....		1,757.00	1,840.00	3,597.00
Wharfage.....		12,362.41	2,713.20	15,075.61
Ships measured.....		70.00	50.00	120.00
Miscellaneous.....		268.21	159.23	427.44
Clearances issued.....		206	185	391
Bills of health issued.....		222	185	407

ALL VESSELS ENTERING AND CLEARING PORT.

	Port of Cristobal.			Port of Balboa.		
	No. of ships.	Registered gross tonnage.	Registered net tonnage.	No. of ships.	Registered gross tonnage.	Registered net tonnage.
<i>Ships entering.</i>						
All vessels, including those transiting Canal.....	410	2,820,643	1,692,476	375	2,267,290	1,389,186
Vessels entering port but not transiting Canal.....	64	611,587	340,792	4	15,620	7,419
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	94	647,446	396,817	75	577,718	345,548
<i>Ships clearing.</i>						
All vessels, including those transiting Canal.....	414	2,856,857	1,714,870	372	2,262,304	1,381,735
Vessels clearing port but not transiting Canal.....	67	648,071	362,757	5	15,623	7,422
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	94	641,079	393,299	75	577,718	345,548

MOVEMENT OF PASSENGERS.

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Disembarking:									
From Atlantic ports....	692	254	946	54	157	211	746	411	1,157
From Pacific ports.....	96	102	198	231	109	340	327	211	538
Total disembarking.....	788	356	1,144	285	266	551	1,073	622	1,695

	At Cristobal.			At Balboa.			Total.		
	First-class.	Others.	Total.	First-class.	Others.	Total.	First-class.	Others.	Total.
Embarking:									
For Atlantic ports.....	670	454	1,124	41	229	270	711	683	1,394
For Pacific ports.....	75	59	134	239	208	447	314	267	581
Total, embarking...	745	513	1,258	280	437	717	1,025	950	1,975
Remaining on board:									
From Atlantic to Pacific ports.....	1,284	2,040	3,324				1,284	2,040	3,324
From Pacific to Atlantic ports.....				1,048	917	1,965	1,048	917	1,965
From Atlantic to Atlantic ports.....	6,310	310	6,620				6,310	310	6,620
From Pacific to Pacific ports.....				7		7	7		7
Total remaining on board.....	7,594	2,350	9,944	1,055	917	1,972	8,649	3,267	11,916
Total arriving on Canal Zone.	8,382	2,706	11,088	1,340	1,183	2,523	9,722	3,889	13,611
Total departing from Canal Zone.....	8,339	2,863	11,202	1,335	1,354	2,689	9,674	4,217	13,891

NOTE.—In passengers "remaining on board," those from the Atlantic to the Pacific and Pacific to the Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL.

	Total commercial vessels.	Passenger-carrying vessels.	Per cent of total transits.	Number of passengers carried.
Atlantic to Pacific.....	198	67	33.8	3,669
Pacific to Atlantic.....	170	52	30.6	2,433
Total.....	368	119	32.3	6,102

In addition to the aforesaid, 54 passenger-carrying vessels called at the port of Cristobal and 2 at the port of Balboa without transiting the Canal, making a total of 175 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING.

During the month of February, 1933, 36 commercial airplanes entered and cleared at Cristobal, and none at Balboa. A total of 87 passengers (39 from the north and 48 from the south) disembarked from the planes landing at Cristobal, and 62 passengers (36 for the north and 26 for the south) embarked.

COMMISSARY SALES TO VESSELS.

The following is a statement of commissary sales to vessels during the month of February, 1933, together with the total sales in the corresponding month in 1932 and 1931:

	Ice.	Groceries.	Cold storage.	Laundry.	Miscellaneous.	Total.
Sales at Cristobal to:						
Commercial vessels.....	\$657.50	\$3,271.33	\$8,461.15	\$11.16	\$2,791.48	\$15,192.62
Government vessels.....	78.39	912.14	2,019.35		310.78	3,320.66
P. R. R. vessels.....		233.37	19.17	380.37	4.24	643.15
Total sales, February, 1933..	735.89	4,416.84	10,499.67	397.53	3,106.50	19,156.43
Total sales, February, 1932..	1,317.46	7,940.08	22,607.71	639.50	3,951.01	36,455.76
Total sales, February, 1931..	2,242.15	12,269.50	37,754.13	987.42	10,307.83	63,561.03
Sales at Balboa to:						
Commercial vessels.....	157.08	1,790.71	3,759.73	154.89	1,155.22	7,017.63
Government vessels.....	492.50	2,579.45	11,476.85	665.87	1,224.13	16,438.80
Total sales, February, 1933..	649.58	4,370.16	15,236.58	820.76	2,379.35	23,456.43
Total sales, February, 1932..	1,118.46	9,731.75	39,481.46	1,253.56	8,219.43	59,804.66
Total sales, February, 1931..	3,518.15	10,957.93	61,854.14	1,909.46	37,872.94	116,112.62

The aggregate sales to commercial vessels during the month were \$22,210.25; to Government vessels, \$19,759.46; and Panama Railroad vessels, \$643.15; making the total sales to all vessels, \$42,612.86. The figures are subject to minor change on final audit.

LOCK OPERATIONS.

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of February, 1933, as compared with the corresponding month in 1932 and 1931:

Locks.	Number of lockages.						Comparative grand totals.		
	Commercial.			Noncommercial.*			Feb., 1931.	Feb., 1932.	Feb., 1933.
	North.	South.	Total.	North.	South.	Total.			
Gatun.....	160	180	340	7	7	14	452	385	354
Pedro Miguel.....	160	180	340	7	14	21	473	406	361
Miraflores.....	158	178	336	6	9	15	466	402	351
Number of vessels put through locks.									
Gatun.....	170	198	368	34	36	70	541	503	438
Pedro Miguel.....	170	198	368	30	27	57	559	494	425
Miraflores.....	170	198	368	34	27	61	562	493	429

* Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS.

	Gatun.	Pedro Miguel.	Miraflores.
Army and Navy vessels.....	53	39	39
Panama Canal equipment.....	5	15	18
Launches under 20 tons measurement.....	12	3	4

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in February, 1933, as compared with the preceding month and the corresponding month in 1932:

	Gatun.	Pedro Miguel.	Miraflores.
Lockages.....	<i>Cubic feet.</i> 1,490,100,000	<i>Cubic feet.</i> 1,108,030,000	<i>Cubic feet.</i> 1,149,550,000
Leakage.....	30,000,000	75,000,000	30,000,000
Maintenance.....	27,890,000		
Total, February, 1933.....	1,547,990,000	1,183,030,000	1,179,550,000
Total, January, 1933.....	1,641,760,000	1,437,210,000	1,323,420,000
Total, February, 1932.....	1,608,180,000	1,290,480,000	1,241,420,000

HYDROGRAPHY.

The hydrographic conditions in the Canal Zone and vicinity during the month of February, 1933, are shown in comparative form in the following tabulation:

	February.		February—Years of record.		
	1932.	1933.	Maximum.	Minimum.	Mean.
Discharge of Chagres River at Alhajuela.....	<i>C. f. s.</i> 1,024	<i>C. f. s.</i> 980	<i>C. f. s.</i> 3,304	<i>C. f. s.</i> 516	<i>C. f. s.</i> 1,190
Maximum momentary discharge for the month.....	1,418	1,328	* 39,500		
Gatun Lake watershed, total yield.....	1,293	1,309	5,077	705	1,717
Gatun Lake watershed, net yield.....	331	278	4,207	287	784
Draft on Gatun Lake for lockages and power.....	2,566	2,868			* 2,323

* February 12, 1911.

* 10-year average, 1921-1930.

The monthly mean discharge of the Chagres River at Alhajuela for February, 1933, was 980 c. f. s. which is 18 per cent below the 32-year mean of 1,190 c. f. s. The maximum monthly mean discharge on record for February is 3,304 c. f. s. in 1909, and the minimum is 516 c. f. s., in 1912. The maximum momentary discharge for the month was 1,328 c. f. s. at elevation 92.79 feet on the 1st and the minimum was 754 c. f. s. at elevation 92.17 feet on the 28th. The maximum momentary discharge on record for February is 39,500 c. f. s. at elevation 105.50 feet on February 12, 1911, and the minimum is 400 c. f. s. at elevation 91.35 feet on February 29, 1912.

Gatun Lake varied in elevation during February from a maximum of 86.60 feet on the 1st to a minimum of 85.12 feet on the 28th and averaged 85.90 feet. The total yield of the Gatun Lake watershed for the month was 1,309 c. f. s. which is 24 per cent below the 20-year February average of 1,717 c. f. s. The maximum total yield on record for February is 5,077 c. f. s. and the minimum is 705 c. f. s. in 1920.

Miraflores Lake varied between elevations 54.00 feet on the 8th and 52.66 feet on the 2d, averaged 53.53 feet, and ended the month at elevation 53.81 feet.

SEISMOLOGY.

Seismic disturbances were recorded on the 3d, 12th, 14th, 18th, 19th, 21st, and 23d. The disturbances of the 19th and 21st were of local origin, and were felt by local residents.

ELECTRICAL DIVISION.

The gross generator output of the Gatun hydroelectric station for the month was 5,894,600 kilowatt hours, and the computed water consumption was 4,310,771,337 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross generator output of 12,400 kilowatt hours, and the fuel oil consumption was 25.87 barrels. Diesel units were on the bus twice during the month for dry-dock operations.

In connection with the laying of armored cable from existing telephone station at Salamanca to the new stations on the Boqueron and Pequeni Rivers to provide telephone service and circuits for river-level recording equipment, 5,500 feet of trench were opened, 2,500 feet of 5-conductor cable and 3,000 feet of 8-conductor cable were laid in trench and backfilled in the Peluca district. Twenty-four splices were made and two terminals installed on rail poles, one at Peluca and one at junction of 5-conductor and 8-conductor cables. A total of 9,450 feet of trench was opened during the month in the Salamanca district, 13,000 feet of 8-conductor cable were laid and spliced, and the trench was backfilled.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 21 vessels during the month. There were 223 work orders issued during the month, as compared with 319 during the previous month.

MECHANICAL DIVISION.

Marine work at the Cristobal and Balboa shops during the month of February, 1933, is summarized as follows:

	Ships repaired (including those in dry dock).		
	Remaining from previous month.	Entered during month.	Completed during month.
At Cristobal:			
Commercial.....	3	29	30
United States Army and Navy.....	5	6	9
Panama Canal equipment.....	2	3	2
At Balboa:			
Commercial.....	2	3	3
United States Army and Navy.....	5	.....	3
Panama Canal equipment.....	1	4	2
Total.....	18	45	49
Ships in dry dock.			
At Cristobal:			
None (dry dock under repairs).....			
At Balboa:			
United States Army and Navy.....	2	.....	2
Panama Canal equipment.....	1	2	1
Total.....	3	2	3

Barges Nos. 119 and 138 of the Dredging Division entered shops for general overhaul. Work on the hull of the new crane ship *Atlas* was carried forward. Work was commenced on the annual overhaul of the tug *Gorgona* of the Marine Division. Annual overhaul of the U. S. S. *Chewink* and submarine *S-13*, and repairs to the U. S. S. *Overton*, were completed during the month. Repairs to the U. S. S. *Memphis* and U. S. S. *Sturtevant* were carried forward.

MUNICIPAL ENGINEERING DIVISION.

In connection with the municipal work on the new high school at Cristobal there were excavated by steam shovel and placed 1,334 cubic yards of earth in fill. On oil line to coaling dock, Cristobal, there were 23 cubic yards excavated, 500 square yards of area along the 16-inch line cleared and graded, and 3,500 feet of 16-inch pipe

painted. At the Cristobal dry dock, which is being reconstructed, 8,600 cubic yards of earth were excavated from borrow pit and placed in cofferdam. On the construction of breakwater at the west ferry slip of Gaillard Highway there were quarried and placed 2,275 cubic yards of rock. In connection with the Curundu fill there were excavated and placed in fill by task labor 5,600 cubic yards; there were also excavated from Diablo Hill borrow pit by shovel and hauled to fill by trucks, 7,665 cubic yards of material. On the grading and relocation of Gaillard Highway over Paraiso Hill there were excavated and graded 5,487 cubic yards of earth, a retaining wall containing 6 cubic yards of concrete was constructed and 100 feet of guard rail were erected.

Work on a number of other improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 737,906,500 gallons.

DREDGING DIVISION.

The movement of West Culebra slide on the 450-foot base line showed an average of 2.6 feet toward the Canal between stations 1776 plus 00 and 1793 plus 00 W., and no movement southward. The reference points on this slide showed no movement during the month. Dredging equipment removed a total of 19,500 cubic yards from this slide, of which 10,000 cubic yards were rock and 9,500 cubic yards were earth. The total excavation to date from this slide is 10,626,350 cubic yards.

There was no observed movement on any of the reference points on East Culebra slide during the month. Dredging equipment removed 24,150 cubic yards, of which 9,650 cubic yards were rock and 14,500 cubic yards were earth. Total excavation to date on this slide, excluding East Culebra extension, is 20,462,150 cubic yards.

There was no movement shown on any of the other slides during the month, and no interference with shipping on account of slides.

The total excavation during February, 1933, was 773,250 cubic yards, as follows:

	Wet excavation.		
	Earth.	Rock.	Total.
	<i>Cubic yds.</i>	<i>Cubic yds.</i>	<i>Cubic yds.</i>
Work excavation:			
Canal prism, Gaillard Cut—			
West Culebra slide.....	9,500	10,000	19,500
East Culebra slide.....	14,500	9,650	24,150
East Culebra slide extension.....	41,800	12,650	54,450
Maintenance.....	4,400	1,950	6,350
Canal prism, Pacific entrance—			
Project No. 1.....		42,700	42,700
Maintenance.....	607,100	19,000	626,100
Plant excavation:			
None.....			
Total.....	677,300	95,950	773,250

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 28 days during the month. A total of 1,482 single trips were made, and 994 Panama Canal, 1,009 U. S. Army, and 11,659 other vehicles, a total of 13,662, were ferried across the Canal.

MADDEN DAM DIVISION.

The average working force for both the Government and contractors for February was 352 gold and 1,229 silver employees.

On the 3d the driving of sheet piles in the 1933 cofferdam was completed in the east levee. The unwatering was started on the 1st, but progressed very slowly due to heavy leakage at both the east and west levees. To stop the leakage earth was dumped to the west of the downstream crib and earth and clay were dumped to the east of the upstream levee. The upstream leakage continued to be heavy and the piles were redriven and then an excavation was made to locate the leakage after which a square cell of sheet piling was driven and filled with puddled clay.

Excavation in the 1933 cofferdam was begun on the 6th. Beginning with the 7th, an intensive program was carried on, and about 75 per cent of the remaining common excavation was completed during the month. Rock excavation on the right abutment was brought to the point where it was considered complete, but the cutoff trench excavation which was started and finished during the month apparently caused the opening of seams and cracking of rock between elevations 150 and 235, which will necessitate the removal of additional material. Other rock excavation was performed in block No. 4 and the apron areas both up and down stream. The removal of rock

over the right training wall was completed and the vertical cutoff trench at the lower end of the wall was 80 per cent completed.

On saddle dam No. 8 drilling and grouting were completed early in the month, after which time 29,478 cubic yards of earth embankment and 4,523 cubic yards of rock fill were placed. Considerable gravel blanket and riprap also were placed on this dam during month. On the left ridge, dam stripping and hand tamping were completed, and 50,054 cubic yards of earth embankment and 11,870 cubic yards of rock fill were placed during month.

Work was carried on at saddle dams Nos. 10 and 11 until the 25th of the month at which time these two saddles were completed.

Tests on concrete and concreting materials were performed in accordance with the schedule of routine tests. No concrete was poured during the month.

OCCUPANTS OF QUARTERS.

The number of persons, including men, women, and children, occupying Panama Canal quarters on February 28, 1933, was 24,357, composed of 8,252 Americans, 2,866 of whom were men, 2,614 women, and 2,772 children; 185 Europeans, 76 of whom were men, 28 women, and 81 children; and 15,920 West Indians, 4,265 of whom were men, 2,835 women, and 8,820 children. The total number of persons in quarters on February 29, 1932, was 24,357.

WORKING FORCE.

The following tabulation shows the number of gold and silver employees as of February 15, 1933, with a comparison of the working force for the preceding month and for February, 1932:

	Total employees.		As of February 15, 1933.		
	February, 1932.	January, 1933.	Gold.	Silver.	Total.
Operation and Maintenance:					
Office.....	105	113	55	66	121
Electrical.....	440	390	147	249	396
Municipal Engineering.....	1,015	1,192	111	1,208	1,319
Lock Operation.....	926	1,689	307	1,270	1,577
Dredging.....	1,060	970	164	799	963
Madden Dam.....	270	191	54	136	190
Mechanical.....	1,233	1,079	384	748	1,132
Marine.....	766	673	176	513	694
Fortifications.....	251	151	12	86	98
Total.....	6,066	6,448	1,410	5,080	6,490
Supply Department:					
Quartermaster.....	1,625	1,679	186	1,490	1,676
Commissary.....	1,500	1,459	222	1,231	1,453
Cattle Industry—Plantations.....	101	100	2	98	100
Hotel Tivoli.....	112	99	7	92	99
Hotel Washington.....	95	91	7	78	85
Transportation.....	296	301	82	222	304
Total.....	3,729	3,729	506	3,211	3,717
Accounting Department.....	204	194	189	5	194
Health Department.....	1,092	1,115	279	847	1,126
Executive Department.....	927	919	566	362	923
Total.....	2,223	2,228	1,034	1,214	2,248
Panama Railroad Company:					
General Manager.....	105	70	22	47	69
Transportation.....	353	312	71	246	317
Receiving and Forwarding Agency.....	909	588	83	625	703
Coaling Stations.....	117				
Total.....	1,484	970	176	918	1,094
Grand total, February, 1932.....	13,502				
Grand total, January, 1933.....		13,375			
Grand total, February, 1933.....			3,126	10,423	13,549

Additions to the gold force on the Isthmus in February, 1933, were as follows: Employed in the United States, 3; employed on the Isthmus, 1; reemployed on the Isthmus, 3; total, 7. Separations from the gold force totaled 11, as follows: Resigned, 5; discharged, 2; retired, 3; died, 1. At the end of the month there were on file 910 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 277 and separations from service, 154; the number seeking employment was estimated at approximately 2,000.

VITAL STATISTICS.

A total of 188 deaths occurred during the month of February, 1933, among the population of the Canal Zone (42,070) and the cities of Panama (79,000) and Colon (30,000), total population of 151,070, which is equivalent to an annual death rate of 14.93 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 31; pneumonia (broncho and lobar), 28; nephritis (acute and chronic) 12; cancer, 9; organic diseases of the heart, 7; and syphilis, 6. There were 5 deaths from diarrhea and enteritis, 2 from influenza, 2 from dysentery, and one from diphtheria. There were 32 deaths among nonresidents, which are not included in the above statistics.

There were 280 live births and 13 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 23.27. Deaths among children under one year of age numbered 33, giving an infant mortality rate, based on the number of live births reported, of 117.86.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 80, of whom 13 were employees (3 white and 10 colored), 7 were members of employees' families (3 white and 4 colored), 4 were employees of the Madden Dam contractors (1 white and 3 colored), 4 were Canal Zone agriculturists, 25 were other civilian nonemployees, and 27 were Army and Navy personnel. Of the 20 employees and members of employees' families, 17 were probably infected outside our sanitated areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were two deaths from malaria among residents; both were from the Bella Vista section of Panama City, and one of the patients had been several places in the interior shortly before becoming ill.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES.

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$311,142.24, of which \$294,174.83 was for the Department of Operation and Maintenance, and \$16,967.41 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$29,632.86.

FINANCIAL STATEMENT.

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of January, 1933, as compared with January, 1932, with the figures for the first seven months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of February at the time of writing this report, since all charges, etc., involved in the accounting have not been completed.

	January, 1932.	January, 1933.	Fiscal year.	
			Last year.	This year.
Tolls.....	\$1,770,280.28	\$1,762,880.15	\$12,553,586.82	\$11,524,407.14
Other receipts.....	282,285.41	256,885.68	1,882,909.83	1,754,992.45
Total transit revenues.....	2,052,565.69	2,019,765.83	14,436,496.65	13,279,399.59
Total transit expenses.....	1,010,101.49	1,015,687.31	7,359,380.30	6,536,870.02
Net transit revenues.....	1,042,464.20	1,004,078.52	7,077,116.35	6,742,529.57
3% fixed capital charge.....	1,266,386.62	1,272,757.12	8,839,727.40	8,884,722.17
Surplus or (deficit).....	(223,922.42)	(268,678.60)	(1,762,611.05)	(2,142,192.60)
Business revenues.....	1,402,862.49	1,331,908.40	10,170,702.03	8,767,330.95
Business expenses.....	1,350,769.38	1,261,670.44	9,755,710.64	8,325,409.53
Net business revenues.....	52,093.11	70,237.96	414,991.39	441,921.42
3% fixed capital charge.....	59,811.59	60,097.90	443,660.07	444,632.99
Surplus or (deficit).....	(7,718.48)	10,230.06	(28,668.68)	(2,711.57)
Combined revenues.....	3,455,428.18	3,351,674.23	24,607,198.68	22,046,730.54
Combined expenses.....	2,360,870.87	2,277,357.75	17,115,090.94	14,862,279.55
Net revenues.....	1,094,557.31	1,074,316.48	7,492,107.74	7,184,450.99
3% fixed capital charge.....	1,326,198.21	1,332,765.02	9,283,387.47	9,329,355.16
Surplus or (deficit).....	(231,640.90)	(258,448.54)	(1,791,279.73)	(2,144,904.17)

() Indicates deficit.

Respectfully,

J. L. SCHLEY.

Governor.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, March 18, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)		Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.									Nature.	Tons.	Gross.	Net.
Port Fre- mantle ¹	12	5.55	12	6.20	12	13.54	12	15.07	British	477.4	63.0	26.8	London, England.	Nelson, N. Z.	General.	5,260	10,652	7,704
Manizales ²	10	20.40	12	8.55	12	15.32	12	16.51	German	216.5	32.9	13.1	Cristobal, C. Z.	Guayaquil, Ecuador	General.	218	1,132	741
Yuri Maru.....	11	23.40	12	10.55	12	18.26	12	18.35	Japanese	425.0	54.0	28.2	New York, N. Y.	Yawaka, Japan	General.	9,048	6,909	5,147
Willapa ³	12	13.15	12	13.25	12	20.00	12	20.55	American	415.0	56.0	18.6	Baltimore, Md.	Seattle, Wash.	General.	2,500	7,731	5,805
Snead ⁴	12	13.25	12	14.20	12	21.40	12	22.55	Norwegian	377.0	54.0	21.0	New Orleans, La.	Oak, Japan	Cotton, general.	4,257	6,079	4,534
Point Caleta.....	12	15.40	12	16.00	12	23.00	13	0.02	American	386.8	52.2	20.0	Houston, Tex.	Seattle, Wash.	Coke, oil, etc.	4,108	5,708	4,131
Takaka Maru.....	12	17.15	13	6.10	13	14.09	13	15.28	Japanese	445.0	58.0	25.0	Boston, Md.	Yokohama, Japan	Cotton, general.	7,337	7,989	5,856
S-10 ⁵	13	7.30	13	7.30	13	15.23	.....	.....	American	231.0	21.1	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....	.....
S-11 ⁶	13	7.30	13	7.30	13	15.30	.....	.....	American	231.0	21.1	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....	.....
S-13 ⁷	13	8.40	13	8.40	13	18.50	.....	.....	American	240.0	21.1	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	.....	.....
S-48 ⁸	13	5.15	13	8.35	13	20.00	13	20.17	Norwegian	382.7	53.4	22.0	Galveston, Tex.	Shanghai, China	Cotton.	4,328	6,112	4,284
Nuevo Leon ⁹	13	4.30	13	15.05	13	21.15	13	22.25	Panamanian	108.0	20.0	9.0	Bocas, R. P.	Buenaventura, Col.	General.	140	226	101
Gen. Wm. M. Graham ¹⁰	13	7.15	13	7.15	13	14.10	.....	.....	American	156.0	32.0	.....	Cristobal, C. Z.	Miraflores, C. Z.	Ballast.	.....	.....	.....
Heinrich V. Re- demann ¹¹	14	22.10	15	6.15	15	14.41	15	15.55	Danish	521.0	70.0	21.0	New York, N. Y.	Tahara, Peru	Ballast.	.....	12,535	8,224
Swan ¹²	15	6.15	15	6.15	15	15.15	.....	.....	American	180.0	35.6	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast.	.....	78	49
Tuira ¹³	14	16.55	15	7.10	15	16.31	15	17.30	Panamanian	64.2	17.0	.....	Cristobal, C. Z.	Balboa, C. Z.	Steel, general.	2,128	7,330	5,239
Enslay City ¹⁴	15	4.20	15	7.20	15	16.36	15	17.45	American	395.5	55.0	17.1	Baltimore, Md.	Seattle, Wash.	Gasoline.	10	70	27
Amirante ¹⁵	14	21.30	15	11.35	15	20.55	15	21.50	Panamanian	71.0	18.6	8.0	Poston, Mass.	Pedregal, R. P.	Gen. lumber, oil.	2,492	7,156	5,094
Dakota ¹⁶	15	11.35	15	11.55	15	19.50	15	20.15	American	407.0	53.0	18.6	Baltimore, Md.	Tacoma, Wash.	Steel, general.	2,000	7,623	5,412
Taybank ¹⁷	15	13.55	15	14.10	15	20.15	15	21.50	British	426.0	57.0	18.0	Baltimore, Md.	Darien, China	Gen. lumber, oil.	35	46	22
Real ¹⁸	14	16.55	15	11.35	15	20.55	15	21.50	Panamanian	62.2	17.1	.....	Cristobal, C. Z.	Pedregal, R. P.	Gasoline.	245	1,055	698
Cal. ¹⁹	14	21.15	16	6.05	16	15.06	16	16.25	German	216.0	32.0	12.2	Cristobal, C. Z.	Tumaco, Colombia	General.	1,768	5,167	4,133
Nelson Traveler Edward Luck- enbach ²⁰	15	6.10	16	7.25	16	15.03	16	17.25	American	380.0	53.0	16.5	New York, N. Y.	Seattle, Wash.	General.	4,071	8,543	6,427
Sacramento Valley ²¹	16	8.45	16	8.55	16	17.13	16	18.20	American	436.0	57.0	23.0	Boston, Mass.	Seattle, Wash.	General.	.....	.....	.....
Santa Ana ²²	16	4.10	16	12.20	16	18.40	17	2.15	British	401.0	54.0	22.7	Brunswick, Ga.	Shanghai, China	General.	6,089	6,621	4,916
Santa Clara ²³	16	3.40	16	14.04	16	20.25	17	12.25	American	360.0	51.0	23.6	New York, N. Y.	San Francisco, Cal.	General, oil.	1,879	5,710	4,011
President Van Buren ²⁴	17	6.30	17	6.45	17	20.25	17	21.25	American	483.0	63.0	25.0	New York, N. Y.	San Antonio, Chile	General.	2,658	11,680	7,456
Emile Maersk ²⁵	17	3.40	17	6.45	17	15.58	17	21.40	American	502.0	62.0	26.0	New York, N. Y.	San Francisco, Cal.	General.	2,514	12,023	8,495
Pan Norway ²⁶	17	0.10	17	9.09	17	19.08	17	20.20	Danish	284.0	42.0	12.1	Pto. Mexico, Mex.	San Jose, Guat.	General.	316	2,458	1,645
Salvador ²⁷	17	8.35	17	9.55	17	20.18	17	21.40	Norwegian	484.0	65.0	20.6	Rouen, France	Tahara, Peru	Ballast.	.....	.....	.....
.....	11	15.55	18	7.05	18	17.35	18	18.56	British	215.0	34.0	15.3	Cristobal, C. Z.	Champerico, Guat.	General.	338	1,270	735

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.																		
Savorgnan de Brazza 7.	16	8 05	18	7 05	18	14 08	French.	French Navy.	338.0	42.0	15.0	Lorient, France.	Saigon, China.	Ballast.	6,548			
Eastern Sun 2.	18	4 15	18	8 40	18 28	18 19 40	American.	Sun Oil Co.	480.0	66.0	21.0	Chester, Pa.	Los Angeles, Calif.	Ballast.	6,548			
Tsuisu Maru.	18	4 30	18	8 45	18 40	18 20 55	Japanese.	Nippon Yusen Kaisha.	445.0	58.0	21.0	Baltimore, Md.	Kobe, Japan.	(*) 6,803	5,716			
Svearoff 2.	18	6 50	18	9 35	18 35	19 3 40	Swedish.	Scand. South Pacific Line	392.0	54.0	20.9	Gothenburg, Swed'n	Valparaiso, Chile.	(*) 6,803	5,039			
Kelikut Maru.	18	14 40	18	14 50	18 22	12 18 23 30	Japanese.	Nippon Yusen Kaisha.	335.0	51.0	21.1	St. John, N. B.	Yawata, Japan.	Iron, cotton.	7,967			
Charles R. Mc- Cornick.	11	14 15	12	6 11	12 14	10 12 14 10	American.	McCormick S. S. Co.	401.4	53.2	25.0	Tacoma, Wash.	Philadelphia, Pa.	General.	7,939			
Hokuriku Maru 2.	11	14 15	12	7 11	12 14	14 12 14 45	American.	Shell Eastern Pet. Co.	435.0	56.0	26.2	Los Angeles, Calif.	Wilmington, N. C.	Gasoline.	9,262			
Dilworth 2.	12	3 35	12	7 52	12 16	30 12 14 45	Japanese.	Osaka Shosen Kaisha.	446.0	60.0	26.0	Iloilo, P. I.	Baltimore, Md.	General.	6,043			
Endurance 2.	12	9 00	12	7 38	12 19	10 12 19 30	Panamanian.	E. Garcia.	60.0	14.6		Darien, R. P.	Cristobal, C. Z.	Coconuts.	33			
Lio 2.	12	9 00	12	10 38	12 19	10 12 19 30	American.	General Pet. Corp.	431.0	59.2	28.5	Los Angeles, Calif.	New York, N. Y.	Fuel distillate.	10,620			
Porto Bello 2.	12	7 02	12	7 02	12 19	10 12 19 30	Panamanian.	Tagapagos Bros.	46.0	15.6		Darien, R. P.	Cristobal, C. Z.	Coconuts.	20			
Dolphin 2.	13	5 00	13	7 16	13 15	00 13 15 00	British.	U. S. Navy.	342.0	53.4	25.0	San Diego, Calif.	Coco Solo, C. Z.	Kerosene.	7,762			
Murex 2.	13	4 28	13	8 28	13 16	10 13 16 10	American.	Anglo-Saxon Pet. Co.	427.0	59.8	25.0	Portland, Ore.	Land's End, Eng.	General.	7,605			
Californian 2.	13	9 50	13	10 57	13 18	30 14 2 05	German.	Amer-Hawkan Line.	449.6	58.8	25.0	Vancouver, B. C.	Bremen, Germany.	General.	7,519			
Witell 2.	13	13 15	13	14 25	13 23	15 23 25	Norwegian.	North German Lloyd.	475.6	64.2	28.0	Talara, Peru.	Fawley, England.	Crude oil.	12,767			
Barfom 2.	13	14 30	13	15 34	13 8	45 14 8 55	Norwegian.	Standard Shipping Co.	380.5	54.7	27.0	Vancouver, B. C.	Velle, Denmark.	Wheat, lumber, general.	8,418			
Bronnoy 2.	13	14 30	13	15 34	13 8	45 14 8 55	Norwegian.	Canadian Transp. Co.	380.5	54.7	27.0	Vancouver, B. C.	Velle, Denmark.	Wheat, lumber, general.	8,418			
General W. M. Graham 4.	13	15 47	14	4 45	14 12	10 14 20 40	American.	U. S. Army.	180.2	32.0		Miraflores, C. Z.	Cristobal, C. Z.		6,447			
Canadian Cruiser.	13	15 47	14	4 45	14 12	10 14 20 40	British.	Can. Nat. Steamships.	445.0	56.0	30.0	Brisbane, Australia	Halifax, N. S.	General.	7,680			
Constance	13	17 10	14	6 04	14 13	50 14 13 50	American.	Arrow Line.	409.6	54.2	25.0	Aberdeen, Wash.	Baltimore, Md.	Lumber, general.	7,718			
Chandler	14	0 50	14	7 21	14 15	00 14 15 00	Norwegian.	Cascade Line.	400.6	54.2	27.0	Vancouver, B. C.	Antwerp, Belgium.	Wheat, general.	6,978			
Titanic	14	0 50	14	8 10	14 15	50 14 15 50	American.	McCormick S. S. Co.	410.5	54.2	23.0	San Francisco, Cal.	Buenos Aires, Arg.	General.	5,068			
Westra	14	6 00	14	8 10	14 16	55 15 7 10	Panamanian.	A. A. Valdez.	64.0	20.0	6.0	Bayano, R. P.	Cristobal, C. Z.	Bananas.	65			
Tuira 6.	14	4 30	14	9 16	14 16	50 14 16 50	American.	Williams S. S. Corp.	434.4	57.7	27.3	Seattle, Wash.	Newark, N. J.	Lumber, general.	8,229			
Georgian	14	4 30	14	9 16	14 16	50 14 16 50	American.	Haus Elliot.	62.2	17.1	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	32			
Real 6.	14	5 15	14	10 21	14 18	55 14 23 10	American.	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Gasoline.	13,683			
Sun 2.	14	8 30	14	11 45	14 20	30 15 15 10	French.	French Line.	425.0	55.0	26.0	Coronel, Chile.	Haere, France.	General.	7,776			
Zenon.	14	8 30	14	12 10	14 21	30 15 11 35	Panamanian.	Enrique del Valle.	71.0	32.9	12.2	Darien, R. P.	Cristobal, C. Z.	Bananas.	35			
Almirante 2.	14	8 30	14	12 10	14 21	30 15 11 35	Panamanian.	North German Lloyd.	216.5	32.9	12.2	Balboa, C. Z.	Cristobal, C. Z.	Ballast.	1,105			
Cal.	11	2 00	14	13 36	14 21	15 6 05	German.	Transatlant S. S. Co.	378.0	54.0	23.2	Pagumene, N. Cal.	Rotterdam, Holland	Ore, general.	7,636			
Tolken.	14	13 35	14	14 41	14 22	40 15 1 10	Swedish.								6,235			
Jacob Lucken- bach.	14	14 40	14	15 20	14 23	20 14 23 20	American.	Luckenbach Gulf S. S. Co.	450.0	57.6	26.0	Seattle, Wash.	Mobile, Ala.	General.	7,436			
Andrea F. Luck- enbach.	14	19 45	15	6 17	15 14	05 15 14 05	American.	Lukenbach Line.	496.0	68.2	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	9,118			
Madras City.	14	22 28	15	7 16	15 15	55 15 18 30	British.	Continental Grain Co.	383.9	56.5	25.3	Vancouver, B. C.	Cobb, Ireland 2.	Wheat.	7,890			
Lochail 2.	14	23 30	15	8 35	15 17	00 15 22 10	British.	Royal Mail Lines, Ltd.	485.6	62.3	29.0	Vancouver, B. C.	Rotterdam, Holland	General.	8,711			
Tulsgo 2.	15	2 15	15	9 37	15 18	10 15 18 10	American.	Associated Oil Co.	431.0	59.2	27.4	San Francisco, Cal.	Tiverton, R. I.	Crude oil.	10,317			
Memphis City.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.	15	10 30	15	11 26	15 19	55 15 23 55	American.	Isthmian S. S. Lines.	424.2	56.2	27.0	Vancouver, B. C.	Avonmouth, Eng.	General.	8,079			
Motor ship.																		

* Tanker.

† Motor ship.

‡ Wire rods, copper, tobacco, and explosives.

§ Submarine rock.

|| Motor schooner.

¶ Destroyer.

** For orders.

*** Towing barge.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Nehrasian...	15	21.00	16	4.59	16	12.15	16	12.15	American...	Amer-Hawaiian Line...	472.0	60.0	25.0	Seattle, Wash....	Boston, Mass....	General.....	7,243	6,644
San Francisco	15	23.10	16	6.22	16	14.35	16	14.35	Japanese	Kokusai Kisen Kaisha.	385.0	51.0	28.0	Iloilo, P. I.....	Savannah, Ga., ¹⁵	Sugar.....	7,500	4,672
Lapwing ¹²	16	2.00	16	6.40	16	14.25	16	14.25	American	U. S. Navy.	187.0	37.0		Balboa, C. Z....	Christobal, C. Z.	General.....	8,449	7,830
Barnes Old	16	2.00	16	7.28	16	15.55	17	0.10	Dutch	Royal Neth. S. S. Co.	400.9	58.2	27.0	Valparaiso, Chile.	Hamburg, Germany	General.....	5,246	6,665
Santa Maria	16	4.00	16	9.30	16	17.15	17	22.25	American	Grace Line S. S. Co.	466.0	64.0	25.0	Valparaiso, Chile.	New York, N. Y.	General.....	6,550	6,205
Ruth Kellogg	16	8.50	16	10.25	16	18.25	17	18.25	American	Kellogg S. S. Co.	390.0	54.2	26.0	Swanghai, China.	New York, N. Y.	General.....	8,255	6,103
Bendheim	16	9.30	16	11.10	16	20.00	17	20.55	British	Burris-Phillips Co.	407.0	53.5	25.0	Townsville, Aus. I.	London, England.	General.....	7,846	
Lundington	16	0.30	17	5.15	17	13.20	19	11.20	American	U. S. Army	455.0	60.0	17.5	Manila, P. I.....	Brooklyn, N. Y.	Army supplies.	7,800	7,022
Queen City	16	15.00	17	6.31	17	13.55	17	13.55	British	Reardon Smith Line.	412.0	55.1	25.0	Vancouver, B. C.	Genoa, Italy	Wheat, general.	9,433	13,787
California	17	5.30	17	7.35	17	15.55	18	2.00	Italian	Nav. Libero-Trestita	523.1	64.0	30.0	Vancouver, B. C.	Christobal, C. Z.	Grain, general.	1,221	1,632
Durazo	17	1.00	17	8.14	17	16.35	17	16.35	German	Hamburg-American Line	227.5	34.4	15.0	Guayaquil, Ecuador	New York, N. Y.	General.....	7,712	7,330
Steed Voyager	17	3.00	17	9.11	17	18.00	17	21.05	American	Isthmian S. S. Lines...	395.5	55.0	26.0	Honolulu, T. H.	Savannah, N. J.	Sugar, cane	13,548	9,604
Northern	17	7.11	17	11.20	17	20.20	17	20.20	American	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Seattle, Wash....	Gasoline.....	5,879	7,082
Sidney M.	17	8.15	17	12.12	17	21.20	17	21.20	American	McCormick S. S. Co.	401.4	53.2	24.4	Tacoma, Wash....	New York, N. Y.	General, lumber.	7,871	5,725
Hauptman.	17	7.45	17	13.27	17	21.55	18	12.05	American	Panama Mail S. S. Co.	360.2	51.6	25.0	San Francisco, Cal.	New York, N. Y.	Coffee, general.	7,890	5,979
Santa Teresa.	17	10.50	17	15.49	18	9.00	18	11.15	British	Reardon Smith Line.	396.5	53.5	26.0	Vancouver, B. C.	Cobh, Ireland ¹⁵	Wheat.....	10,086	8,771
Orient City	17	13.55	18	4.50	18	12.40	18	12.40	Danish	W. L. Garmyn.	384.7	54.4	26.0	Vancouver, B. C.	Veile, Denmark.	Grain, lumber.	8,300	5,619
Nordfarer	17	23.00	18	6.45	18	13.55	18	14.45	Belgium	Com. Maritime Helge	473.6	60.7	27.0	Grays Harbor, Wash.	London, England.	General.....	10,147	7,555
Mercer	18	0.30	18	7.51	18	15.45	18	15.45	American	Amer-Hawaiian Line.	386.0	52.0	26.0	Seattle, Wash....	New York, N. Y.	Lumber, general.	2,451	5,688
Willfaro	18	1.30	18	8.20	18	17.30	18	20.30	British	Anglo Chilean Nit. Co.	390.0	53.6	26.0	Tocopilla, Chile.	Azores ¹⁵	Nitrate.....	1,220	3,848
Salvador	18	2.55	18	9.46	18	18.35	18	22.20	British	Anglo-Ecuador Oil Co.	440.8	57.6	28.0	La Libertad, Ecuador	Philadelphia, Pa.	Crude oil.....		
El Alito	18	5.45	18	13.19	18	20.30	18	20.40	American	Gulf Pac. Mail Line.	379.9	53.1	21.0	Portland, Oreg.	Beaumont, Tex.	General.....		
Point Ancho.	18	12.30	18	14.23	18	21.55	21	6.55	American	Panama Mail S. S. Co.	296.1	45.9	18.0	San Francisco, Cal.	Christobal, C. Z.	General.....		
Santa Catalina	18	12.30	18	14.23	18	21.55	21	6.55	American	U. S. Army.	296.1	45.9	18.0	Balboa, C. Z.	Christobal, C. Z.	General.....		
O. B. No. 3	18		18		18													

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	Date.	Vessel.	Line.	For—
March 12.	Georgic	White Star Line.	March 12.	Metapan	United Fruit Co.	New York via wayports.
March 12.	No. 144-M	Pan American-Grace Airways.	March 12.	Costa Rica	Royal Netherlands S. S. Co.	Amsterdam via wayports.
March 12.	No. 414-H	Pan American Airways.	March 12.	Christobal	Panama R. R. S. S. Line.	New York via Haiti.
March 13.	Peten	United Fruit Co.	March 12.	Georgic	White Star Line.	New York via Havana.

PORT OF CRISTOBAL.—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
March 13.	Conte Grande.	Societa Italia-Flotte Riunite.	New York via waypoints.	March 12.	Pastores	Colombian S. S. Line.	New York via waypoints.
March 13.	No. 145-M ¹⁷ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.	March 13.	No. 670-M ¹⁷ .	Pan American Airways.	Barranquilla, Colombia.
March 13.	No. 670-M ¹⁷ .	Pan American Airways.	Barranquilla, Colombia.	March 13.	No. 300-N ¹⁷ .	Pan American-Grace Airways.	Barranquilla, Colombia.
March 13.	No. 9673 ¹⁷ .	Pan American Airways.	Guatemala via waypoints.	March 13.	Peten.	United Fruit Co.	New York via waypoints.
March 14.	Contessa.	Standard Fruit & S. S. Co.	New Orleans via waypoints.	March 14.	Conte Grande.	Societa Italia-Flotte Riunite.	New York via waypoints.
March 14.	Colombie.	French Line.	Havre via waypoints.	March 14.	No. 945-M ¹⁷ .	Pan American-Grace Airways.	Talara via waypoints.
March 14.	Annetta I. ¹⁸ .	P. W. Hamilton.	Colon, Rep. of Panama.	March 14.	Klondyke ¹⁹ .	Maxwell Newhall.	Cartagena, Colombia.
March 14.	Inapaquina ¹⁸ .	A. Tagarapoulos.	Colon, Rep. of Panama.	March 14.	Herbyron.	Anglo-Saxon Petroleum Co.	Curacao, D. W. I.
March 15.	Juan Sebastian Elcano	Spanish S. S. Line.	Barcelona via waypoints.	March 14.	Colombie.	French Line.	Port Limon, Costa Rica.
March 15.	No. 9688 ¹⁷ .	Pan American Airways.	San Salvador via waypoints.	March 15.	Contessa.	Standard Fruit & S. S. Co.	New Orleans via waypoints.
March 15.	No. 22-V ¹⁷ .	Pan American-Grace Airways.	Chiclayo via waypoints.	March 15.	Annetta I. ¹⁸ .	P. W. Hamilton.	Colon, Rep. of Panama.
March 15.	Director.	T. & J. Harrison.	Liverpool via waypoints.	March 15.	Inapaquina ¹⁸ .	A. Tagarapoulos.	Colon, Rep. of Panama.
March 16.	Colombie.	French Line.	Port Limon, Costa Rica.	March 16.	Director.	T. & J. Harrison.	Tampico, Mexico.
March 16.	No. 660-M ¹⁷ .	Pan American Airways.	Miami via waypoints.	March 16.	Colombie.	French Line.	Havre via waypoints.
March 16.	Georgia.	Hamburg-American Line.	Cartagena, Colombia.	March 16.	No. 670-M ¹⁷ .	Pan American Airways.	Miami via waypoints.
March 17.	Aenas.	United Fruit Co.	New Orleans via waypoints.	March 16.	No. 9673 ¹⁷ .	Pan American Airways.	Guatemala via waypoints.
March 17.	Veragua.	United Fruit Co.	New York via waypoints.	March 16.	No. 145-M ¹⁷ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
March 17.	Buenaventura.	Panama R. R. S. S. Line.	New York via waypoints.	March 16.	Georgia.	Hamburg-American Line.	Port Limon, Costa Rica.
March 17.	Ulowana ¹⁶ .	A. V. Armour.	Medellin, Colombia.	March 17.	No. 144-M ¹⁷ .	Pan American-Grace Airways.	Chiclayo via waypoints.
March 17.	Santa Marta.	Colombian S. S. Line.	St. Andrews.	March 17.	Veragua.	United Fruit Co.	Port Limon, Costa Rica.
March 18.		United Fruit Co.	New York via waypoints.	March 18.	Juan Sebastian Elcano	Spanish S. S. Line.	Barcelona via waypoints.
March 18.			New York via Kingston.	March 18.	No. 9688-M ¹⁷ .	Pan American Airways.	San Salvador via waypoints.
March 18.				March 18.	No. 145-M ¹⁷ .	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
March 18.				March 18.	Buenaventura.	Panama R. R. S. S. Line.	New York, N. Y.
March 18.				March 18.	Aenas.	United Fruit Co.	New Orleans via waypoints.

PORT OF BALBOA.

March 12.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.	March 12.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.
March 14.....	Calgarolite ¹ ¹³	Imperial Oil Co.....	Talara, Peru.	March 16.....	Calgarolite ¹ ¹³	Imperial Oil Co.....	Talara, Peru.
March 12.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.	March 12.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.
March 14.....	Calgarolite ¹ ¹³	Imperial Oil Co.....	Talara, Peru.	March 16.....	Calgarolite ¹ ¹³	Imperial Oil Co.....	Talara, Peru.

¹ Tanker. ¹² Tug. ¹³ Motor ship. ¹⁴ Launch. ¹⁵ For orders. ¹⁶ China and coconut oil. ¹⁷ Air mail carrier. ¹⁸ Motor boat. ¹⁹ Schooner. ²⁰ Yacht.

* Other than ships passing through the Canal.

Hamburg-American Line Adds New Vessels to Central American Service.

The Hamburg-American Line, which operates a passenger and freight service between Europe and Central America, via ports in the West Indies, Colombia, and Venezuela, has announced the addition of the new motor ships *Caribia* and *Cordillera* to the service, augmenting the facilities now provided by the motor ships *Magdalena* and *Orinoco*. The *Caribia* is due to arrive at Cristobal on her maiden voyage on March 23, 1933, and to sail on the following day for Port Limon and Puerto Barrios, thence returning and sailing on April 5, 1933, to Europe, via Colombia, Curacao, Venezuela, Trinidad, and Barbados. The *Caribia* is to be followed within a short time by her sister ship, the *Cordillera*.

The new vessels are 528 feet long by 67 feet beam, with registered gross tonnage of 12,000 tons. Their speed is about 17 knots. Accommodations are provided for 160 first, 103 second, and 100 tourist-class passengers.

Additional Calls in Gulf-Pacific Line Service.

The Gulf-Pacific Line (Swayne & Hoyt), operating a fleet of vessels between Gulf ports and the west coast of the United States and Canada, has announced that Tampico, Kingston, and Puerto Colombia are to be ports of call on westbound voyages of its vessels when cargo is offering. Calls have been made at these ports for some time past on the eastbound voyages.

Aviation.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 15, 1933.

To all concerned:

The following is published for the information and guidance of all concerned:

Before using military landing areas as airports, as contemplated in subparagraph (c), paragraph 9, of Executive Order No. 5047, dated February 18, 1929, or in Section 26 of the "Regulations to Govern Air Navigation in the Canal Zone," permission must be obtained from the Commanding General, Panama Canal Department.

In the case of naval landing areas, permission must be obtained from the Commandant, Fifteenth Naval District.

J. L. SCHLEY,
Governor.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 15, 1933.

No. 33.

Panama Canal, Miraflores and Pedro Miguel locks, whistle signs discontinued. The following whistle signs were permanently discontinued, effective March 15, 1933:

- (a) Southern approach to Miraflores Locks, west bank, at station 2085.
- (b) Southern approach to Miraflores Locks, east bank, at station 2125.
- (c) East bank, north of Pedro Miguel Locks, at station 1920.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., March 16, 1933.

No. 34.

Colombia, west coast, Buenaventura River, buoy out of position. The master of the M. S. *Santa Maria* reports that on March 13, 1933, buoy No. 3 in Buenaventura River (charted position latitude 3° 47' 55" N., longitude 77° 13' 15" W.) was approximately 1 mile, 258°, from the charted position and the light extinguished. Soldado lighthouse bearing about 80°, 2½ miles distance. The buoy marks a shoal with 23 to 24 feet at low water.

Also the buoy showing a green light, marking the wreck of the S. S. *Tritonia*, is missing.

J. L. SCHLEY,
Governor.

System of Steering Orders.

THE PANAMA CANAL, DEPARTMENT OF OPERATION AND MAINTENANCE,
BALBOA HEIGHTS, C. Z., March 17, 1933.

Notice to steamship owners and agents:

1. Recently a new system of steering orders has gone into effect on certain vessels transiting the Canal, thus making three such systems now in use and thereby increasing the possibility of accident due to misinterpretation of orders. This recent system is in accordance with Article 41, quoted below, of the 1929 International Conference on Safety of Life at Sea, but which has not yet been ratified by all of the governments concerned:

Article 41, *Helm Orders*.—The Contracting Governments agree that after midnight on the 30th June, 1931, helm or steering orders, *i. e.*, orders to the steersman, shall on all their ships be given in the direct sense, *e. g.*, when the ship is going ahead an order containing the word "starboard" or "right" or any equivalent of "starboard" or "right" shall only be used when it is intended, on ships as at present generally constructed and arranged, that the wheel, the rudder-blade and the head of the ship, shall all move to the right.

2. This article not only permits, for the purpose of steering orders, the use of the words "starboard" (port) or "right" (left) but also of their equivalents, but in the Panama Canal their equivalents will not be employed. It also definitely states how these words shall be interpreted. Two of the most commonly used of them, *e. g.*, "starboard" and "port" have the disadvantage of also being employed for orders to the main engines and, under present circumstances, the situation is further complicated by some vessels using these terms to apply to the helm while others intend them to apply to the rudder. The Panama Canal is anxious to comply with the wishes of masters as to the system they desire to use while in Canal waters, but, in view of the present confused conditions, believes that the possibility of accident will be considerably reduced if the words "right" and "left" be restricted to steering orders and only in the sense as outlined in Article 41, and that "starboard" and "port" be not used for orders to the wheel; and it is requested that this preference be brought to the attention of all masters.

3. Pilots will be instructed that, before taking over their duties, they will inform the master that The Panama Canal prefers the system just outlined, but that if the master desires to use any of the other systems now being used by vessels transiting the Canal, his wishes are to be complied with.

W. ANCRUM,
Marine Superintendent.

APPROVED:

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending March 18, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				<i>Tons.</i>	<i>Tons.</i>
Guayaquil.....	Panama Railroad S. S. Line.....		March 5		410
Sixaola.....	United Fruit Co.....		March 5		102
Haiti.....	Colombian S. S. Line.....		March 5		691
President Lincoln.....	Dollar Line.....	March 5	March 5	271	(¹)
Rialto.....	Navigazione Libera-Triestina.....	March 5	March 5	73	(¹)
Peter Kerr.....	Quaker S. S. Line.....	March 5	March 6	81	(²)
Sollund.....	Panama Mail S. S. Co.....	March 5	March 9	1,195	(²)
Cerigo.....	Hamburg-American Line.....		March 6		231
Granville.....	Fred Olsen & Co.....		March 6		487
Quirigua.....	United Fruit Co.....	March 6	March 6	35	8
Jason.....	Royal Netherlands S. S. Co.....	March 7	March 7	(¹)	119
Seattle.....	Hamburg-American Line.....	March 7	March 7	76	118
Magdalena.....	Hamburg-American Line.....	March 7	March 8	(¹)	621
Cefalu.....	Standard Fruit & S. S. Co.....	March 7	March 8	166	529
Lochkatrine.....	Royal Mail Lines, Ltd.....	March 7	March 8	422	8
Dorelian.....	Leyland S. S. Line.....	March 7	March 8	289	15
West Nilus.....	McCormick S. S. Co.....	March 7	March 8	126	57
Tillie Lykes.....	Lykes Brothers.....	March 7	March 9	2,916	96
Amerika.....	Danish East Asiatic Line.....	March 8	March 8	(¹)	²
Feltre.....	Navigazione Libera-Triestina.....	March 8	March 8	(¹)	400
Canadian Leader.....	Canadian National Steamships.....	March 8	March 8	40½	3
Cristobal.....	Panama Railroad S. S. Line.....	March 8		1,377	
Tacoma.....	Hamburg-American Line.....	March 9	March 10	17	130

¹ No cargo discharged.

² No cargo laded.

³ One case.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Cali.	Hamburg-American Line.	March 9		893	
Axel Johnson.	Johnson S. S. Line.	March 9	March 10	206	(²)
Alabama.	French Line.	March 9	March 10	11	219
Nuevo Panama.	H. Elliot.	March 9	March 10	239	69
President Wilson.	Dollar Line.	March 9	March 10	(¹)	62
Cavina.	Elders & Fyffes, Ltd.	March 10	March 10	6	(²)
Loreto.	Pacific Steam Navigation Co.	March 10	March 11	15	279
Virgilio.	Italian S. S. Line.	March 10		233	
Herbjorn.	Anglo-Saxon Petroleum Co.	March 10		10,970	
Manizales.	Panama Mail S. S. Co.	March 10		1,315	
Taketoyo Maru.	Nippon Yusen Kaisha.	March 10	March 10	77	(²)
Peten.	United Fruit Co.	March 10	March 10	316	25
Zacapa.	United Fruit Co.	March 10	March 11	700	304
Santa Paula.	Panama Mail S. S. Co.	March 10	March 11	348	120
Reina del Pacifico.	Pacific Steam Navigation Co.	March 11		130	
Remuera.	New Zealand Shipping Co.	March 11	March 11	124	(²)
Salvador.	Pacific Steam Navigation Co.	March 11		994	
Costa Rica.	Royal Netherlands S. S. Co.	March 11		7	
Pearl Marie.	R. Feuillebois.	March 11	March 11	(¹)	18
Santa Elisa.	Panama Mail S. S. Co.	March 11		1,398	
Pastores.	United Fruit Co.	March 11		64	
Metapan.	United Fruit Co.	March 11		501	
Cristobal.	Panama Railroad S. S. Line.		March 12		347
Virgilio.	Italian S. S. Line.		March 12		1,507
Manizales.	Grace Line.		March 12		220
Costa Rica.	Royal Netherlands S. S. Co.		March 12		966½
Santa Elisa.	Panama Mail S. S. Co.		March 12		559
Pastores.	Colombian S. S. Line.		March 12		604½
Metapan.	United Fruit Co.		March 12		199
Hokuroku Maru.	Osaka Shosen Kaisha.	March 12	March 12	244	(²)
Nuevo Panama.	Hans Elliot.	March 13	March 13	211	123
Peten.	United Fruit Co.	March 13	March 13	16	9½
Witell.	North German Lloyd.	March 13	March 14	11	407
Colombie.	French Line.	March 14	March 14	37	305
Canadian Cruiser.	Canadian National Steamships.	March 14	March 14	101	607
Contessa.	Standard Fruit & S. S. Co.	March 14	March 15	144	745
Almirante.	E. del Valle.	March 14	March 15	35	53
Zenon.	French Line.	March 14	March 15	668	(²)
Lochgool.	Royal Mail Lines, Ltd.	March 15	March 15	(¹)	217
Nelson Traveler.	Nelson S. S. Line.	March 15	March 16	221	(²)
Director.	T. & J. Harrison.	March 15	March 16	275	(²)
Juan Sebastian Elcano.	Spanish S. S. Line.	March 15	March 18	140	693
Cali.	North German Lloyd.		March 16		252
Georgia.	Hamburg-American Line.	March 16	March 16	93	8
Colombie.	French Line.	March 16	March 16	6	369
Santa Ana.	Panama Mail S. S. Co.	March 16	March 16	88	191
Santa Clara.	Grace Line.	March 16	March 16	134	275
Santa Maria.	Grace Line.	March 16	March 16	286	(²)
Barneveld.	Royal Netherlands S. S. Co.	March 16	March 17	864	(²)
Buenaventura.	Panama Railroad S. S. Line.	March 17	March 18	1,043	679
President Van Buren.	Dollar Line.	March 17	March 17	1	(²)
Atenas.	United Fruit Co.	March 17	March 18	432	354
Veragua.	United Fruit Co.	March 17	March 17	235	39½
Santa Teresa.	Panama Mail S. S. Co.	March 17	March 18	607	79
Durazzo.	Hamburg-American Line.	March 17		1,221	
California.	Navigazione Libera-Triestina	March 17	March 18	(¹)	689
Salvador.	Pacific Steam Navigation Co.		March 18		939
Santa Catalina.	Panama Mail S. S. Co.	March 18		1,471	
Colombia.	Colombian S. S. Line.	March 18		29	
Santa Marta.	United Fruit Co.	March 18		215	
India.	Danish East Asiatic Co.	March 18		645	

¹ No cargo discharged.² No cargo laded.³ One package.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending March 18, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Santa Elisa.	Grace Line.	March 10	March 11	114	230
Santa Paula.	Grace Line.	March 11	March 11	205	
Reina del Pacifico.	Pacific Steam Navigation Co.	March 11	March 11	10	
Antigua.	United Fruit Co.	March 12	March 12	275	56
Calgarolite.	Imperial Oil Co.	March 14	March 16	16,000	
Santa Maria.	Grace Line.	March 16	March 16	67	17
Santa Ana.	Grace Line.	March 16	March 16	37	54
Santa Clara.	Grace Line.	March 16	March 17	141	20
Point Ancha.	Gulf Pacific Mail Line.	March 16	March 18	2,815	
Ludington.	U. S. Government.	March 16	March 17	601	36
President Van Buren.	Dollar Line.	March 17	March 17	7	
Santa Teresa.	Panama Mail S. S. Co.	March 17	March 17	63	1
Cali.	North German Lloyd.	March 16	March 16		1
Santa Catalina.	Panama Mail S. S. Co.	March 18	March 18	1	

THE PANAMA CANAL RECORD

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Volume XXVI.

Balboa Heights, C. Z., March 29, 1933.

No. 35.

Shipments of Chilean Nitrate Increase.

Shipments of Chilean nitrate via the Panama Canal, which have been almost dormant for some months, underwent a revival during February, 1933, when a total of 33,259 tons were passed through. This was the highest tonnage of this product since February, 1932, when transiting shipments amounted to 64,260 tons. In March, 1932, tonnage of Chilean nitrate shipped via the Canal dropped to 19,091 tons, and in the following month fell to 18,875 tons. In May, shipments were somewhat revived when the total amounted to 24,282 tons. From that month there were successive decreases until September, in which month there were no shipments. In the following four months shipments varied between 1,169 tons in December and 7,350 tons in November. In February, 1933, as stated, a sharp rise occurred, and indications point to a heavier nitrate tonnage in March than in February.

Chilean nitrates in normal times contribute extensively to the cargo tonnage shipped via the Panama Canal. In the fiscal year 1928 the nitrate traffic reached a peak of 2,565,572 tons. In the fiscal year 1929 the total was 2,554,565 tons. In the following table are shown the amounts shipped during the past 10 fiscal years, together with the average per month for each year:

Fiscal year.	Total tonnage.	Average per month.
1923.....	1,664,751	138,729
1924.....	1,744,580	145,382
1925.....	2,155,814	179,651
1926.....	1,878,050	156,504
1927.....	1,174,384	97,865
1928.....	2,565,572	213,798
1929.....	2,554,565	212,880
1930.....	1,910,793	159,233
1931.....	1,375,450	114,621
1932.....	811,522	67,627
1933.....	52,986	6,623

* For 8 months, July, 1932, to February, 1933, inclusive.

Last of New Panama Mail Liners to Sail on Maiden Voyage.

The turbo-electric passenger and freight liner *Santa Elena* is scheduled to sail from New York on its maiden voyage on March 31, and is due to arrive at Cristobal on April 7 en route to the west coast of Central and North America. The *Santa Elena* is the fourth and last of a program of new vessels constructed for the Grace Line—Panama Mail Service (a subsidiary of W. R. Grace & Company) for coast-to-coast service. The others are the *Santa Rosa*, the *Santa Paula*, and the *Santa Lucia*, all of which have been placed in service since last December. The four are sister ships. Each is 508 feet long, 72 feet beam, of 11,200 gross tons, and has accommodations for 222 first-class, 28 third-class, and 36 steerage passengers.

MOVEMENTS OF OCEAN VESSELS.
Week ending at midnight, March 25, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line.		Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.		(Charterer or operator.)	Length.	Beam.			Nature.	Tons.	Gross.	Net.
India ¹	18	13 30	19	6 05	19	14 08	19	15 15	Danish.	East Asiatic Co.	470.0	63.0	Copenhagen, Den.	Vancouver, B. C.	Ballast.	11,157	8,336	
Point Reyes ²	19	00 25	19	7 15	19	15 41	19	16 55	American.	Swayne & Hoyt.	324.0	46.0	Houston, Tex.	San Francisco, Cal.	Ballast.	3,984	2,617	
Cape York ³	19	00 40	19	8 40	19	16 48	19	18 10	British.	Lyle Shipping.	409.0	54.0	Swansea, England.	Sta. Rosalia, Mex.	Coal.	4,542	6,927	4,802
Mathew Luckenbach ⁴	19	5 15	19	8 40	19	17 47	19	19 08	American.	Luckenbach Line.	434.0	57.0	New Orleans, La.	Seattle, Wash.	General.	4,113	7,977	5,726
Flomar ⁵	19	7 45	19	9 40	19	18 46	19	20 08	American.	Calmar Line.	410.0	54.0	Baltimore, Md.	Seattle, Wash.	Steel, general.	6,260	6,604	4,655
Wyoming ⁶	19	9 55	19	13 20	19	20 02	19	21 26	French.	French Line.	473.0	61.0	Harve, France.	Vancouver, B. C.	Drugs, perfume.	55	10,440	7,027
Yearby ⁷	19	16 05	19	16 15	19	23 54	20	1 05	British.	Roper Shipping Co.	435.0	55.0	Genoa, Italy.	Vancouver, B. C.	Drugs, perfume.	6,884	5,130	
Gob ⁸	19	19 35	19	7 14	19	20 02	19	21 26	American.	Thomas Kyle.	435.0	55.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	6,884	5,130	
Fleijell ⁹	19	18 35	20	6 20	20	13 40	20	14 45	Norwegian.	Anglo-Saxon Pet. Co.	460.0	59.0	Curacao, D. W. I.	Los Angeles, Calif.	Ballast.	8,297	5,488	
Pacific Express ¹⁰	20	00 05	20	7 10	20	15 06	20	16 00	British.	Furness, Withy & Co.	435.0	60.0	Glasgow, Scotland.	Vancouver, B. C.	General.	1,097	9,633	6,998
Atholstan ¹¹	20	6 25	20	8 25	20	17 45	20	19 10	British.	Asano Bussan Co.	475.0	63.0	Falmouth, England.	Yokohama, Japan.	Crude oil.	12,890	9,572	6,345
Agra ¹²	20	6 45	20	8 45	20	18 40	20	20 08	German.	North German Lloyd.	295.0	46.0	Antwerp, Belgium.	Champerico, Guat.	Ballast.	3,041	1,967	
Mary Ann ¹³	20	12 05	20	8 30	20	21 55	20	23 00	American.	U. S. Navy.	385.0	54.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	1,570	6,515	4,756
Nordkap ¹⁴	20	12 05	20	14 20	20	21 55	20	23 00	Danish.	West Indian Trad. Co.	180.0	35.0	Aalborg, Denmark.	Buenaventura, Col.	Cement, cattle.	1,570	6,515	4,756
Cheewink ¹⁵	20	12 05	20	6 20	20	14 20	20	15 40	American.	U. S. Navy.	180.0	35.0	Cristobal, C. Z.	Balboa, C. Z.	General.	1,570	6,515	4,756
Santa Catalina ¹⁶	18	21 55	21	5 55	21	18 10	21	19 40	American.	Panama Mail S. S. Co.	295.0	45.0	Cristobal, C. Z.	San Francisco, Cal.	General.	196	3,848	2,603
Orazio ¹⁷	20	14 25	21	6 55	21	19 12	21	20 30	Italian.	Societa Italia.	482.0	61.0	Genoa, Italy.	Valparaiso, Chile.	General.	1,357	12,977	9,373
City of Delhi ¹⁸	20	18 10	21	8 25	21	20 30	21	22 12	British.	Amer-Australian Line.	450.0	58.0	New York, N. Y.	Fremantle, Aus. lia.	General.	2,156	9,478	7,069
China Arrow ¹⁹	21	3 00	21	9 35	21	21 40	21	23 10	American.	Socoy Vacuum Oil Co.	468.0	62.0	Portland, Me.	Los Angeles, Calif.	Ballast.	10,084	7,388	
Amer-ton ²⁰	21	9 25	21	10 40	21	22 43	21	23 50	British.	R. Chapman & Son.	410.0	54.0	St. Thomas, V. I.	Vancouver, B. C.	Ballast.	5,756	4,139	
Maracay ²¹	21	00 20	21	13 35	21	23 54	21	25 00	British.	Largo Shipping Co.	350.0	60.0	Aruba, D. W. I.	Balboa, C. Z.	Ballast.	4,076		
Misourian ²²	21	16 00	22	6 00	22	13 35	22	14 45	American.	Amer-Hawaiian Line.	445.0	59.0	Boston, Mass.	Seattle, Wash.	General.	3,000	8,567	6,020
Damsterdyk ²³	21	17 00	22	7 00	22	14 18	22	15 40	Dutch.	Holland-America Line.	490.0	64.0	Rotterdam, Holland.	Portland, Oreg.	General.	1,771	11,721	8,351
K. R. Kingsbury ²⁴	21	19 25	22	8 25	22	16 20	22	17 30	American.	Standard Oil Co.	440.0	58.0	Tiverton, R. I.	San Francisco, Cal.	Ballast.	9,033	5,938	
Chile Maru ²⁵	21	19 50	22	8 25	22	17 25	22	18 45	Japanese.	Kokusai Line.	385.0	51.0	Chester, Pa.	Yawata, Japan.	Steel, tobacco.	6,573	9,023	4,409
Abelknigt ²⁶	21	21 05	22	9 25	22	18 40	22	20 01	British.	United Molasses Co.	475.0	63.0	Glenock, Scotland.	Los Angeles, Calif.	Ballast.	7,569	6,503	
Fair Tassair ²⁷	21	23 35	22	9 40	22	19 50	22	21 15	American.	McCormick Line.	385.0	55.0	Philadelphia, Pa.	Seattle, Wash.	General.	2,008	7,056	4,904
Southern Sun ²⁸	22	9 20	22	11 05	22	20 44	22	22 20	American.	Sun Oil Co.	480.0	66.0	Chester, Pa.	Los Angeles, Calif.	Ballast.	9,716	6,944	
Taranor ²⁹	22	11 15	22	12 35	22	21 50	22	23 25	Norwegian.	Inter-ocean Line.	395.0	54.0	Rotterdam, Holland.	Vancouver, B. C.	Ballast.	6,858	5,308	
Nichols ³⁰	22	11 20	22	13 35	22	22 55	22	24 03	American.	W. L. Conyn & Sons.	381.0	53.0	Antwerp, Belgium.	Los Angeles, Calif.	Ballast.	6,475	4,899	
West Mahwah ³¹	22	11 40	22	13 35	22	24 03	22	25 18	American.	Pac-Arg-Brazil Line.	410.0	54.0	Buenos Aires, Arg.	San Francisco, Cal.	Flour, oats.	1,054	6,588	5,049
Real ³²	21	18 50	22	12 30	22	20 44	22	21 40	Panamanian.	Hans Elliot.	62.0	17.0	Cristobal, C. Z.	Pedregal, R. P.	Flour, oats.	2,213	18,206	13,500
Rangitata ³³	23	1 25	23	6 05	23	13 58	23	15 46	British.	N. Z. Shipping Co.	531.0	70.0	London, England.	Wellington, N. Z.	General.	2,213	18,206	13,500
Endurance ³⁴	23	1 25	23	6 05	23	13 58	23	15 46	Panamanian.	Esteban Garcia.	60.0	14.0	Cristobal, C. Z.	Balboa, C. Z.	Coconuts.	32	36	24

F. J. Luckenbach	23	4.15	23	7.10	23	18.11	23	19.25	American	Luckenbach Line	446.0	56.0	18.6	Boston, Mass.	Tacoma, Wash.	General	1,799	8,508	6,179
Knute Nelson	23	6.45	23	8.30	23	19.19	24	2.18	Norwegian	Fred Olsen Line	433.0	56.0	22.0	Cabo, Norway	Vancouver, B. C.	General	3,870	8,016	5,854
Durazzo	17	16.35	23	13.05	23	20.44	23	22.23	German	Hamburg-American Line	277.0	34.0	13.9	Cristobal, C. Z.	Guayaquil, Ecuador	General	735	1,031	1,041
Roland	22	14.20	23	13.05	23	21.02	23	22.23	German	North German Lloyd	339.0	51.0	18.3	Hamburg, Germany	Corral, Chile	Explosives, gen.	3,021	5,301	3,399
S. M. Spalding	23	15.10	23	15.20	23	23.58	24	1.26	American	Standard Shipping Co.	435.0	56.0	20.0	Baltimore, Md.	Los Angeles, Calif.	Ballast	7,331	5,111	5,111
President Lin-	23	18.20	24	6.00	24	14.22	25	1.50	American	Dollar Line	516.0	72.0	27.3	New York, N. Y.	Manila, P. I.	General	1,582	15,209	10,598
coln	24	4.50	24	7.15	24	15.27	25	00.27	American	Panama-Pacific Line	586.0	80.0	26.8	New York, N. Y.	San Francisco, Cal.	General	1,756	24,506	17,563
California	23	15.45	24	8.10	24	18.17	24	19.30	German	North German Lloyd	521.0	64.0	22.6	Bremen, Germany	Vancouver, B. C.	General	2,493	11,007	7,093
Donau	24	1.00	24	8.20	24	19.40	24	20.50	American	Isthmian S. S. Lines	424.0	56.0	18.0	Baltimore, Md.	Honolulu, T. H.	General	1,404	7,611	5,497
Steel Worker	23	15.25	24	8.40	24	19.34	24	21.05	Norwegian	Panama Mail S. S. Co.	221.0	32.0	11.1	Cristobal, C. Z.	Acajutla, Salvador	Ballast	980	579	579
Sollund	23	15.25	24	8.40	24	19.34	24	21.05	Norwegian	Panama Mail S. S. Co.	221.0	32.0	11.1	Cristobal, C. Z.	Acajutla, Salvador	Ballast	980	579	579
City of Evans-	24	2.05	24	9.35	24	20.43	25	1.50	British	Amer. Manchurian Line	433.0	47.0	24.0	New York, N. Y.	Dairen, China	General	2,283	8,628	5,686
ville	23	15.25	24	10.10	24	21.40	24	23.00	American	Quaker Line	410.0	54.0	19.8	New York, N. Y.	Seattle, Wash.	General	1,592	6,755	4,895
San Marcos	24	9.40	24	12.55	24	23.56	25	00.27	American	Argonaut Line	404.0	54.0	19.0	New York, N. Y.	Seattle, Wash.	General	2,210	6,745	4,562
Santa Cecilia	24	10.50	24	10.30	24	23.55	25	1.50	Chilean	Cia. Chilena de Nav.	400.0	52.0	20.0	Casilda, Cuba	Valparaiso, Chile	Sugar	3,468	5,883	4,167
Valparaiso	24	10.50	24	10.30	24	23.55	25	1.50	Chilean	Cia. Chilena de Nav.	400.0	52.0	20.0	Casilda, Cuba	Valparaiso, Chile	Sugar	3,468	5,883	4,167
Albempress	24	12.10	24	14.05	25	00.52	25	2.34	British	United Molasses Co.	475.0	63.0	18.0	Rotterdam, Holland	Los Angeles, Calif.	Ballast	9,589	6,492	6,492
Thurband	24	11.00	24	14.40	25	2.02	25	2.56	British	Barber S. S. Line	464.0	60.0	19.1	New York, N. Y.	Shanghai, China	General	1,382	8,805	6,036
Castle	24	11.00	24	14.40	25	2.02	25	2.56	British	Barber S. S. Line	464.0	60.0	19.1	New York, N. Y.	Shanghai, China	General	1,382	8,805	6,036
Gen. Wm. M.	24	7.25	24	14.15	25	15.04	25	20.48	American	U. S. Army	156.0	32.0		Cristobal, C. Z.	Balboa, C. Z.	General, coffee	1,436	13,948	9,217
Graham	24	7.25	24	14.15	25	15.04	25	20.48	American	U. S. Army	156.0	32.0		Cristobal, C. Z.	Balboa, C. Z.	General, coffee	1,436	13,948	9,217
Santa Rosa	23	18.55	25	6.05	25	16.25	25	9.36	British	Panama Mail S. S. Co.	484.0	72.0	22.0	New York, N. Y.	Seattle, Wash.	Liquors	660	1,370	783
Arwyco	23	00.30	25	7.00	25	16.25	25	9.36	British	General Nav. Co.	225.0	34.0	15.1	Nassau, B. W. I.	Vancouver, B. C.	General	703	5,831	4,341
Parthenia	24	20.50	25	7.15	25	16.32	25	18.10	British	Donaldson Line	415.0	52.0	17.0	Glasgow, Scotland	Vancouver, B. C.	General	703	5,831	4,341
Tusaloosa	25	1.55	25	8.25	25	17.38	25	19.30	American	Isthmian S. S. Lines	424.0	55.0	18.0	Baltimore, Md.	Vancouver, B. C.	Iron, general	2,535	7,611	5,450
City	25	4.55	25	8.25	25	17.38	25	19.30	Japanese	Osaka Shosen Kaisha	446.0	60.0	23.0	Boston, Mass.	Kobe, Japan	Iron, general	6,166	8,976	6,435
Nankai Maru	25	4.55	25	8.25	25	17.38	25	19.30	Japanese	Osaka Shosen Kaisha	446.0	60.0	23.0	Boston, Mass.	Kobe, Japan	Iron, general	6,166	8,976	6,435
President Her-	25	7.25	25	9.35	25	19.48	25	21.00	Norwegian	Pechelbronn, Strassburg	477.0	63.0	30.0	Antwerp, Belgium	Talara, Peru	Ballast	9,444	6,483	6,483
reusmidt	25	7.25	25	9.35	25	19.48	25	21.00	Norwegian	Pechelbronn, Strassburg	477.0	63.0	30.0	Antwerp, Belgium	Talara, Peru	Ballast	9,444	6,483	6,483
Franz Klauen	25	9.25	25	12.15	25	22.25	25	23.45	Danzig	Baltic Amer. Pet. Co.	520.0	70.0	21.6	Hamburg, Germany	Talara, Peru	Ballast	234	1,132	741
Manizales	24	16.20	25	13.25	25	21.15	25	22.45	German	Gracie Line	216.0	32.0	12.7	Cristobal, C. Z.	Guayaquil, Ecuador	General	234	1,132	741
Retriever	24	16.20	25	13.25	25	21.15	25	22.45	German	Gracie Line	216.0	32.0	12.7	Cristobal, C. Z.	Guayaquil, Ecuador	General	234	1,132	741

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

San Bernardino	18	20.00	19	5.59	19	13.45	19	13.45	American	States S. S. Co.	426.6	54.0	25.0	Portland, Oreg.	Philadelphia, Pa.	General, lumber	7,502	6,755	4,873
President Jackson	19	6.00	19	7.00	19	15.40	19	23.45	American	Dollar Line	517.0	72.2	29.0	Manila, P. I.	New York, N. Y.	General	5,036	15,296	10,427
Washington	19	00.05	19	8.19	19	16.25	19	17.40	Japanese	Warner Barnes & Co.	385.0	51.0	25.0	Manila, P. I.	U. S. Atl. coast	Sugar	7,000	5,919	4,400
Maru	19	00.05	19	8.19	19	16.25	19	17.40	Japanese	Warner Barnes & Co.	385.0	51.0	25.0	Manila, P. I.	U. S. Atl. coast	Sugar	7,000	5,919	4,400
Panama	19	00.10	19	9.51	19	17.10	19	17.10	American	Amer-Hawaiian Line	407.7	53.7	25.0	Los Angeles, Calif.	New York, N. Y.	General	4,933	7,112	5,060
Arnold Maersk	19	10.00	19	11.05	19	19.40	19	21.55	Danish	Besa Guggero	371.9	38.9	18.0	Toopilla, Chile	Tampa, Fla.	Guano	2,950	2,176	1,487
Democracy	19	21.30	20	6.29	20	14.05	20	14.05	American	Nelson S. S. Co.	377.0	52.0	24.4	Cristobal, Wash.	New York, N. Y.	Lumber, general	5,769	5,434	3,969
Schwaben	20	13.20	20	14.37	20	22.05	21	11.15	German	North German Lloyd	491.4	63.8	28.0	Vancouver, B. C.	Antwerp, Belgium	General	10,439	10,002	6,743
Wichita	20	17.32	21	5.00	21	13.10	21	21.05	American	Roosevelt S. S. Co.	395.5	55.0	27.0	Bayang Pt., P. I.	New York, N. Y.	Sugar, general	7,802	7,209	5,172
Virginia	20	12.16	21	6.13	21	14.40	21	15.00	American	Panama-Pacific Line	586.4	80.3	29.0	San Francisco, Cal.	New York, N. Y.	General	1,890	25,234	18,170
San Simeon	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
Tanker	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
Steel, coffee, oil, and general	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
Motor ship	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
Crane	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
Launch	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916
For orders	21	1.10	21	7.15	21	15.30	21	15.30	American	Quaker S. S. Line	410.5	54.3	25.0	Longview, Wash.	New London, Conn.	Lumber	7,500	6,573	4,916

* Coffee, cocoa, and beef.

* Mine planter.

* Motor schooner.

* Mine sweeper.

* Crane.

* Launch.

* For orders.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Clear'd for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Cortona.....	21	1.40	21	8.18	21	17.05	21	21.45	British	.....	414.4	55.7	27.0	Vancouver, B. C.	Glasgow, Scotland.	General	6,240	7,424	5,393
District of Columbia ¹	21	2.24	21	9.35	21	18.45	21	18.45	American	.....	431.0	59.2	29.0	Port San Luis, Calif.	Port Arthur, Tex.	Fuel oil	11,119	8,097	5,431
Chelsea.....	21	3.30	21	19.35	21	19.40	21	19.40	British	.....	396.1	52.8	24.0	Vancouver, B. C.	Hull, England.	Wheat	7,600	5,374	4,771
Real ¹	21	9.25	21	18.10	22	12.30	21	20.45	Panamanian	.....	62.2	17.1	6.0	Darien, P.	Cristobal, C. Z.	Bananas	38	46	22
Point Salinas.....	21	5.10	21	11.56	21	20.45	21	20.45	American	.....	386.8	52.2	24.0	Portland, Ore.	Mobile, Ala.	General	6,700	5,705	4,160
Pacific	21	6.20	21	13.08	21	22.00	21	22.00	British	.....	452.0	60.1	28.0	Vancouver, B. C.	London, England.	General	8,146	9,630	6,943
Poncer ¹²	21	11.15	21	14.34	21	23.05	21	23.05	American	.....	446.0	56.1	29.5	Seattle, Wash.	Boston, Mass.	General	8,559	8,552	6,236
K. I. Lucken- bach.....	21	13.20	21	5.10	22	13.40	22	13.40	British	.....	38.3	13.6	13.6	Balboa, C. Z.	Gatun, C. Z.	Ballast	7,168	5,797	3,820
Brate.....	21	16.30	22	7.10	22	15.05	22	15.05	British	.....	400.3	52.5	25.0	Antofagasta, Chile.	United Kingdom.	Nitrate	4,448	6,870	4,909
Nalsea Court.....	21	16.30	22	7.10	22	15.05	22	15.05	British	.....	400.3	52.5	25.0	Antofagasta, Chile.	United Kingdom.	Nitrate	4,448	6,870	4,909
Viking Star.....	21	16.30	22	7.10	22	15.05	22	15.05	British	.....	400.3	52.5	25.0	Antofagasta, Chile.	United Kingdom.	Nitrate	4,448	6,870	4,909
Possidon.....	22	0.10	22	8.12	22	17.25	22	17.25	British	.....	400.3	52.5	25.0	Antofagasta, Chile.	United Kingdom.	Nitrate	4,448	6,870	4,909
Tremorah.....	22	6.30	22	8.12	22	17.25	22	17.25	British	.....	400.3	52.5	25.0	Antofagasta, Chile.	United Kingdom.	Nitrate	4,448	6,870	4,909
San Gabriel.....	22	15.45	23	4.56	23	12.50	23	12.50	American	.....	386.8	52.2	23.0	Longview, Wash.	Philadelphia, Pa.	Lumber, general	6,168	5,735	4,075
Heinrich V. Rie- demann ¹²	22	14.30	23	6.18	23	14.55	23	14.55	Danzig	.....	521.1	70.2	32.0	Talara, Peru.	Liverpool, England	Crude, Diesel oil	16,028	12,535	8,224
Sollund.....	22	22.55	23	7.00	23	15.25	24	8.40	Norwegian	.....	221.6	32.2	13.0	Acajutla, Salvador.	Cristobal, C. Z.	General	698	930	579
Wind Rush.....	23	7.05	23	8.26	23	17.30	23	17.30	American	.....	410.0	54.2	21.0	Seattle, Wash.	Philadelphia, Pa.	Lumber, general	7,500	6,593	4,903
Brompton	19	2.30	23	13.40	24	0.22	24	0.22	British	.....	255.0	38.2	10.0	High seas.	Colon, R. P.	Ballast	1,886	1,130	
Hudikvall.....	23	12.30	23	13.53	23	22.10	24	21.15	Swedish	.....	197.3	31.0	11.3	Turkey.	Manure, Colombia.	Ballast	7,374	6,854	5,800
Hindanger ¹²	23	13.30	23	14.49	23	23.30	24	2.20	Norwegian	.....	398.0	55.0	27.0	Vancouver, B. C.	Havre, France	Wheat, general	7,374	6,854	5,800
Makiki.....	23	17.00	24	4.47	24	13.45	24	13.45	American	.....	402.0	54.2	27.0	Manure, Colombia.	East coast, U.S.A.	Sugar	7,195	6,926	5,003
Trepa.....	24	1.25	24	6.25	24	15.00	24	15.00	Jugoslav	.....	417.0	52.0	23.0	Talca, Chile.	Azores ¹² .	Nitrate	8,470	1,132	741
Manizales.....	24	1.40	24	7.09	24	16.20	24	16.20	German	.....	216.5	32.9	15.0	Guayaquil, Ecuador.	Cristobal, C. Z.	General	449	209	101
Nuevo Panama ¹²	23	22.55	24	7.18	24	15.05	26	5.55	Panamanian	.....	108.5	20.6	9.0	Buenaventura, Col.	New York, N. Y.	Coffee, general	209	226	101
Steel Exporter.....	20	10.15	24	14.05	24	23.35	24	23.35	American	.....	424.2	56.2	26.0	Kahului, T. H.	Cristobal, C. Z.	General	8,638	7,611	5,450
Maracy.....	21	23.45	25	4.57	25	12.55	25	12.55	British	.....	350.0	60.0	12.0	Balboa, C. Z.	Aruba, D. W. I.	Ballast	4,076		
Swan	25	5.03	25	5.03	25	13.35	25	13.35	American	.....	187.0	34.0		Balboa, C. Z.	Cristobal, C. Z.	(¹²)			
Barge No. 2.....	24	16.45	25	6.26	25	16.45	25	16.45	British	.....	521.5	70.4	32.0	Talara, Peru.	Halifax, N. S.	Crude oil	16,808	12,339	7,717
Calagrite ¹²	24	14.20	25	7.30	25	17.05	25	17.05	British	.....	385.0	52.0	24.0	Iquique, Chile.	Azores ¹² .	Nitrate	7,409	5,482	3,997
Marylin.....	24	14.20	25	7.30	25	17.05	25	17.05	British	.....	385.0	52.0	24.0	Iquique, Chile.	Azores ¹² .	Nitrate	7,409	5,482	3,997
Chewink ¹⁴	25	6.15	25	7.40	25	17.05	25	17.05	American	.....	180.0	35.6		Balboa, C. Z.	Cristobal, C. Z.	General	590	1,572	1,011
Cerro.....	25	6.15	25	7.40	25	17.05	25	17.05	American	.....	180.0	35.6		Balboa, C. Z.	Cristobal, C. Z.	General	590	1,572	1,011
Wandsbek.....	24	22.10	25	8.45	25	18.00	25	18.00	German	.....	227.2	34.4	12.4	Guayaquil, Ecuador.	Cristobal, C. Z.	Sugar	4,054	3,289	2,322
Voivoda Putnik.....	25	4.45	25	10.39	25	19.35	25	19.35	Yugoslav	.....	307.0	45.4	21.3	Topolobampo, Mex.	Cardiff, Wales.	Nitrate	8,880	6,091	4,179
Atago Maru ¹²	25	9.10	25	10.45	25	21.25	26	1.00	Japanese	.....	440.2	57.0	28.0	Italo, P. I.	Boston, Mass.	General	9,208	8,158	5,676

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
March 19.	Trocas.	Angle-Saxon Petroleum Co.	Curacao, D. W. I.	March 19.	Santa Marta.	United Fruit Co.	New York via Kingston.
March 19.	Buenav.	Hamburg-American Line.	New York via waypts.	March 19.	Reliance.	Hamburg-American Line.	New York via waypts.
March 19.	Barneveld.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	March 19.	Colombia.	Colombian Line.	New York via waypts.
March 19.	No. 945-M ¹⁷ .	Pan American Airways.	San Salvador via waypts.	March 20.	Barneveld.	Royal Netherlands S. S. Co.	Curacao, D. W. I.
March 20.	No. 145-M ¹⁷ .	Uruba, Medellin & Cent. Airways	Medellin, Colombia.	March 20.	No. 660-M ¹⁷ .	Pan American Airways.	Barranquilla, Colombia.
March 20.	Verguia.	United Fruit Co.	Port Limon, Costa Rica.	March 20.	Trocas.	Angle-Saxon Petroleum Co.	Curacao, D. W. I.
March 20.	Kungholm.	Swedish-American Line.	New York via waypts.	March 20.	Verguia.	United Fruit Co.	New York via Habana.
March 20.	No. 945-M ¹⁷ .	Uruba, Medellin & Cent. Airways	Buenaventura, Colombia.	March 20.	Kungholm.	Swedish-American Line.	New York via waypts.
March 20.	No. 145-M ¹⁷ .	Pan American Airways.	Guatemala City.	March 21.	No. 965-M ¹⁷ .	Pan American Airways.	Talara via waypts.
March 20.	No. 660-M ¹⁷ .	Pan American Airways.	Barranquilla, Colombia.	March 21.	Cetali.	Standard Fruit & S. S. Co.	San Salvador via waypts.
March 20.	Cetali.	New Orleans via Habana.	New Orleans via Habana.	March 22.	Simon Bolivar.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
March 21.	Georgia.	Standard Fruit & S. S. Co.	Port Limon, Costa Rica.	March 22.	Georgia.	Hamburg-American Line.	Hamburg via waypts.
March 21.	Simon Bolivar.	Hamburg-American Line.	Amsterdam via waypts.	March 22.	Velma Lykes.	Lykes Brothers.	Sto. Domingo via waypts.
March 21.	Velma Lykes.	Royal Netherlands S. S. Co.	Port Arthur, Tex.	March 23.	No. 414 ¹⁷ .	Pan American Airways.	San Salvador via waypts.
March 21.	Ancon.	Lykes Brothers.	New York via Haiti.	March 23.	No. 145-M ¹⁷ .	Uruba, Medellin & Cent. Airways	Medellin via waypts.
March 22.	March 22.	Panama R. R. S. S. Line.	San Salvador via waypts.	March 23.	No. 660-M ¹⁷ .	Pan American Airways.	Miami via waypts.
March 22.	March 22.	Hamburg-American Line.	Hampburg via waypts.	March 24.	Darien.	Leyland S. S. Line.	Kingston, Jamaica.
March 23.	March 23.	Leyland S. S. Line.	Liverpool via waypts.	March 24.	No. 945-M ¹⁷ .	Pan American-Grace Airways.	Chidlayo via waypts.
March 23.	March 23.	Pan American Airways.	Talara via waypts.	March 24.	Arguani.	Elders & Fyffes, Ltd.	Avonmouth via waypts.
March 23.	No. 670-M ¹⁷ .	Pan American-Grace Airways.	Avonmouth via waypts.	March 24.	Pearl Marie.	G. I. Bryan.	Bluefields, Nicaragua.
March 23.	No. 22-V ¹⁷ .	Elders & Fyffes, Ltd.	New Orleans via waypts.	March 24.	Caribia.	Hamburg-American Line.	Hamburg via waypts.
March 24.	Arguani.	United Fruit Co.	New York via waypts.	March 24.	Quingua.	United Fruit Co.	Port Limon, Costa Rica.
March 24.	Turrialba.	Unad Line.	Port Limon, Costa Rica.	March 25.	No. 9673 ¹⁷ .	Pan American Airways.	San Salvador via waypts.
March 24.	Quingua.	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.	March 25.	No. 145 ¹⁷ .	Uruba, Medellin & Cent. Airways	Medellin via waypts.
March 25.	Mauretanian.	Colombian S. S. Line.	New York via waypts.	March 25.	Mauretanian.	Cunard Line.	New York via waypts.
March 25.	Simon Bolivar.	United Fruit Co.	New York via Kingston.	March 25.	Turrialba.	United Fruit Co.	New Orleans via waypts.
March 25.	Haiti.						
March 25.	Shad.						

PORT OF BALBOA.

March 21.....	San Nicolas ¹²	F. Martan	Buenaventura, Colombia.	March 25	San Nicolas ¹²	F. Martan.	Buenaventura, Colombia.
March 23.....	Isabel ^{12 18}	Wilfred H. Weeks	Esmeraldas, Mexico				
March 23.....	Point Arena	McCormick S. S. Co.	San Francisco, Calif.				
March 24.....							
March 25.....							
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June 20.....							

air mail carrier.

Charge No. 2.

orders.

14. Tuesday

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* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending March 25, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Colombia.....	Colombian S. S. Line.....		March 19		1,060½
Santa Marta.....	United Fruit Co.....		March 19		201
Wyoming.....	French Line.....	March 19	March 19	37	5
Barneveld.....	Royal Netherlands S. S. Co.....	March 19	March 19	(¹)	316
President Jackson.....	Dollar Line.....	March 19	March 19	513	(²)
Trocas.....	Anglo-Saxon Petroleum Co.....	March 19	March 20	10,443	(²)
Schwaben.....	North German Lloyd.....	March 20	March 20	59	37
Veragua.....	United Fruit Co.....	March 20	March 20	127	192
Orazio.....	Italian S. S. Line.....	March 20	March 21	185	1
Santa Catalina.....	Panama Mail S. S. Co.....		March 21		197
Wichita.....	Roosevelt S. S. Co.....	March 21	March 21	165	(²)
Maracay.....	Lago Shipping Co.....	March 21	March 21	4,525	(²)
Damsterdijk.....	Holland-American Line.....	March 21	March 22	222	11
Cefalu.....	Standard Fruit & S. S. Co.....	March 21	March 22	199	597
Simon Bolivar.....	Royal Netherlands S. S. Co.....	March 21	March 22	98	½
Georgia.....	Hamburg-American Line.....	March 21	March 22	(¹)	583
Velma Lykes.....	Lykes Brothers.....	March 21	March 23	460	52
Poseidon.....	Hamburg-American Line.....	March 22	March 22	217	(²)
West Mahwah.....	Pacific-Argentine-Brazil Line.....	March 22	March 22	6	(²)
Roland.....	North German Lloyd.....	March 22	March 23	564	200
Ancon.....	Panama R. R. S. S. Line.....	March 22		1,418	876
Durazzo.....	Hamburg-American Line.....		March 23		4
Knute Nelson.....	Fred Olsen & Co.....	March 23	March 23	4	(²)
San Marcos.....	Quaker S. S. Line.....	March 23	March 24	732	(²)
President Lincoln.....	Dollar Line.....	March 23	March 24	5	(²)
Sollund.....	Panama Mail S. S. Co.....	March 23	March 24	800	(²)
Donau.....	North German Lloyd.....	March 23	March 24	45	69
Caribia.....	Hamburg-American Line.....	March 23	March 24	101	30
Darian.....	Leyland S. S. Line.....	March 23	March 24	274	(²)
Quirigua.....	United Fruit Co.....	March 24	March 24	311	59
Pearl Marie.....	R. Feuillebois.....	March 24	March 24	(¹)	18
Manizales.....	Grace Line.....	March 24	March 25	448	234
Turrialba.....	United Fruit Co.....	March 24	March 25	589	182
Santa Rosa.....	Panama Mail S. S. Co.....	March 24	March 25	300	82
Nuevo Panama.....	Hans Elliot.....	March 24		238	
R. L. Hustler.....	L. C. Bodden.....	March 24		2½	
Cerigo.....	Hamburg-American Line.....	March 25		664	
Atika.....	North German Lloyd.....	March 25		122	
Atago Maru.....	Nippon Yusen Kaisha.....	March 25		98	
Simon Bolivar.....	Royal Netherlands S. S. Co.....	March 25		8	
Sixaola.....	United Fruit Co.....	March 25		526	
Haiti.....	Colombian S. S. Line.....	March 25		14	

¹ No cargo discharged.

² No cargo laded.

³ One package.

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective March 28, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.36
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

American-Hawaiian Line Makes Port Newark, N. J., Port of Call.

The American-Hawaiian Line has announced that Port Newark, N. J., is to be included regularly in the eastbound itinerary of the company. Vessels of the American-Hawaiian Line have been calling at Port Newark when sufficient cargo offered and offerings now justify inclusion of the port in the regular schedule.

The American-Hawaiian Line has sailings twice a week in each direction through the Canal in the United States intercoastal trade.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Lubricating Oils.

The following is a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils with a statement of the purpose for which it is generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list:

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, No. 2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, No. 2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, No. 2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, No. 2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Tractor, heavy, No. 3100.—A very heavy body oil for aircraft engines, high speed gasoline engines, motor trucks, motor boats, motorcycles, and diesel engines S. A. E.-50.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive and for tempering.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Official Publications of Interest to Shipping.

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Sailings of Panama Railroad Steamship Line.

Following are proposed sailings for 1933 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M.*	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 3 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Cristobal</i>	March 28.....	April 2.....	April 5.....	April 9.....	April 12.....	April 17.
<i>Ancon</i>	April 11.....	April 16.....	April 19.....	April 23.....	April 26.....	May 1.
<i>Cristobal</i>	April 25.....	April 30.....	May 3.....	May 7.....	May 10.....	May 15.
<i>Ancon</i> ²	May 9.....	May 14.....	May 17.....	May 21.....	May 24.....	May 29.
<i>Cristobal</i> ²	May 23.....	May 28.....	May 31.....	June 4.....	June 7.....	June 12.
<i>Ancon</i> ²	June 6.....	June 11.....	June 14.....	June 18.....	June 21.....	June 26.
<i>Cristobal</i> ²	June 20.....	June 25.....	June 28.....	July 2.....	July 5.....	July 10.
<i>Ancon</i> ²	July 5.....	July 10.....	July 13.....	July 16.....	July 19.....	July 24.
<i>Cristobal</i> ²	July 18.....	July 23.....	July 26.....	July 30.....	August 2.....	August 7.
<i>Ancon</i> ²	August 1.....	August 6.....	August 9.....	August 13.....	August 16.....	August 21.
<i>Cristobal</i> ²	August 15.....	August 20.....	August 23.....	August 28.....	August 31.....	September 5.
<i>Ancon</i> ²	August 29.....	September 3.....	September 6.....	September 10.....	September 13.....	September 18.
<i>Cristobal</i> ²	September 12.....	September 17.....	September 20.....	September 24.....	September 27.....	October 2.
<i>Ancon</i> ²	September 26.....	October 1.....	October 4.....	October 8.....	October 11.....	October 16.
<i>Cristobal</i>	October 10.....	October 15.....	October 18.....	October 22.....	October 25.....	October 30.
<i>Ancon</i>	October 24.....	October 29.....	November 1.....	November 5.....	November 8.....	November 13.
<i>Cristobal</i>	November 8.....	November 13.....	November 16.....	November 19.....	November 22.....	November 27.
<i>Ancon</i>	November 21.....	November 26.....	November 29.....	December 3.....	December 6.....	December 11.
<i>Cristobal</i>	December 5.....	December 10.....	December 13.....	December 18.....	December 21.....	December 26.
<i>Ancon</i>	December 19.....	December 24.....	December 27.....	December 31.....	January 3.....	January 8.

* Steamers sail at 4 p. m. from Pier 65, North River, foot of West 25th St., New York. Sailings are at 4 p. m., Eastern standard time, except in the period from May 1 to September 30, inclusive, when they are at 4 p. m., daylight saving time.

² Sailing from New York at 4 p. m., daylight saving time.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., April 5, 1933.

No. 36.

Canal Traffic During March, 1933.

During the month of March, 1933, 399 commercial vessels and 9 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,718,908.41, and on the launches, \$99.15, or a total tolls collection of \$1,719,007.56.

The daily average of commercial vessels was 12.87, and the daily average tolls collection was \$55,448.66, as compared with an average of 13.14 transits and \$56,275.30 in tolls for the previous month, and an average of 11.71 transits and \$53,076.35 in tolls for March, 1932. The average amount of tolls paid by each of the commercial vessels was \$4,308.04, as compared with \$4,532.69 for the month of March, 1932.

Although March showed an increase in quantity of transits and tolls in comparison with February, 1933, the daily averages for both transits and tolls were slightly lower in March (2.1 percent and 1.5 percent, respectively). The increase in actual figures in comparison with February, 1933, was 31 transits (8.4 percent) and \$143,200.06 in tolls (9.1 per cent). In comparison with March, 1932, traffic for the past month registered an increase of 36 transits (9.9 percent), and \$73,541.60 in tolls (4.5 percent).

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 9 months of the current fiscal year, with the daily averages of transits and tolls and the totals for the first 9 months of the fiscal years 1932 and 1931:

Month.	Total for month.		Daily averages.	
	Transits.	Tolls.	Transits.	Tolls.
July.....	326	\$1,468,728.36	10.52	\$47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
December.....	431	1,781,940.03	13.90	57,481.94
January.....	415	1,762,808.56	13.39	56,864.79
February.....	368	1,575,708.35	13.14	56,275.30
March.....	399	1,718,908.41	12.87	55,448.66
Total, first 9 months of fiscal year 1933.....	3,388	14,818,853.46	12.36	54,083.41
Total, first 9 months of fiscal year 1932.....	3,443	15,846,547.93	12.52	57,623.81
Total, first 9 months of fiscal year 1931.....	4,248	18,886,246.53	15.50	68,927.91

In comparison with the first 9 months of the fiscal year 1932, the corresponding period this year has had 55 fewer transits and \$1,027,694.47 in tolls, decreases of 1.6 percent and 6.5 percent, respectively. In comparison with the first 9 months of the fiscal year 1931, there occurred a decrease of 860 transits and \$4,067,393.07 in tolls, losses of 20.2 percent and 21.5 percent, respectively.

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, April 1, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.		Gross.	Net.
Nuevo Panama ²	24	15 05	26	5 55	26	18 05	27	1 00	Panamanian	Hans Elliot.	108.0	20.0	8.0	Cristobal, C. Z.	Buenaventura, Col.	General	60	226	101
Atika	25	13 45	26	6 10	26	13 23	27	15 55	German	North German Lloyd.	315.7	46.8	15.4	Bremen, Germany	San Jose de Guat.	General	1,211	3,512	2,471
Point Lobos	25	17 40	26	7 15	26	18 10	26	19 27	American	Gulf-Pacific Mail Line.	380.1	53.1	18.6	Beaumont, Tex.	Vancouver, B. C.	Corp. general	1,724	5,683	4,260
Trimountain	25	21 45	26	8 25	26	19 09	26	20 30	American	Bermuth & Lembecke.	416.9	56.0	24.0	Key West, Fla.	San Francisco, Cal.	Coastal	7,320	6,798	4,775
Kansan.	25	23 00	26	8 35	26	20 05	26	21 52	American	Amer-Hawaiian Line.	404.6	54.0	16.6	Boston, Mass.	Portland, Oreg.	General	1,638	6,779	4,921
Mercury Sun ¹	26	3 40	26	9 40	26	21 18	26	22 45	American	Shell Oil Co.	480.0	66.0	22.6	Baltimore, Md.	Los Angeles, Calif.	Ballast	5,991	9,713	6,536
Point Chico	26	10 40	26	10 20	26	22 25	26	23 54	American	Swayne & Hoyt.	381.0	52.0	22.6	Houston, Tex.	Seattle, Wash.	Oil, corn, gen.	5,991	9,727	4,107
Barr	26	4 20	26	11 25	26	23 35	27	1 00	Dutch	Royal Neth. S. S. Co.	400.6	58.3	17.0	Hamburg, Germany	Valdivia, Chile	General	1,064	7,863	5,104
Betterton ¹	26	10 40	26	12 25	27	00 31	27	2 19	American	Associated Oil Co.	431.0	59.2	20.0	New York, N. Y.	San Francisco, Cal.	Ballast	7,863	6,931	4,971
Drigo ¹	26	11 25	26	13 45	27	1 40	27	3 07	American	The Texas Co.	416.0	56.0	27.0	Pt. Arthur, Tex.	Shanghai, China.	(*) Phosphate	8,161	6,931	4,971
Venice Maru.	26	12 30	26	15 00	27	2 47	27	3 56	Japanese	Kawasaki Dockyard Co.	405.0	53.0	23.1	New York, N. Y.	Yokohama, Japan.	Ballast	6,016	7,025	5,055
Dorothy ³	27	7 25	27	7 25	27	15 38	27	15 38	American	V. D. Tabor.	231.0	21.1	21.1	Cristobal, C. Z.	Balboa, C. Z.	Ballast	2	2	2
S-14 ⁴	27	7 25	27	7 25	27	15 38	27	15 38	American	U. S. Navy.	231.0	21.1	21.1	Cristobal, C. Z.	Balboa, C. Z.	Ballast	12,966	8,991	8,991
S-15 ⁴	27	9 04	27	9 10	27	18 21	27	23 15	British	Federal Steam Nav. Co.	520.0	64.2	19.4	Avonmouth, Eng.	New Zealand	Ballast	66	1,572	1,011
Norfolk	27	10 50	27	10 05	27	19 17	27	20 55	German	Hamburg-American Line.	227.2	34.4	13.8	Cristobal, C. Z.	Guayaquil, Ecuador	General	4,830	3,361	2,562
Geniza	25	18 00	27	11 00	27	20 30	27	22 23	British	Kerr S. S. Corp.	451.0	61.0	26.0	New York, N. Y.	Singapore, Str. Set.	Gen., cotton	31	31	19
Silverview ²	27	10 50	27	11 00	27	20 30	27	22 23	British	Kerr S. S. Corp.	451.0	61.0	26.0	New York, N. Y.	Singapore, Str. Set.	Gen., cotton	31	31	19
Lica Maersk.	27	11 20	27	13 25	27	21 34	27	23 15	Danish	A. P. Moller.	308.7	44.0	12.2	Casablanca, Mor.	Topolobampo, Mex	Ballast	31	31	19
Porto Bello ⁵	27	9 25	27	9 25	27	18 20	27	19 15	Panamanian	A. Tagaropoulos.	46.0	15.6	15.6	San Blas, R. P.	Panama, R. P.	Ballast	4,839	6,930	5,048
Q. M. No. 1 ¹	27	9 25	27	9 25	27	18 20	27	19 15	American	U. S. Army.	391.4	52.0	22.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	4,839	6,930	5,048
Fernbrook ²	28	1 00	28	6 30	28	20 28	28	21 40	Norwegian	Fern Line.	391.4	52.0	22.0	Galveston, Tex.	Yokohama, Japan.	Cotton, gen.	4,791	7,410	5,523
Niel Maersk ²	28	1 05	28	12 45	28	22 00	28	23 10	Danish	Isbrandtsen Moller Co.	418.0	54.6	20.3	Baltimore, Md.	Cebu, P. I.	General	4,791	7,410	5,523
Herman F.	29	2 10	29	8 30	29	17 41	29	18 55	American	Texas Gulf Sulphur Co.	409.0	54.2	24.1	Galveston, Tex.	Tacoma, Wash.	Sulphur	7,475	6,581	4,784
Whiton	29	4 35	29	4 35	29	16 28	29	18 28	American	Amer-Hawaiian Line.	404.6	53.9	17.0	Boston, Mass.	Tacoma, Wash.	General	2,222	6,754	4,800
Oregon	29	7 30	29	9 20	29	18 31	29	20 00	American	Shell Oil Co.	425.0	57.2	21.0	New York, N. Y.	San Francisco, Cal.	Ballast	2,222	6,754	4,800
S. C. T. Dodd	28	16 10	29	6 15	29	17 29	29	18 28	Panamanian	A. A. Valdez.	47.0	32.0	32.0	Cristobal, C. Z.	Balboa, C. Z.	Ballast	7,481	5,095	3,800
Pirre ⁶	29	12 25	29	12 30	29	19 25	29	21 00	Danish	A. P. Moller.	390.6	53.7	17.0	Falmouth, England	Talara, Peru	Ballast	47	47	32
BenteMaersk ¹	29	12 25	29	12 30	29	19 25	29	21 00	Danish	A. P. Moller.	390.6	53.7	17.0	Falmouth, England	Talara, Peru	Ballast	47	47	32
Paul Locken.	29	19 30	30	6 15	30	14 39	30	15 55	American	Luckenbach Line.	471.0	59.0	19.0	Boston, Mass.	Seattle, Wash.	General	2,702	9,027	6,539
bech	29	19 30	30	6 15	30	14 39	30	15 55	American	Luckenbach Line.	471.0	59.0	19.0	Boston, Mass.	Seattle, Wash.	General	2,702	9,027	6,539
Moldaner ²	29	19 45	30	7 30	30	15 36	30	16 45	Norwegian	Intercean Line.	456.0	61.0	12.7	Amsterdam, Holl'd.	Los Angeles, Calif.	Ballast	1,888	10,626	6,977
Santa Maria ²	30	12 50	30	10 35	31	00 37	31	12 50	American	Grace Line.	466.0	64.0	23.9	New York, N. Y.	San Antonio, Chile.	General	1,888	10,626	6,977
Real ¹	28	19 40	30	6 10	30	14 30	30	15 30	Panamanian	Hans Elliot.	62.0	17.0	17.0	Cristobal, C. Z.	Pto. Arnuelles, R. P.	General	40	40	22
Oreoca	30	11 55	31	6 30	31	14 28	31	15 30	British	Pacific Steam Nav. Co.	511.0	62.0	23.7	Liverpool, England	Valparaiso, Chile.	General	1,022	12,417	8,805
Patrick Henry.	31	4 15	31	7 35	31	17 50	31	19 30	American	Lykes Bros. Ripley Co.	439.0	60.0	27.6	New Orleans, La.	Cebu, P. I.	General	9,634	8,917	6,662
President Gar-	31	6 45	31	8 25	31	16 41	31	21 50	American	Dollar Line.	502.0	62.0	27.6	New York, N. Y.	San Francisco, Cal.	Genal.	2,853	12,583	9,207

Duchessa	31	8.00	31	15.20	1	11.39	1	13.00	Italian	Nav. Libera-Triestina	464.0	57.0	16.6	Venice, Italy	Vancouver, B. C.	General	934	8,734	6,144
D'Aosta	31	15.20	31	15.25	31	22.40	1	3.18	American	Roosevelt S.S. Co., S. B.	395.0	55.0	18.0	Baltimore, Md.	Shanghai, China.	Ballast	2,736	7,842	5,247
Junior E.	31	8.00	31	15.25	31	22.40	1	3.18	American	F. Kariger	395.0	55.0	18.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	2,736	7,842	5,247
Lt. Col. H. C. Schumm	31	8.00	31	15.25	31	22.40	1	3.18	American	U. S. Army	98.0	22.0	15.2	Cristobal, C. Z.	Gatun, C. Z.	General	600	1,273	706
Acajula	26	21.20	1	6.00	1	14.58	1	16.25	British	Pacific Steam Nav. Co.	215.0	33.0	15.2	Cristobal, C. Z.	Champerico, Guat.	General	600	1,273	706
Willkno	1	1.10	1	6.45	1	15.03	1	16.25	American	Amer.-Hawaiian Line	415.0	55.0	16.1	Baltimore, Md.	Seattle, Wash.	General	2,643	7,750	5,805
Sun	31	22.10	1	8.00	1	16.02	1	17.20	American	Sun Oil Co.	480.0	66.0	21.6	Chester, Pa.	Los Angeles, Calif.	Ballast	5,175	6,032	4,610
Chr. Knudsen	1	2.55	1	9.00	1	17.14	1	18.45	Norwegian	Canadian Transp. Co.	396.0	54.0	22.0	Veile, Denmark	Vancouver, B. C.	General	1,954	6,829	4,627
Nevadan	1	12.55	1	13.05	1	20.55	1	22.30	American	Amer.-Hawaiian Line	460.0	58.0	17.0	Boston, Mass.	Portland, Ore.	General	1,097	5,957	4,325
Santa Elisa	1	9.25	1	14.00	1	21.55	2	2.32	American	Panama Mail S. S. Co.	360.0	51.0	19.11	New York, N. Y.	San Francisco, Cal.	General	7,614	8,568	6,648
Eagar F	1	13.20	1	14.00	1	23.19	2	00.33	American	Luckenbach Line	425.0	57.0	29.0	Houston, Tex.	Tacoma, Wash.	General	7,614	8,568	6,648
Luckenbach	1	13.20	1	14.00	1	23.19	2	00.33	American	U. S. Navy	425.0	57.0	29.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	7,614	8,568	6,648
Motor Sailor	1	13.20	1	14.00	1	23.19	2	00.33	American	U. S. Navy	425.0	57.0	29.0	Cristobal, C. Z.	Gatun, C. Z.	Ballast	7,614	8,568	6,648

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Akibaian Maru No. 4035	25	19.00	26	4.54	26	13.35	26	13.35	Japanese	Mitsui Bussan Kaisha	375.0	50.0	24.0	Hilo, P. I.	New York, N. Y.	General	5,215	5,045	3,634
David McKelvy	25	19.00	26	4.54	26	13.35	26	13.35	American	Donald Hutchinson	375.0	50.0	24.0	Balboa, C. Z.	Miraflores Lake.	Ballast	5,215	5,045	3,634
Tai Ping Yang	26	3.00	26	6.09	26	14.55	26	14.55	American	Tidewater Oil Co.	430.0	59.2	26.0	San Francisco, Cal.	New York, N. Y.	Gasoline	9,400	7,629	5,325
Endurance	26	1.00	26	7.16	26	16.20	26	22.50	Panamanian	Barber S. Lines	459.6	60.5	26.0	Manila, P. I.	New York, N. Y.	Sugar, general	8,040	9,806	6,955
Hawaiian	26	1.52	26	8.24	26	17.20	26	17.20	Panamanian	R. Feuillebois	60.0	14.6	26.0	Darien, R. P.	Cristobal, C. Z.	Plantains, gen.	6	36	24
Acajula	26	13.15	26	13.56	26	21.20	26	23.30	American	Amer.-Hawaiian Line	404.6	53.9	27.0	Tacoma, Wash.	Boston, Mass.	General	6,308	6,741	4,756
Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver	646	1,273	706
Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver	646	1,273	706
Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver	646	1,273	706
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Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver	646	1,273	706
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Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.	Coffee, silver	646	1,273	706
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Atlantic	26	13.30	26	15.00	26	23.30	26	23.30	British	Pacific Steam Nav. Co.	215.7	33.6	15.0	Champerico, Guat.	Cristobal, C. Z.				

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line (Charterer or operator.)	Length.	Salt beam, water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.							Nature.	Tons.	Gross.	Net.
Sanyo Maru ¹⁵ .	28	9 20	28	12 20	28	21 00	28	10 05	Japanese	Osaka Shosen Kaisha.	446.0	60.0	Dairen, Manchuria	Baltimore, Md.	General.	2,120	8,942	6,246
Badestan.	28	13 40	28	14 35	28	23 15	28	23 15	British	Common Brothers.	395.5	54.0	Vancouver, B. C.	Hull, England.	Grain.	8,370	6,042	4,247
Robert Luckenbach.	28	14 45	28	16 03	29	9 00	29	9 00	American	Luckenbach Line.	445.0	58.0	Seattle, Wash.	Boston, Mass.	General.	7,574	8,695	6,375
Goustaata.	28	15 20	28	16 55	29	10 05	29	10 05	British	Common Brothers.	440.0	57.5	Vancouver, B. C.	London, England.	Wheat, general.	10,013	7,679	5,848
Atlanta City.	28	18 20	29	4 37	29	13 03	29	13 03	American	Ischman S. S. Lines.	424.2	56.2	Manukona, T. H.	New York, N. Y.	Sugar.	8,555	7,611	5,450
Lundby ¹⁵ .	28	23 30	29	6 41	29	15 03	29	15 03	Danish	Canadian Transp. Co.	357.0	51.3	W. Hartlepool, Eng.	N. Y.	General.	6,917	4,973	3,651
Ochoan.	29	3 15	29	7 39	29	15 35	29	15 35	American	Amer.-Hawaiian Line.	407.7	53.7	Seattle, Wash.	Boston, Mass.	General.	6,078		
Santa Barbara ¹⁵ .	29	5 14	29	10 10	29	17 30	30	00 30	American	Grace Line.	466.0	64.0	San Antonio, Chile.	New York, N. Y.	General.	2,815	10,687	6,630
West Cactus.	29	6 20	30	6 16	30	13 50	30	13 50	American	McCormick S. S. Co.	410.5	54.0	Vancouver, B. C.	Buenos Aires, Arg.	General.	3,136	6,626	5,019
Nebraska.	29	7 45	30	7 20	30	15 45	31	00 55	British	Royal Mail Lines, Ltd.	450.2	58.4	Vancouver, B. C.	Rotterdam, Holland.	General.	7,548	8,878	6,588
Norman Star.	29	18 50	30	8 22	30	16 15	30	16 15	British	Blue Star Line.	415.6	56.3	Vancouver, B. C.	Liverpool, England.	Fruit.	5,108	7,521	5,423
Canada ¹⁵ .	30	00 30	30	9 28	30	17 45	30	21 10	Swedish	Johnson Line.	426.9	56.2	Los Angeles, Calif.	Stockholm, Sweden.	General.	8,091	7,476	5,485
Vivi ¹⁵ .	30	7 45	30	10 55	30	20 15	30	20 15	Norwegian	H. Ditlev Simonsen Co.	407.4	53.9	Vancouver, B. C.	Avonmouth, Eng.	Gasoline.	7,991	6,779	4,616
Edda.	30	22 15	31	6 05	31	13 45	31	16 05	Italian	Nav. Libera-Tristina.	418.0	53.9	Vancouver, B. C.	Hamburg, Germany.	General.	4,243	6,206	4,421
Schiffbek.	30	22 00	31	7 23	31	15 05	31	16 12	German	Knorr & Borchard.	281.8	44.2	Yaveros, Mexico.	Bilbao, Spain.	Chick peas.	1,661	2,571	1,822
Idalsfjeld.	31	6 00	31	8 08	31	16 50	31	18 40	British	Anglo-Canadian Co.	420.7	55.0	Vancouver, B. C.	London, England.	Grain, general.	9,104	6,882	5,911
Ensoh.	31	7 30	31	9 20	31	19 45	31	19 45	American	Lykes Bros. Ripley Co.	434.3	57.7	London, England.	Boston, Mass.	Sugar.	8,500	7,982	5,911
Langleacrag.	31	7 00	31	10 10	31	21 15	1	3 55	German	North German Lloyd.	360.6	51.0	London, England.	Hamburg, Germany.	General.	5,810	4,814	3,370
Ville de Verdun.	31	23 30	1	6 21	1	14 45	1	14 45	French	F. Carriek & Co.	416.0	55.8	Vancouver, B. C.	Dunkirk, France.	Grain, general.	8,568	6,668	4,836
Porto Bello ¹⁵ .	1	5 30	1	7 25	1	16 15	1	23 30	French	Cieles Messageries Mar.	409.3	53.5	Noumea, N. Caled.	Oristobal, C. Z.	General.	2,667	7,603	5,029
	1	.....	1	6 50	1	14 40	1	14 40	Panamanian	A. Tagaropoulos.	46.0	15.6	Darien, R. P.		Salt and soap.	14	31	19

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.										* DEPARTURES.									
Date.		Vessel.		Line.		Date.		Vessel.		Line.		Date.		Vessel.		Line.		For—	
March 26.	No. 9673 ¹⁶ .	Pan American Airways.		Pan American Airways.		March 26.	Simon Bolivar.	Royal Netherlands S. S. Co.		Royal Netherlands S. S. Co.		March 26.	Sixela.	United Fruit Co.		Panama Railroad S. S. Line.		Amsterdam via wayports.	
March 26.	No. 945-M ¹⁶ .	Quirigua.		Pan American Airways.		March 26.	Anton.	Anton.		United Fruit Co.		March 26.	Anton.	United Fruit Co.		Colombian S. S. Line.		New York via wayports.	
March 27.	No. 145-M ¹⁶ .	Uraba, Medellin & Cent. Airways.		Uraba, Medellin & Cent. Airways.		March 26.	Haiti.	Haiti.		Colombian S. S. Line.		March 26.	Haiti.	Colombian S. S. Line.		Colombian S. S. Line.		New York via wayports.	
March 27.	No. 670-M ¹⁶ .	Pan American Airways.		Pan American Airways.		March 26.	Ulowana.	Ulowana.		A. V. Armour.		March 26.	Ulowana.	Pan American Airways.		Pan American Airways.		Guantanamo, Cuba.	
March 27.	No. 414-II ¹⁶ .	Condesa.		Pan American Airways.		March 26.	Quirigua.	Quirigua.		United Fruit Co.		March 26.	Quirigua.	United Fruit Co.		Pan American Airways.		Barraquilla, Colombia.	
March 28.	C. Star ¹⁷ .	C. Star.		Standard Fruit & S. S. Co.		March 27.	No. 22-V ¹⁶ .	No. 22-V ¹⁶ .		Pan American-Graee Airways.		March 28.	No. 22-V ¹⁶ .	Pan American-Graee Airways.		Pan American-Graee Airways.		New York via wayports.	
March 28.						March 28.						March 28.						Talara via wayports.	

PORT OF CRISTOBAL—Continued.

* ARRIVALS.			* DEPARTURES.		
Date.	Vessel.	Line.	Date.	Vessel.	Line.
March 28.....	Pellerin de Latouche.	French Line.	March 28.....	No. 9073 + 6.....	Pan American Airways.....
March 28.....	Syra.....	Hamburg-American Line.....	March 29.....	Contessa.....	Hamburg-American Line.....
March 28.....	No. 19-V + 6.....	Pan American-Grace Airways.....	March 29.....	Pellerin de Latouche.	Standard Fruit & S. Co.....
March 28.....	No. 18-V + 6.....	Pan American-Grace Airways.....	March 29.....	C. Stat.....	French Line.....
March 28.....	Annetta I. + 8.....	P. W. Hamilton.....	March 30.....	Conte Grande.....	S. C. May.....
March 28.....	Conte Grande.....	Societa Italia-Flotte Riunite.....	March 30.....	No. 670-M + 6.....	Societa Italia-Flotte Riunite.....
March 29.....	No. 144-M + 6.....	Pan American Airways.....	March 30.....	No. 145-M + 6.....	Pan American Airways.....
March 29.....	Guayaquil.....	Pan American Airways.....	March 30.....	No. 414-H + 6.....	Uraba, Medellin & Cent. Airways.....
March 30.....	No. 660-M + 6.....	Pan American Airways.....	March 30.....	Annetta I. + 8.....	P. W. Hamilton.....
March 30.....	Pellerin de Latouche.	French Line.....	March 31.....	No. 145-M + 6.....	Uraba, Medellin & Cent. Airways.....
March 31.....	Tivives.....	United Fruit Co.....	March 31.....	Pellerin de Latouche.	French Line.....
March 31.....	No. 145-M + 6.....	Uraba, Medellin & Cent. Airways.....	March 31.....	Peten.....	United Fruit Co.....
April 1.....	Metapan.....	United Fruit Co.....	April 1.....	No. 9685 + 6.....	United Fruit Co.....
April 1.....	Pastores.....	Colombian S. S. Line.....	April 1.....	No. 145-M + 6.....	Pan American Airways.....
					Uraba, Medellin & Cent. Airways.....

PORT OF BALBOA.

Date.	Vessel.	Line.	Date.	Vessel.	Line.
March 26.....	Chiriqui.....	United Fruit Co.....	March 26.....	Chiriqui.....	United Fruit Co.....
March 31.....	Real + 6.....	Hans Elliot.....	March 28.....	Point Arena.....	McCormick S. S. Co.....
April 1.....	Charcas.....	Grace Line.....	March 31.....	Real + 6.....	Hans Elliot.....
			April 2.....	Charcas.....	Grace Line.....

1 Trawler. 25 Motor ship. 26 Air mail carrier. 27 Yawl. 18 Motor boat. 19 Yacht. 20 Motor schooner.

* Other than ships passing through the Canal.

San Salvador via wayp'ts.
Hamburg via wayp'ts.
New Orleans via wayp'ts.
Pt. Limon, Costa Rica.
Colon, Rep. of Panama.
S. C. May.
New York via wayp'ts.
Miami via wayp'ts.
Medellin, Colombia.
Guayaquil, Ecuador.
Colon, Rep. of Panama.
Medellin, Colombia.
Havre via wayp'ts.
Port Limon, Costa Rica.
New Orleans, La.
San Salvador via wayp'ts.
Medellin, Colombia.

San Francisco, Calif.
San Marcos Island, Mex.
Panama Bay, R. P.
Valparaiso, Chile.

Wheat Shipments.

An article dealing with the heavy wheat shipments passing through the Canal from the Pacific to the Atlantic during November, 1932, and presenting a short résumé of shipments of this product during the previous months of the past year and the average tonnage per month for the preceding four years, was published in THE PANAMA CANAL RECORD of December 28, 1932 (Vol. XXVI, No. 22).

As pointed out in the article, shipments in November, 1932, aggregated 253,246 tons, and constituted the highest tonnage for wheat from the Pacific to the Atlantic since February, 1929. During December, 1932, shipments continued to rise, a total of 337,021 tons having been passed through during that month. Shipments in December, 1932, were the highest since February, 1928, when 432,690 tons were passed through. In January and February, shipments fell off, the tonnages in those months having been 262,339 and 211,626, respectively. This indicates the tapering off of a heavy seasonal movement. In both of these months, however, wheat shipments were greater than in the corresponding months in 1932.

Approximately 97 percent of the recent movement of wheat through the Canal in the current fiscal year has been shipments from Canada to Europe. The following is a comparison of the wheat shipments from Canada passing through the Canal during the first 8 months of the fiscal year 1932, and the fiscal year 1933:

Month.	Fiscal year 1932.	Fiscal year 1933.	Excess, 1933 over 1932.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
July.....	125,870	132,130	6,260
August.....	73,432	111,950	38,518
September.....	33,038	82,823	49,785
October.....	59,773	186,533	126,760
November.....	95,686	252,642	156,956
December.....	147,516	328,607	181,091
January.....	210,418	259,026	48,608
February.....	194,025	211,626	17,601

Transit of the "Empress of Britain."

The steamship *Empress of Britain*, of the Canadian Pacific Railway, Ltd., arrived at Balboa on the evening of April 3, 1933, on the final leg of a world cruise east-bound, begun last December from New York. The vessel remained in port until the morning of April 5, on which date she transited the Canal and sailed for New York, via Habana. This is the second transit of the Panama Canal by the *Empress of Britain*, the first having been made on April 1, 1932, on a similar voyage.

The *Empress of Britain* is 733 feet 3 inches in length by 97 feet 8 inches beam, and of 42,348 gross tons. Tolls, limited to \$1.25 times the United States net tonnage, 15,188 tons, amounted to \$18,985. In beam, tonnage, and tolls, the *Empress of Britain* exceeds any other commercial ship which has passed through the Panama Canal to date. Based on gross tonnage, she is reputed to be the twelfth largest liner afloat.

Ships' Chandlery Supplies.

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

Notices to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 4, 1933.

No. 40.

Panama Canal, Pacific entrance, Balboa reach, aids to navigation. The obstruction beacon, unlighted, outside of channel, at station 2193-E, was demolished by shipping on April 2, 1933, and will be replaced as soon as is practicable.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 4, 1933.

No. 41.

Colombia, north coast, approaches to Cartagena, Salmedina Bank light vessel reported extinguished. The master of the S. S. *Metapan* reports by radio that the light on Salmedina Bank light vessel was extinguished on the night of April 3, 1933.

Approximate position, latitude $10^{\circ} 23' N.$, longitude $75^{\circ} 38' W.$

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending April 1, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Ancon.....	Panama R. R. S. S. Line.....	March 26	March 26	26	572
Nuevo Panama.....	Hans Elliot.....	March 26	March 26	26	79
Attika.....	North German Lloyd.....	March 26	March 26	26	356
Simon Bolivar.....	Royal Netherlands S. S. Co.....	March 26	March 26	26	675
Sixaola.....	United Fruit Co.....	March 26	March 26	26	252
Haiti.....	Colombian S. S. Line.....	March 26	March 26	26	479
Tai Ping Yang.....	Barber S. S. Line.....	March 26	March 26	1,064	(²)
Baarn.....	Royal Netherlands S. S. Co.....	March 26	March 26	2	142½
Acajutla.....	Pacific Steam Navigation Co.....	March 26	April 1	646	649
Cerigo.....	Hamburg-American Line.....	March 27	March 27	27	77
Orduna.....	Pacific Steam Navigation Co.....	March 27	March 27	270½	(²)
Quirigua.....	United Fruit Co.....	March 27	March 27	30	133
Samuel Bakke.....	Scandinavian-South Pacific Line.....	March 27	March 28	141	½
Winnipeg.....	French Line.....	March 27	March 28	220	241
Santa Lucia.....	Panama Mail S. S. Co.....	March 27	March 28	28	457
Justin.....	North German Lloyd.....	March 28	March 29	63	197
Pellerin de Latouche.....	French Line.....	March 28	March 29	75	(²)
Contessa.....	Standard Fruit & S. S. Co.....	March 28	March 29	209	422
Benjamin Franklin.....	Fred Olsen & Co.....	March 28	March 29	(¹)	750
Sanyo Maru.....	Osaka Shosen Kaisha.....	March 28	March 29	153	331½
Real.....	Hans Elliot.....	March 28	March 30	28	21
C. Star.....	S. C. May.....	March 28	March 30	1	(²)
Santa Barbara.....	Grace Line.....	March 29	March 30	440	531
Guayaquil.....	Panama R. R. S. S. Line.....	March 30	March 30	1,170	.....
Santa Maria.....	Grace Line.....	March 30	March 30	7	225
Canada.....	Johnson S. S. Line.....	March 30	March 30	(²)	108
Nebraska.....	Royal Mail Line, Ltd.....	March 30	March 31	(²)	346
Oreoma.....	Pacific Steam Navigation Co.....	March 30	March 31	73	71
Pellerin de Latouche.....	French Line.....	March 31	March 31	(²)	815
Duchess D'Aosta.....	Navigazione Libera-Triestina.....	March 31	March 31	143	(²)
President Garfield.....	Dollar Line.....	March 31	March 31	3	(²)
Peten.....	United Fruit Co.....	March 31	March 31	228	20
Tivives.....	United Fruit Co.....	March 31	April 1	750	120
Eisenach.....	North German Lloyd.....	March 31	April 1	242	23
Santa Elisa.....	Panama Mail S. S. Co.....	April 1	April 1	79	95
Pastores.....	Colombian S. S. Line.....	April 1	.....	54	.....
Metapan.....	United Fruit Co.....	April 1	.....	352	.....
San Antonio.....	French Line.....	April 1	.....	191	.....

¹ No cargo discharged.² No cargo laded.³ Three packages.

Publication of Notices and Circulars of Interest to Shipping.

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending April 1, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Wichita.....	Roosevelt S. S. Co.....	March 20	March 21	337	
San Nicolas.....	E. Martan.....	March 21	March 23		14
West Mahwah.....	McCormick S. S. Line.....	March 22	March 22	3	
Knute Nelson.....	Fred Olsen Line.....	March 23	March 24	428	
Point Arena.....	McCormick S. S. Line.....	March 23	March 28	5,225	
California.....	Panama-Pacific Line.....	March 24	March 24	3	1
Santa Rosa.....	Panama Mail S. S. Co.....	March 25	March 25	113	2
Arwyco.....	General Navigation Co.....	March 25	March 26		53
Chiriqui.....	United Fruit Co.....	March 26	March 26	415	9
Samuel Bakke.....	Scandinavian-South Pacific Line.....	March 26	March 27	106	14
Attika.....	North German Lloyd.....	March 26	March 27	90	13
Santa Lucia.....	Panama Mail S. S. Co.....	March 27	March 27	143	1
Santa Barbara.....	Grace Line.....	March 29	March 29	40	
Santa Maria.....	Grace Line.....	March 30	March 31	217	25
President Garfield.....	Dollar Line.....	March 31	March 31	1	
Charcas.....	Grace Line.....	April 1	April 1	650	300
Santa Elisa.....	Panama Mail S. S. Co.....	April 1	April 1	61	25

Prices of Miscellaneous Supplies at Panama Canal Storehouses.

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective April 6, 1933.

Commodities.	Unit.	Price.
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.31
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Facilities for Shipping.

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, can bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from ample stocks at both ends of the Canal. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits, and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective in the course of handling large traffic through the Canal in over 17 years of operation.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Entered as second-class matter February 6, 1918, at the Post Office

at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., April 12, 1933.

No. 37.

Traffic by Nationality for March, 1933.

The following tabulation shows the commercial traffic through the Canal during the month of March, 1933, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for March, 1932 and 1931:

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	7,044	4,567	7,212	4,398	\$5,071.68	.....
British.....	36	211,532	154,617	254,959	155,563	174,763.97	73,107
Chilean.....	1	4,167	3,268	5,639	3,034	4,085.00	3,468
Danish.....	6	26,919	17,920	29,602	18,161	19,735.15	6,677
Danzig.....	2	16,345	14,001	24,600	14,064	11,768.40	.....
Dutch.....	3	17,563	11,341	18,910	11,651	14,176.25	4,110
French.....	4	19,737	11,579	21,413	12,212	15,548.75	3,671
German.....	13	53,555	23,487	39,934	23,819	28,361.83	13,631
Italian.....	3	21,529	13,540	25,634	15,500	16,925.00	4,841
Japanese.....	11	57,835	48,967	73,812	48,496	60,582.90	73,555
Norwegian.....	17	86,429	57,005	95,665	57,459	62,378.50	23,951
Panamanian.....	14	603	579	878	476	636.67	363
Swedish.....	4	13,304	8,154	14,324	10,402	9,567.74	4,809
United States.....	72	438,202	314,299	523,278	314,200	373,459.54	181,944
Total, March, 1933.....	187	954,794	683,324	1,135,860	689,435	797,061.38	393,927
Total, March, 1932.....	189	988,024	718,990	1,194,017	726,073	842,663.21	530,497
Total, March, 1931.....	223	1,110,097	818,822	1,360,246	826,309	953,289.79	496,617

* Includes naval vessel of 2,150 tons displacement (tolls \$1,075) in transits and tolls, but not in tonnage.

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	1	6,292	4,986	7,816	5,758	\$6,232.50	10,086
British.....	50	262,006	190,206	315,668	195,049	237,222.60	348,144
Colombian.....	1	307	302	405	308	368.40	300
Danish.....	5	23,979	15,350	26,372	15,990	19,187.50	34,238
Danzig.....	1	8,224	7,068	12,175	6,974	8,835.00	16,628
Dutch.....	2	13,599	8,893	14,892	9,147	11,116.25	17,969
French.....	4	23,279	14,778	26,903	15,571	18,472.50	26,633
German.....	17	58,163	38,239	64,716	38,812	47,798.75	74,626
Italian.....	4	29,579	20,531	36,877	22,431	25,663.75	25,314
Japanese.....	12	62,151	51,987	79,903	50,892	64,817.50	71,309
Norwegian.....	13	57,542	37,852	63,036	37,609	46,727.50	88,233
Panamanian.....	16	20,473	11,201	20,269	11,324	13,978.65	23,867
Swedish.....	4	14,797	9,959	16,515	12,426	12,247.61	23,529
United States.....	77	432,269	311,263	513,043	311,640	388,401.02	542,400
Yugoslav.....	5	21,560	16,622	26,817	16,665	20,777.50	41,024
Total, March, 1933.....	212	1,034,250	738,767	1,225,407	750,596	921,847.03	1,344,300
Total, March, 1932.....	174	876,872	638,330	1,063,635	641,487	802,703.60	1,113,455
Total, March, 1931.....	216	1,101,837	811,590	1,349,302	813,798	1,011,144.43	1,415,890

COMBINED TRAFFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
Belgian.....	2	13,336	9,553	15,028	10,156	\$11,304.18	10,086
British.....	86	473,538	344,823	570,627	350,612	411,986.57	421,251
Chilean.....	1	4,167	3,268	5,639	3,034	4,085.00	3,468
Colombian.....	1	307	302	405	308	368.40	300
Danish.....	11	50,898	33,270	55,974	34,151	38,922.65	40,915
Danzig.....	3	24,569	21,069	36,775	21,038	20,603.40	16,628
Dutch.....	5	31,162	20,234	33,802	20,798	25,292.50	22,079
French.....	8	43,016	26,357	48,316	27,783	34,021.25	30,304
German.....	30	91,748	61,726	104,650	62,631	76,160.58	88,257
Italian.....	7	51,108	34,071	62,511	37,931	42,588.75	30,155
Japanese.....	23	120,016	100,954	153,715	99,338	125,400.40	144,664
Norwegian.....	30	143,971	94,387	158,701	95,068	109,106.00	112,184
Panamanian.....	30	21,076	11,780	21,147	11,800	14,615.32	24,230
Swedish.....	8	28,101	18,113	30,839	22,828	21,815.35	25,338
United States.....	149	870,471	625,562	1,036,321	625,840	761,860.56	724,344
Yugoslav.....	5	21,560	16,622	26,817	16,665	20,777.50	41,024
Total, March, 1933.....	399	1,989,044	1,422,091	2,361,267	1,440,031	1,718,908.41	1,738,227
Total, March, 1932.....	363	1,864,896	1,357,320	2,257,652	1,367,560	1,645,366.81	1,643,952
Total, March, 1931.....	439	2,211,934	1,630,412	2,709,548	1,640,107	1,964,434.22	1,915,507

* Includes naval vessel of 2,150 tons displacement (tolls \$1,075) in transits and tolls, but not in tonnage.

Notice to Aviators and Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 5, 1933.

No. 42.

Panama, Panama Bay, machine-gun practice from airplanes. Beginning at 6 a. m. Monday, April 10, 1933, and continuing until 11.45 a. m. daily (Sundays and holidays excepted) until May 31, 1933, there will be practice machine-gun firing from airplanes, on towed targets by airplanes from Albrook Field, Canal Zone.

Caliber 30 machine guns will be used.

The danger area will be as follows:

Right boundary.—The line beginning from a point at the three-mile limit directly south of Juan Diaz, extending seaward 6,000 yards. The line 79° 28' W. latitude.

Left boundary.—The line beginning from a point at the three-mile limit directly south from the mouth of the Rio Chico extending seaward 6,000 yards. The line 79° 10' W. latitude.

J. L. SCHLEY,
Governor.

Tanker Traffic Through the Panama Canal in March, 1933.

During the month of March, 1933, 51 tank ships transited the Canal, with an aggregate net tonnage (Panama Canal measurement) of 301,278, on which tolls of \$267,971.60 were paid. Cargo amounted to 308,802 tons, comprised of 294,632 tons of mineral oils, 7,320 tons of creosote, and 6,850 tons of vegetable oils.

In point of net tonnage, tanker traffic increased by 102,634 tons, or 51.7 percent, compared with the corresponding month a year ago, and cargo tonnage increased 129,136 tons, or 71.9 percent.

Tank ships comprised 12.8 percent of the total commercial transits through the Canal during March, 1933; made up 15.1 percent of the total Panama Canal net tonnage; were the source of 15.6 percent of the total tolls collected; and carried 17.8 percent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of March, 1933, segregated by direction of transit and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for March, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
British.....	6	35,292	\$29,429.01	21,868
Danish.....	1	4,097	2,949.84	.....
Danzig.....	2	16,345	11,768.40	.....
Norwegian.....	4	24,540	17,668.80	.....
United States.....	14	83,210	64,269.30	* 22,628
Total, March, 1933.....	27	163,484	126,085.35	44,496
Total, February, 1933.....	25	147,021	108,673.97	7,046
Total, January, 1933.....	34	207,709	152,963.89	8,220
Total, March, 1932.....	20	112,932	86,860.09	17,884
<i>Pacific to Atlantic.</i>				
British.....	4	22,091	23,156.25	44,525
Danzig.....	1	8,224	8,835.00	16,628
Norwegian.....	3	16,322	16,496.25	27,226
United States.....	16	91,157	93,398.75	* 175,927
Total, March, 1933.....	24	137,794	141,886.25	264,306
Total, February, 1933.....	27	162,694	166,279.45	305,446
Total, January, 1933.....	27	157,011	159,532.54	283,589
Total, March, 1932.....	15	85,712	88,180.00	161,782

* Includes 7,320 tons creosote.

* Includes 6,850 tons vegetable oils.

The following tabulation shows the tanker traffic through the Canal during March, 1933, classified according to trade route:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>Atlantic to Pacific.</i>				
United States intercoastal.....	12	70,346	\$53,600.09	* 14,467
United States to South America.....	3	21,166	15,239.52	.....
United States to Far East.....	2	11,316	11,710.00	21,051
Mexico to South America.....	1	4,339	4,987.50	* 8,978
West Indies to United States.....	1	5,488	3,951.36	.....
Europe to United States.....	3	18,758	13,505.76	.....
Europe to South America.....	5	32,071	23,091.12	.....
<i>Pacific to Atlantic.</i>				
United States intercoastal.....	15	86,873	89,560.00	169,077
United States to Cristobal.....	1	4,436	4,043.75	6,468
United States to Europe.....	3	13,941	14,457.50	25,561
South America to United States.....	1	5,049	5,493.75	10,147
South America to Canada.....	1	7,717	8,142.50	16,808
South America to Europe.....	2	15,494	16,350.00	29,395
Philippine Islands to United States.....	1	4,284	3,838.75	* 6,850

* Includes 7,320 tons creosote.

* Vegetable oils.

* Includes 1,700 tons loaded at Curacao.

Of the tanker traffic through the Canal in March, 1933, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for March, 1932:

	No. of ships.	Panama Canal net tonnage.	Tolls.	Tons of cargo.
<i>To Los Angeles.</i>				
March, 1933.....	11	68,785	\$50,942.02	7,147
February, 1933.....	15	87,125	64,355.79	5,946
January, 1933.....	15	90,985	65,509.20	.....
March, 1932.....	10	60,651	43,668.72	.....
<i>From Los Angeles.</i>				
March, 1933.....	13	74,878	76,745.00	144,844
February, 1933.....	13	79,789	80,508.75	151,236
January, 1933.....	12	71,176	71,953.75	134,475
March, 1932.....	12	69,589	70,823.75	129,208

MOVEMENTS OF OCEAN VESSELS.

Week ending at midnight, April 8, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	
Astrolabe.....	1	12 20	2	6 10	2	17 20	2	18 50	French.....	Messageries Maritimes.....	352.0	52.0	18.2	Dunkerque, France	Nourmea, N. Caled.	Wine, cement, etc.	1,101	5,580
San Antonio.....	1	13 50	2	7 10	2	18 18	2	20 06	French.....	French Line.....	431.0	59.0	20.0	Havre, France	Vancouver, B. C.	Coke, ehalk, gen.	1,099	7,759
Persphone ²	1	17 20	2	8 25	2	19 39	2	21 00	Daniz.....	W. Tankerschiff Rhederei.....	483.0	63.0	28.0	Caricito, Venezuela	Topoilla, Chile.....	Fuel oil	12,011	9,201
Lio ²	1	20 30	2	8 30	2	20 39	2	22 07	American.....	General Petroleum Co.....	438.0	59.0	22.0	New York, N. Y.	Los Angeles, Calif.	Ballast	7,546	5,112
England Maru.....	2	10 30	2	11 15	2	21 21	2	22 55	Japanese.....	Kokusa Kisen Kaisha.....	335.0	51.0	25.11	New York, N. Y.	Kobe, Japan.....	Tobacco, steel, etc.	7,621	6,214
Endurance ¹	2	6 55	2	6 55	2	18 21	2	20 08	Panama.....	Essoan Garcia.....	100.0	14.0		San Blas, R. P.	Panama, R. P.	Coconuts	36	24
Harpoon.....	3	8 40	3	8 45	3	17 48	3	18 50	Panama.....	Shepard S. Co.....	402.6	53.2	14.0	Boston, Mass.	Seattle, Wash.	General	748	6,560
Buenos Aires.....	3	8 50	3	9 05	3	19 58	3	21 08	Japanese.....	Osaka Shosen Kaisha.....	401.3	62.5	25.2	Buenos Aires, Arg.	Osaka, Japan.....	General	4,982	10,446
Laping ⁴	2	18 20	3	9 40	3	18 58	4	14 50	American.....	U. S. Navy.....	180.0	35.6		Cristobal, C. Z.	Balboa, C. Z.	General ⁽¹⁾	80	226
Nuevo Panama ²	3	14 40	3	14 50	3	22 35	3	23 55	Panama.....	Hans Eliot.....	108.0	20.6	7.4	Cristobal, C. Z.	Buenaventura, Col.	General ⁽¹⁾	2,880	7,380
Mobile City.....	3	12 30	4	6 05	4	18 00	5	5 59	American.....	Isthmian S. S. Lines.....	335.5	55.0	20.0	Baltimore, Md.	Honolulu, T. H.	General	1,244	8,454
San Francisco ²	4	6 30	4	7 10	4	18 53	5	1 07	British.....	Hamburg-American Line.....	432.0	59.0	18.0	Hamburg, Germany	Vancouver, B. C.	General	2,920	11,443
Rumline.....	4	6 30	4	8 25	4	20 02	4	21 40	American.....	N. Z. Shipping Co.....	480.6	60.3	29.4	London, England	Pt. Chalmers, N. Z.	General	2,242	7,322
Chickasaw City.....	4	4 00	4	8 25	4	20 02	4	22 41	American.....	Norton, Lilly & Co.....	335.5	55.0	17.0	New York, N. Y.	Seattle, Wash.	General	1,734	6,627
Absaroka.....	3	20 05	4	9 55	4	21 06	4	23 40	American.....	McCormick S. S. Co.....	409.6	54.1	19.2	New York, N. Y.	Tacoma, Wash.	Gen., iron, steel	2,050	3,970
Athen.....	4	8 45	4	10 55	4	22 02	4	23 40	Norwegian.....	Com'lth & Dom. Line.....	330.5	49.0	17.0	New York, N. Y.	Brisbane, Australia	General	194	11,226
Europa ²	4	9 00	4	13 10	4	23 03	5	00 27	Danish.....	East Asiatic Co.....	445.4	64.2	18.1	Copenhagen, Den.	Vancouver, B. C.	General	1,600	6,747
Columbian.....	4	16 40	5	6 00	5	16 43	5	17 55	American.....	Amer-Hawaiian Line.....	404.6	52.0	17.0	Boston, Mass.	Seattle, Wash.	General	1,945	1,338
Helga.....	4	23 25	5	8 40	5	17 58	5	19 10	Danish.....	J. Lauritzen.....	288.2	39.7	13.8	Bordeaux, France	San Antonio, Chile	Ballast	1,416	10,772
Lochmonar ²	4	18 10	5	9 40	5	19 10	5	20 30	British.....	Royal Mail Lines, Ltd.	485.0	62.2	20.0	Bordeaux, Holland	Vancouver, B. C.	General	11,719	8,619
California.....	5	14 00	4	14 10	5	23 08	6	00 37	American.....	Standard Oil Co.....	513.0	68.2	20.0	London, England	Los Angeles, Calif.	Ballast	1,457	5,788
Osiris ²	5	15 00	5	15 40	6	00 13	6	1 45	American.....	Hamburg-American Line.....	376.1	51.7	17.1	Hamburg, Germany	Valparaiso, Chile	General	2,645	1,829
Agnete Maersk.....	5	15 00	5	15 10	6	00 10	6	1 45	German.....	A. P. Moller.....	285.8	43.4	12.9	Port Lincoln, C. R.	Topolobampo, Mex.	Ballast	9	46
Reel ¹	6	16 25	5	11 15	5	19 00	5	20 30	Danish.....	Hans Eliot.....	62.0	17.9	9.25	Cristobal, C. Z.	Pto. Amelies, R. P.	General	687	22
Chaumont ⁵	5	17 05	6	5 55	6	13 55	6	11 05	Panama.....	U. S. Navy.....	436.0	58.2	25.2	Hampton R. Is., Va.	San Francisco, Cal.	Navy stores	557	1,105
Cal.....	2	18 25	6	7 05	6	18 11	6	19 39	German.....	North German Lloyd.....	216.5	32.9	14.9	Cristobal, C. Z.	Guayaquil, Ecuador	General	2,649	8,720
Walter A.....	5	21 25	6	8 25	6	19 09	6	20 15	American.....	Imkenbach Line.....	446.5	56.1	20.0	Boston, Mass.	Seattle, Wash.	General	1,680	5,977
Hardanger.....	5	23 10	6	8 45	6	20 10	6	21 50	Norwegian.....	Westfal, Larsen & Co.....	375.5	52.3	14.1	Buenos Aires, Arg.	Vancouver, B. C.	General	8,320	7,420
Hakubasan.....	6	1 50	6	9 55	6	21 20	6	23 05	Japanese.....	Mitsui Bussan Kaisha.....	435.0	56.6	26.4	New York, N. Y.	Yawata, Japan.....	General	6,094	8,942
Hokuroku.....	6	8 45	6	10 15	6	20 22	6	23 05	Japanese.....	Osaka Shosen Kaisha.....	446.0	60.6	25.7	Philadelphia, Pa.	Kobe, Japan.....	Iron, auto, gen.	2,338	6,246
Maron.....	6	7 00	6	11 20	6	23 37	7	1 15	British.....	Alfred Holt & Co.....	433.0	56.3	22.4	Philadelphia, Pa.	Yokohama, Japan	General	1,911	6,572
San Vincente.....	6	10 05	6	14 55	7	1 00	7	2 40	American.....	Quaker S. S. Line.....	410.5	54.3	16.8	New York, N. Y.	Seattle, Wash.	General	2,747	15,290
President Jaek-son.....	7	3 45	7	6 20	7	13 48	8	00 20	American.....	Dollar Line.....	517.0	72.2	25.5	New York, N. Y.	San Francisco, Cal.	General	2,747	15,290

Bralanta ¹ 2	6 15 00	7 7 15	7 15 24	7 16 45	Norwegian	Anglo-Saxon Pet. Co.	451.1	59.2	18.6	Cardiff, Wales	Los Angeles, Calif.	Ballast	8,333
El Aleto ¹ 2	6 17 55	7 8 35	7 16 31	7 18 05	British	Anglo-Ecuador Oil Co.	440.8	57.6	22.0	Philadelphia, Pa.	La Libertad, Ecuador	Ballast	7,555
Cadillac ¹ 2	6 22 20	7 8 40	7 17 33	7 19 00	British	Anglo-Amer. Oil Co.	530.2	66.3	20.6	London, England	Los Angeles, Calif.	Ballast	12,092
Birmingham City	7 2 50	7 9 40	7 18 33	7 19 55	American	Isthmian S. S. Lines	395.5	55.0	18.0	Houston, Tex.	Honolulu, T. H.	Ballast	7,304
Tai Shan ¹ 2	7 5 45	7 10 35	7 19 42	7 20 45	Panamanian	Barber S. S. Line	461.9	60.6	21.0	Norfolk, Va.	Shanghai, China	General	1,424
Taranaki ¹ 2	7 6 15	7 11 50	7 20 47	8 2 48	British	Shaw, Savill & Albion	483.0	64.2	23.6	London, England	Wellington, N. Z.	General	4,015
Berganger ¹ 2	7 6 20	7 12 50	7 23 10	8 5 57	Norwegian	Intercean S. S. Corp.	464.4	61.2	19.6	Rotterdam, Holland	Vancouver, B. C.	Machinery, etc.	5
Thorsholm ¹ 2	7 11 05	7 13 30	8 00 05	8 1 25	Norwegian	A/S Thor Dahl	435.3	57.2	21.0	Sandefjord, Nor.	Estero Bay, Calif.	Ballast	7,388
Chateau Thierry ¹ 2	7 5 55	7 14 05	7 21 53	8 2 48	American	U. S. Army	436.0	53.0	23.9	New York, N. Y.	Balboa, C. Z.	General	677
Indian ¹ 2	7 13 25	7 15 15	8 1 05	8 2 48	Danish	Ortend Steamship Co.	410.0	53.2	21.0	Liverpool, England	Sydney, Australia	Newsprint	4,099
Tulsgaard ¹ 2	7 22 50	8 6 15	8 13 51	8 15 15	American	Associated Oil Co.	431.0	59.2	20.6	Baltimore, Md.	San Francisco, Cal.	Grease, lub. oil	5,112
Steel Seafarer ¹ 2	8 6 35	8 7 05	8 15 26	8 20 00	American	Isthmian S. S. Lines	425.0	56.2	21.0	Baltimore, Md.	Penang, Str. Sett.	Steel, tobacco	3,819
Santa Elena ¹ 2	8 00 50	8 12 00	8 19 48	9 16 10	American	Panama Mail S. S. Co.	484.0	72.0	23.11	New York, N. Y.	Seattle, Wash.	General, coffee	3,680
Cingalese Prince ¹ 2	8 12 30	8 12 45	8 21 05	8 22 20	British	Prince Line, Ltd.	441.0	60.0	25.6	New York, N. Y.	Singapore, Str. Sett.	General	4,819
Manizales ¹ 2	6 15 30	8 14 08	8 22 10	8 23 50	German	Grace Line	216.5	33.0	13.6	Cristobal, C. Z.	Guayaquil, Ecuador	General	257
Mahia ¹ 2	4 14 55	8 15 10	8 23 10	9 00 30	British	Shaw, Savill & Albion	477.0	63.0	21.3	London, England	N. Plymouth, N. Z.	Ballast	11,110
No. 223 ⁶	8 10 35	8 19 42	8 27 10	9 14 22	American	U. S. Navy	102.0	14.9	.....	Cristobal, C. Z.	Balboa, C. Z.	Ballast	.....
Shamrock ¹⁰⁻¹	7-32-21.55	8 6 10	8 15 29	.....	American	Frank C. Ekman	55.7	16.0	.....	Cristobal, C. Z.	San Francisco, Cal.	Ballast	42

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

Federiko Glavie Rotorua ¹ 2	1 15 30	2 3 50	2 13 00	2 14 00	Yugoslav	Anglo-Chilean Nit. Corp.	420.6	54.7	25.6	Tonopilla, Chile	Azores ^{1,2}	Nitrate	9,420
President Herrenscheidt ¹ 2	1 20 00	2 6 32	2 15 00	2 16 00	Norwegian	N. Z. Shipping Co.	526.4	61.4	24.0	Suva, Fiji Islands	London, England	Frozen, general	5,622
President Wilson Herman Frasch. Cali ¹ 2	2 6 30	2 7 30	2 16 10	2 22 05	American	Pechelbroun, Strasbourg	477.1	72.2	27.0	Talara, Peru	Pt. de Boue, France	Cande oil	13,172
S-14 ⁸	2 6 27	2 10 11	2 18 05	2 19 35	American	Dollar Line	516.5	72.2	27.0	San Francisco, Cal.	New York, N. Y.	Silk, general	10,588
Nuevo Panama ²	2 10 00	2 10 47	2 18 20	2 18 25	British	North German Lloyd	356.0	51.6	26.0	Everett, Wash.	Panama, Me.	Lumber	5,370
Rajahstan ²	2 7 10	2 12 25	2 21 15	2 22 30	Norwegian	Dutton Lumber Co.	216.5	32.9	16.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	3,950
Talisman ²	2 7 20	2 13 29	2 22 30	2 23 00	American	U. S. Navy	231.0	20.0	.....	Balboa, C. Z.	Cristobal, C. Z.	General	1,107
Yorkmar ²	2 18 20	3 4 43	3 13 15	3 15 05	American	Amer-Hawaiian Line	404.6	53.9	26.0	Portland, Ore.	Boston, Mass.	General	5,727
Buenos Aires ²	2 18 15	3 6 16	3 14 28	3 14 28	Swedish	Hans Eliot	108.5	20.6	9.2	Buenaventura, Col.	Cristobal, C. Z.	Coffee	215
San Clemente ²	3 4 45	3 7 15	3 15 45	3 15 45	American	W. L. Comyn	425.0	57.0	26.0	Vancouver, B. C.	Avonmouth, Eng.	Grain	9,695
Nokomis ⁹	3 4 45	3 8 25	3 16 35	3 16 35	American	Dale & Co.	400.6	54.2	28.0	Vancouver, B. C.	Antwerp, Belgium	General	6,992
No. 4 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	Johnson Line	426.9	56.2	27.0	Seattle, Wash.	Baltimore, Md.	Lumber	7,470
No. 5 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	Quaker Line	410.0	54.4	24.0	Portland, Ore.	Stockholm, Sweden	General	7,591
No. 6 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	U. S. Navy	201.0	26.0	13.5	Balboa, C. Z.	Philadelphia, Pa.	Lumber, general	7,464
No. 7 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	U. S. Navy	.....	.....	.....	Balboa, C. Z.	Cristobal, C. Z.	General	6,476
No. 8 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	U. S. Navy	.....	.....	.....	Balboa, C. Z.	Cristobal, C. Z.	General	.....
No. 9 ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	U. S. Navy	.....	.....	.....	Balboa, C. Z.	Cristobal, C. Z.	General	.....
Motor Sailor ¹⁰	3 7 40	3 13 00	3 18 00	3 18 00	American	U. S. Navy	.....	.....	.....	Balboa, C. Z.	Cristobal, C. Z.	General	.....

¹⁰ Launch.

⁹ Survey ship.

⁸ Submarine.

⁷ Yacht.

⁶ Sub-chaser.

⁵ Transport.

⁴ Mine sweeper.

³ Motor schooner.

² Motor ship.

¹ Steel products, general.

¹ Towing barge.

¹ For orders.

MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Cleared for sea.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Franz Klaser ¹⁴	3	7.50	3	10.08	3	18.15	3	18.15	Daniz.	Baltic Amer. Pet. Imp. Co.	520.2	70.1	30.0	Talara, Peru.	Rotterdam, Holl'd.	Gasoline.	16,508	12,629	8,121
Volunteer ¹⁴	3	9.45	3	10.57	3	20.05	3	20.05	American.	Lykes Bros. Ripley Co.	410.2	56.0	29.1	New Orleans, La.	New Orleans, La.	General.	9,590	8,214	6,244
Portland ¹⁴	3	10.35	3	12.25	3	21.20	3	20.20	German.	Hamburg-American Line	462.0	61.2	27.0	Vancouver, B. C.	Hamburg, Germany	General.	7,587	9,139	6,666
Cris Craft, No. 6 ¹⁵	3	9.11	3	9.11	3	14.40	4	15.00	Panamanian	E. Pucci.	25.9	6.4		Balboa, C. Z.	Cristobal, C. Z.	Ballast.	6,632	25,262	18,192
Pennsylvania	3	10.00	4	6.10	4	17.35	4	17.35	American.	Panama-Pacific Line.	586.4	80.3	37.3	San Francisco, Cal.	New York, N. Y.	General.	6,632	25,262	18,192
Endurance ¹⁴	4	4	4	6.58	4	17.35	4	17.35	Panamanian	R. Feuillebois	60.0	14.5		Cristobal, C. Z.	Cristobal, C. Z.	General.	36	36	24
Real ¹⁶	4	4	4	7.33	4	16.25	5	11.15	Panamanian	Hans Elliot.	62.2	17.1	5.0	Darien, R. P.	Cristobal, C. Z.	Bananas.	24	46	22
J. L. Lucken- bach	3	20.55	4	7.34	4	15.25	4	15.25	American.	Luckenbach Line.	448.9	60.2	29.0	Seattle, Wash.	Boston, Mass.	General.	6,932	9,294	6,861
Lagarto ¹⁴	3	23.50	4	8.21	4	17.20	4	17.20	British.	Pacific Steam Nav. Co.	385.1	52.2	27.5	Valparaiso, Chile.	Hull, England.	General.	6,853	5,656	3,823
Pacific Enter- prise ¹⁴	4	4.45	4	9.29	4	17.45	4	17.45	British.	Furness Withy & Co.	435.9	60.2	28.0	Vancouver, B. C.	Glasgow, Scotland.	Wheat, general.	8,700	9,641	6,989
Point Brava.	4	9.10	4	10.21	4	19.00	4	19.00	American.	Swayne & Hoyt.	336.8	52.2	23.0	Portland, Me.	Tampa, Fla.	Lumber, general.	6,530	5,696	4,125
Lapwing ¹⁷	4	12.01	4	23.55	4	23.55	4	23.55	American.	U. S. Navy	187.0	37.0		Balboa, C. Z.	Cristobal, C. Z.	(*)			
Houseboat.	4	12.01	4	23.55	4	23.55	4	23.55	American.	U. S. Navy	221.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
S-15 ¹⁸	4	13.13	4	20.52	4	20.52	4	20.52	American.	U. S. Navy	221.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
Fenglen ¹⁴	4	13.50	4	14.43	4	23.30	4	23.30	Norwegian.	Fern Line.	335.3	54.8	27.0	Cebu, P. I.	Cape Hatteras.	Sugar.	7,800	6,615	4,859
Empress of Britain	3	16.00	5	5.32	5	16.35	5	22.15	British.	Canadian-Pacific Line.	733.3	97.8	31.0	New York, N. Y.	New York, N. Y.	Passengers.	44,124	27,589	
Harvester ¹⁴	4	19.30	5	6.25	5	15.15	5	15.15	American.	The Texas Co.	416.8	56.1	25.0	Los Angeles, Calif.	Norfolk, Va.	Gasoline.	8,477	6,932	5,023
Farfield City.	5	2.30	5	7.50	5	16.35	5	18.20	American.	Isthmian S. S. Lines	424.2	56.2	26.0	Baltimore, Md.	Baltimore, Md.	Sugar, pineapples	8,175	7,611	5,450
No. 223 ¹⁹	5	8.20	5	8.20	5	20.15	5	20.15	American.	U. S. Navy	105.0	14.0		Balboa, C. Z.	Cristobal, C. Z.				
No. 353 ¹⁹	5	8.20	5	8.20	5	20.15	5	20.15	American.	U. S. Navy	105.0	14.0		Balboa, C. Z.	Cristobal, C. Z.				
S-10 ¹⁸	5	8.34	5	8.34	5	20.15	5	20.15	American.	U. S. Navy	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
S-12 ¹⁸	5	8.34	5	8.34	5	20.15	5	20.15	American.	U. S. Navy	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
Pangitiki ¹⁴	4	19.40	5	10.43	5	19.20	5	19.20	British.	N. Z. Shipping Co.	531.0	70.0	30.0	Wellington, N. Z.	London, England.	General.	5,883	18,197	13,526
Virginian	5	8.07	5	11.52	5	21.35	5	21.35	American.	Amer-Hawaiian Line.	491.5	58.2	26.0	Seattle, Wash.	Boston, Mass.	Lumber, general	8,511	10,491	7,601
Sally Maersk ¹⁴	5	9.00	5	13.05	5	22.55	5	23.30	Danish.	A. P. Moller	332.1	44.2	23.2	Salaverry, Peru.	Liverpool, England	Sugar.	4,900	3,518	2,510
Santa Monica ¹⁴	4	18.54	6	4.55	6	14.15	9	9.10	American.	U. S. Mail S. S. Co.	296.5	46.9	16.1	San Francisco, Cal.	Cristobal, C. Z.	Coffee, general.	646	3,848	2,606
S-13 ¹⁸	6	5.00	6	5.00	6	14.10	6	14.10	American.	U. S. Navy	231.0	20.0		Balboa, C. Z.	Cristobal, C. Z.				
Agua.	6	3.20	6	6.30	6	15.30	6	16.35	German.	North German Lloyd	206.3	46.5	16.2	Champerico, Guat.	Hamburg, Germany	General.	1,530	3,041	1,957
Mangites.	6	5.10	6	6.40	6	15.30	8	14.08	German.	Grace Line.	216.5	32.9	14.4	Guayaquil, Ecuador	Cristobal, C. Z.	General.	763	1,132	741
Mallard ¹⁷	6	8.32	6	8.32	6	17.10	6	17.10	American.	U. S. Navy	187.0	38.0		Balboa, C. Z.	Cristobal, C. Z.	(*)			
Barge.	6	9.15	6	10.11	6	18.50	6	18.50	British.	R. Dale & Co.	412.6	55.5	23.0	Vancouver, B. C.	London, England.	Wheat, general.	9,864	6,832	4,797
Mabroun.	6	6.20	6	12.45	6	18.10	7	10.20	American.	Grace Line.	340.2	51.6	24.4	San Francisco, Cal.	New York, N. Y.	Coffee, general.	2,606	5,797	4,188
Santa Cecilia.	6	6.20	6	12.45	6	18.10	7	10.20	American.	Grace Line.	340.2	51.6	24.4	San Francisco, Cal.	New York, N. Y.	Coffee, general.	2,606	5,797	4,188
Deroche ¹	6	10.30	6	13.19	6	21.40	6	21.40	American.	Union Oil Co.	435.0	56.0	26.0	Los Angeles, Calif.	Baltimore, Md.	Gasoline.	10,571	7,452	5,199

Kofuku Maru...	6 11.00	6 15.10	6 23.00	6 23.00	Japanese...	Kokusai Kisen Kaisha...	385.0	51.0	27.0	Cebu, P. I.	East coast, U.S.A.	7,500	6,209	4,763
Murata ¹⁵	6	6	6	6	American...	M. A. Smith...				Balboa, C. Z.	Gatun, C. Z.		1	1
Laurel	6	6	6	6	American...	U. S. Navy...				Balboa, C. Z.	Cristobal, C. Z.			
Gertrude	6 8.15	7 2.48	7 13.00	7 16.25	Danish...	A. P. Moller...	418.9	54.7	27.0	Cebu, P. I.	Savannah, Ga.	7,445	7,885	5,500
Theodore	6 11.45	7 4.16	7 14.10	7 14.10	Norwegian...	Fred Olsen Line...	425.5	55.2	28.5	Vancouver, B. C.	Oslo, Norway	8,988	7,593	5,637
Roosevelt ¹⁴	6 12.30	7 5.05	7 17.35	7 17.35	Norwegian...	Mitsui Bussan Kaisha...	415.3	54.7	23.0	Dairen, Manchuria	Philadelphia, Pa.	5,901	7,296	5,439
Hundicap	7 00.30	7 6.44	7 19.10	7 19.10	Dutch...	Royal Neth. S. S. Co.	400.0	58.3	26.4	Corral, Chile	Hamburg, Germany	8,062	7,817	6,097
Boskoop	7 3.35	7 7.43	7 19.45	7 19.45	German...	Knohr & Burchard...	307.0	45.4	20.0	Topolobampo, Mex.	Hull, England	3,797	3,294	2,356
Barnbek	7 8.00	7 8.59	7 21.05	7 21.05	American...	The Texas Co.	435.0	56.2	31.0	San Luis, Calif.	Port Arthur, Tex.	11,174	7,639	5,135
R. J. Hanna	7 9.30	7 10.23	7 22.05	7 22.05	American...	Williams S. S. Corp.	434.3	57.7	27.0	Seattle, Wash.	Providence, R. I.	8,442	7,983	5,983
Arzonan	8 8.30	8 9.15	8 16.50	8 16.50	German...	Haniburg-American Line	227.5	34.4	14.0	Guayaquil, Ecuador	Cristobal, C. Z.	710	1,632	1,041
Drazzo	8 13.22	8 14.18	8 23.05	8 23.05	American...	Sudden & Christenson...	410.0	54.2	24.4	Seattle, Wash.	Baltimore, Md.	7,500	6,603	4,932
Edwin Christenson														

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
April 2	No. 9685 ²⁴	Pan American Airways...	San Salvador via wayp'ts.	April 2	Metapan	United Fruit Co.	New York via wayp'ts.
April 2	No. 22-V ²⁴	Pan American-Grace Airways...	Salinas via wayp'ts.	April 3	No. 660-M ²⁴	Pan American Airways...	Barranquilla, Colombia.
April 3	Peten	United Fruit Co.	Port Limon, Costa Rica.	April 3	Pastores	Colombian Line	New York via wayp'ts.
April 3	Cefalu	United Fruit Co.	Medellin, Colombia.	April 3	Guayaquil	Panama R. R. S. S. Line.	New York.
April 4	Daytonian	Standard Fruit & S. S. Co.	New Orleans via Hibama.	April 3	Peten	United Fruit Co.	New York via wayp'ts.
April 4	Caribia	Hamburg-American Line.	Puerto Barrios via Limon.	April 4	No. 144-M ²⁴	Pan American-Grace Airways...	Salinas via wayp'ts.
April 4	Daytonian	Leyland S. S. Line.	Liverpool via wayp'ts.	April 4	No. 9655 ²⁴	Pan American Airways...	San Salvador via wayp'ts.
April 4	Cryssen	Royal Netherlands S. S. Co.	Amsterdam via wayp'ts.	April 5	Inapauquina ²⁵	A. Tagaropolos	Colon, Rep. of Panama.
April 4	Inapauquina ²⁵	A. Tagaropolos	Colon, Rep. of Panama.	April 5	Annetta I. ²⁵	P. W. Hamilton.	Colon, Rep. of Panama.
April 4	Cristobal	Panama R. R. S. S. Line.	New York via Haiti.	April 5	Daytonian	Leyland S. S. Line.	Trinidad via wayp'ts.
April 5	No. 9673 ²⁴	Pan American Airways...	San Salvador via wayp'ts.	April 5	Cryssen	Royal Netherlands S. S. Co.	Port Limon, Costa Rica.
April 5	No. 670-M ²⁴	Pan American Airways...	Houston via wayp'ts.	April 5	Cefalu	Hamburg-American Line.	Hamburg via wayp'ts.
April 6	Tillie Lykes	Lykes Brothers S. S. Co.	Avonmouth via wayp'ts.	April 6	No. 660-M ²⁴	Pan American Airways...	Miami via wayp'ts.
April 7	Carare	Elders & Fyffes Ltd.	Avonmouth via wayp'ts.	April 6	No. 9673 ²⁴	Pan American Airways...	San Salvador via wayp'ts.
April 7	Zacapa	United Fruit Co.	New York via wayp'ts.	April 6	No. 145-M ²⁴	Uraba, Medellin & Cent. Airways	Medellin, Colombia.
April 7	Vera Cruz ²⁴	United Fruit Co.	Medellin, Colombia.	April 7	No. 22-V ²⁴	Pan American-Grace Airways...	Avonmouth via wayp'ts.
April 7	No. 145-M ²⁴	G. I. Bryan	Colon, Rep. of Panama.	April 7	Carare	Lykes Brothers S. S. Co.	Avonmouth via wayp'ts.
April 8	Pearl Marie ²⁶	Colombian Line.	New York via wayp'ts.	April 7	Tillie Lykes	R. L. Husler ²⁶	Sto. Domingo via wayp'ts.
April 8	Cryssen	Royal Netherlands S. S. Co.	Port Limon, Costa Rica	April 7	Vera Cruz	Anahuacuna ²⁵	Grand Cayman, B. W. I.
April 8	Santa Marta	United Fruit Co.	New York via Kingston.	April 7	Zacapa	Guayaquil	Port Limon, Costa Rica.
April 8	Cloudeye ²⁶	Walter Robinson	San Andres, Colombia.	April 8	No. 414-H ²⁴	Pan American Airways...	New Orleans via wayp'ts.
April 8				April 8			Guatemala via wayp'ts.

¹ Tanker. ²² Towing houseboat. ¹⁵ Launch. ¹⁶ Motor schooner. ¹⁷ Tug. ¹⁸ Submarine. ¹⁹ Sub-chaser. ²⁰ For orders. ²¹ Round-the-world cruise. ²³ Towing barge. ²⁴ Air mail carrier. ²⁵ Motor boat. ²⁶ Schooner. * Other than ships passing through the Canal.

Commercial Traffic Through the Panama Canal in March, 1933, by Trade Routes.

The following tabulation shows the commercial traffic through the Canal during the month of March, 1933, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for March, 1932 and 1931. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	51	320,475	234,054	387,636	234,137	\$275,065.58	115,451
Europe to Canada:							
Belgian.....	1	7,044	4,567	7,212	4,398	5,071.68	.....
British.....	5	28,891	20,313	32,994	20,290	23,297.79	3,768
Danish.....	1	8,336	5,933	9,549	6,031	6,001.92	.....
Dutch.....	1	8,351	6,201	10,155	6,337	7,751.25	1,771
French.....	2	14,495	8,247	15,768	8,886	10,308.75	2,756
German.....	2	15,022	10,419	17,294	10,650	13,023.75	5,185
Italian.....	2	12,156	8,317	13,965	8,721	10,396.25	3,484
Norwegian.....	3	18,130	11,601	19,167	11,937	14,501.25	3,870
Swedish.....	1	4,860	2,781	4,960	3,665	3,476.25	1,859
Total.....	18	117,265	78,379	131,064	80,915	93,828.89	22,693
United States to Far East:							
British.....	6	35,623	24,059	39,547	23,825	30,073.75	30,351
German.....	1	1,822	1,286	2,158	1,260	1,311.84	.....
Japanese.....	9	47,344	40,523	60,714	39,880	50,027.90	61,460
Norwegian.....	5	25,479	13,824	24,280	13,970	17,280.00	20,081
United States.....	2	10,218	7,814	12,615	7,811	9,767.50	10,897
Total.....	23	120,486	87,506	139,314	86,746	108,460.99	122,789
Europe to South America:							
British.....	3	19,906	16,514	27,300	16,635	18,524.83	4,091
Danish.....	2	8,853	6,102	10,275	6,165	6,383.59	1,570
Danzig.....	1	8,121	6,933	12,425	7,090	5,847.12	.....
Dutch.....	2	9,212	5,140	8,755	5,314	6,425.00	2,339
French.....	1	5,242	3,332	5,645	3,326	4,165.00	915
German.....	2	7,080	5,271	8,650	5,285	6,588.75	5,512
Italian.....	1	9,373	5,223	11,669	6,779	6,528.75	1,357
Norwegian.....	2	13,289	11,143	18,334	11,025	9,568.08	.....
Swedish.....	1	5,039	2,751	4,896	3,548	3,438.75	2,320
Total.....	15	86,115	62,409	107,949	65,167	67,469.87	18,104
Europe to Australasia:							
British.....	6	56,301	39,892	67,605	41,570	44,742.08	9,343
United States to South America:							
British.....	1	5,049	4,395	7,203	4,382	3,635.28	.....
Danzig.....	1	8,224	7,063	12,175	6,974	5,921.28	.....
United States.....	4	28,645	18,707	35,214	18,715	21,602.96	6,506
Total.....	6	41,918	30,170	54,592	30,071	31,159.52	6,506
Europe to United States:							
British.....	2	12,995	11,025	17,881	10,465	9,356.40	.....
Norwegian.....	4	22,885	14,679	24,386	14,849	16,244.05	.....
Total.....	6	35,880	25,704	42,267	25,314	25,600.45	.....
United States to Philippine Islands:							
British.....	1	6,035	3,807	6,372	3,808	4,758.75	1,382
Danish.....	1	5,523	3,091	5,086	3,163	3,863.75	4,791
United States.....	2	12,107	8,407	13,463	8,387	10,508.75	15,265
Total.....	4	23,665	15,305	24,921	15,363	19,131.25	21,438
United States to Canada:							
British.....	1	4,100	3,219	5,281	3,248	2,952.00	.....
United States.....	4	19,889	13,410	21,688	13,321	16,762.50	15,027
Total.....	5	23,989	16,629	26,969	16,569	19,714.50	15,027

ATLANTIC TO PACIFIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States to Europe:							
British	2	13,984	9,207	14,501	9,290	\$11,508.75	4,242
United States	1	5,233	3,838	6,204	3,851	4,797.50	4,857
Total	3	19,217	13,045	20,705	13,141	16,306.25	9,099
Around the world:							
United States	2	17,702	12,461	21,030	12,428	15,576.25	4,855
United States to Hawaiian Islands:							
United States	2	10,947	6,930	11,374	6,900	8,662.50	4,625
South America to United States:							
United States	2	10,144	7,064	11,116	7,036	8,830.00	4,265
West Indies to Canada:							
British	3	9,550	7,256	11,655	6,973	7,251.84	660
Europe to Central America:							
British	1	4,802	3,120	5,027	3,117	3,900.00	4,542
German	2	4,438	3,126	5,314	3,128	3,206.24	1,211
Total	3	9,240	6,246	10,341	6,245	7,106.24	5,753
Canada to Australasia:							
British	2	8,516	6,534	10,862	6,602	8,167.50	4,103
Cristobal to South America:							
German	6	5,243	3,385	6,518	3,496	4,231.25	1,723
Panamanian	2	202	206	406	202	242.40	200
Total	8	5,445	3,591	6,924	3,698	4,473.65	1,923
South America to Far East:							
Japanese	1	5,821	4,170	7,267	4,387	5,212.50	3,928
West Indies to United States:							
Norwegian	1	5,488	4,652	7,616	4,564	3,951.36	.....
Canada to Far East:							
Japanese	1	4,670	4,274	5,831	4,229	5,342.50	7,967
Central America to South America:							
British	1	4,339	3,990	6,433	4,054	4,987.50	8,978
West Indies to South America:							
Chilean	1	4,167	3,268	5,639	3,034	4,085.00	3,468
Foreign vessels in ballast—United States intercoastal:							
Swedish	1	2,917	2,180	3,691	2,658	2,100.24	.....
Cristobal to Central America:							
British	2	1,441	1,286	2,298	1,304	1,607.50	1,647
Norwegian	2	1,158	1,106	1,882	1,114	833.76	.....
Panamanian	5	115	123	180	116	138.00	121
Total	9	2,714	2,515	4,360	2,534	2,579.26	1,768
Cristobal to United States:							
United States	1	2,603	1,351	2,435	1,351	1,688.75	196
Africa to Central America:							
Danish	1	2,562	1,481	2,480	1,471	1,844.64	.....
Central American intercoastal:							
Danish	1	1,645	1,313	2,212	1,326	1,641.25	316
South American intercoastal:							
Swedish	1	488	442	777	531	552.50	630
Cristobal to Balboa:							
Panamanian	6	262	226	292	158	227.47	42
Central America to Balboa:							
Panamanian	1	24	24	.....	.....	28.80	.....
Vessels not engaged in commerce (yachts, warships, etc.):							
French	* 1	.....	.....	.....	.....	1,075.00	.....
United States	* 1	239	263	503	263	197.25	.....
Total	2	239	263	503	263	1,272.25	.....
Grand total, March, 1933	187	954,794	683,324	1,135,860	689,435	797,061.38	393,927
Grand total, March, 1932	189	988,024	718,990	1,194,017	726,073	842,663.21	530,497
Grand total, March, 1931	223	1,100,097	818,822	1,360,246	826,309	953,289.79	499,617

* Naval vessel of 2,150 tons displacement.

* Yacht.

PACIFIC TO ATLANTIC.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
United States intercoastal:							
United States.....	56	323,400	234,971	385,704	234,497	\$293,713.75	421,553
Canada to Europe:							
Belgian.....	1	6,292	4,986	7,816	5,758	6,232.50	10,086
British.....	28	140,946	101,183	164,356	101,474	126,478.75	216,406
Danish.....	3	16,517	10,877	19,067	11,461	13,596.25	23,873
Dutch.....	1	7,619	5,782	9,338	5,808	7,227.50	9,520
French.....	2	14,702	8,500	16,441	9,326	10,625.00	15,207
German.....	5	32,382	21,374	35,543	21,766	26,717.50	41,596
Italian.....	3	20,250	15,355	25,159	15,681	19,193.75	22,416
Norwegian.....	5	26,295	15,365	26,353	15,657	19,206.25	38,231
Panamanian.....	1	6,065	3,447	5,745	3,507	4,308.75	7,595
Swedish.....	1	4,288	3,363	5,659	4,225	4,203.75	7,812
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	8,079
Total.....	51	280,806	193,697	321,164	198,113	242,121.25	400,821
South America to Europe:							
British.....	7	42,801	31,018	54,345	35,306	38,772.50	47,035
Danzig.....	1	8,224	7,068	12,175	6,974	8,835.00	16,628
Dutch.....	1	5,980	3,111	5,554	3,339	3,888.75	8,449
French.....	1	4,834	3,223	5,390	3,219	4,028.75	7,766
German.....	3	14,102	9,387	15,692	9,500	11,733.75	20,617
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	2,898
Norwegian.....	2	12,271	8,765	14,483	8,864	10,956.25	18,761
Yugoslav.....	5	21,560	16,622	26,817	16,665	20,777.50	41,024
Total.....	21	119,101	84,370	146,174	90,617	105,462.50	163,178
Philippine Islands to United States:							
Danish.....	1	5,975	3,170	5,339	3,346	3,962.50	7,415
Japanese.....	9	45,752	38,653	58,400	37,735	48,150.00	67,144
Norwegian.....	2	8,766	4,961	8,563	4,953	6,201.25	15,000
Panamanian.....	2	13,922	7,269	13,657	7,281	9,086.25	15,538
United States.....	5	32,110	24,712	38,958	23,736	30,890.00	38,801
Total.....	19	106,525	78,765	124,922	77,051	98,290.00	143,898
Australasia to Europe:							
British.....	5	41,482	29,120	47,430	29,946	36,400.00	33,902
French.....	1	3,743	3,055	5,072	3,026	3,818.75	3,660
Swedish.....	1	4,536	2,748	4,521	3,424	3,435.00	7,626
Total.....	7	49,761	34,923	57,023	36,396	43,653.75	45,188
Hawaiian Islands to United States:							
United States.....	6	32,052	21,520	35,032	21,435	26,900.00	49,289
South America to United States:							
British.....	1	5,049	4,395	7,203	4,382	5,493.75	10,147
Danish.....	1	1,487	1,303	1,966	1,183	1,628.75	2,950
United States.....	3	20,752	12,763	25,677	14,763	15,953.75	11,305
Total.....	5	27,288	18,461	34,846	20,328	23,076.25	24,402
Far East to United States:							
Japanese.....	3	16,429	13,334	21,503	13,157	16,667.50	4,165
Canada to South America:							
United States.....	3	14,097	10,879	17,078	10,807	13,598.75	12,153
United States to Europe:							
British.....	2	9,325	7,616	12,718	7,480	9,520.00	17,570
Norwegian.....	1	4,616	3,950	6,546	3,853	4,937.50	7,991
Total.....	3	13,941	11,566	19,264	11,333	14,457.50	25,561
South America to Canada:							
British.....	1	7,717	6,514	11,941	6,270	8,142.50	16,808
United States to Cristobal:							
Norwegian.....	1	4,436	3,235	5,204	3,168	4,043.75	6,468
United States.....	1	2,603	1,351	2,435	1,350	1,688.75	1,220
Total.....	2	7,039	4,586	7,639	4,518	5,732.50	7,688
Around the world:							
British.....	1	6,524	3,533	6,373	3,385	4,416.25	1,985
Central America to Europe:							
German.....	3	6,436	4,093	6,963	4,050	5,116.25	7,429
Australasia to Canada:							
British.....	1	5,518	4,419	7,178	4,413	5,523.75	2,651
Hawaiian Islands to Europe:							
Swedish.....	1	5,485	3,406	5,558	4,246	4,257.50	8,091

PACIFIC TO ATLANTIC.—Continued.

Nationality.	No. of ships.	TONNAGE.				Tolls.	Tons of cargo.
		Panama Canal net.	United States equivalent.	Registered gross.	Registered net.		
South America to Cristobal:							
German.....	5	4,502	2,766	5,467	2,856	\$3,457.50	4,535
Panamanian.....	2	202	206	406	202	244.80	422
Total.....	7	4,704	2,972	5,873	3,058	3,702.30	4,957
Central America to Cristobal:							
British.....	3	2,571	2,336	4,033	2,325	2,421.10	1,640
German.....	1	741	619	1,051	640	773.75	449
Norwegian.....	2	1,158	1,106	1,882	1,114	1,382.50	1,782
Total.....	6	4,470	4,061	6,966	4,079	4,577.35	3,871
South America to West Indies:							
United States.....	1	1,566	1,339	1,969	1,339	1,127.52	.....
South American intercoastal:							
Colombian.....	1	307	302	405	308	368.40	300
Swedish.....	1	488	442	777	531	351.36	.....
Total.....	2	795	744	1,182	839	719.76	300
Balboa to Cristobal:							
Panamanian.....	9	244	249	421	302	310.05	312
Vessels not engaged in commerce (yachts):							
British.....	1	73	72	91	68	54.00	.....
Panamanian.....	2	40	30	40	32	28.80	.....
United States.....	1	239	263	503	263	197.25	.....
Total.....	4	352	365	634	363	280.05	.....
Grand total, March, 1933.....	212	1,034,250	738,767	1,225,407	750,596	921,847.03	1,344,300
Grand total, March, 1932.....	174	876,872	638,330	1,063,635	641,487	802,703.60	1,113,455
Grand total, March, 1931.....	216	1,101,837	811,590	1,349,302	813,798	1,011,144.43	1,415,890

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending April 8, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				Tons.	Tons.
Metapan.....	United Fruit Co.....	.....	April 2	.....	251½
San Antonio.....	French Line.....	.....	April 2	.....	47
President Wilson.....	Dollar Line.....	April 2	April 2	459	(²)
Nuevo Panama.....	Hans Elliot.....	April 2	April 3	240	77
Calí.....	North German Lloyd.....	April 2	April 6	1,215	557
Guayaquil.....	Panama R. R. S. S. Line.....	.....	April 3	.....	638
Pastores.....	United Fruit Co.....	.....	April 3	.....	1,075
Peten.....	United Fruit Co.....	April 3	April 3	48	161
San Francisco.....	Hamburg-American Line.....	April 3	April 4	355	78
Portland.....	Hamburg-American Line.....	April 3	April 4	60	107
Europa.....	Danish East Asiatic Co.....	April 4	April 4	16	(²)
Absaroka.....	McCormick S. S. Co.....	April 4	April 5	(²)	51
Caribia.....	Hamburg-American Line.....	April 4	April 5	7	231
Osiris.....	Hamburg-American Line.....	April 4	April 5	97	426
Crijnsen.....	Royal Netherlands S. S. Co.....	April 4	April 5	195	26
Cefalu.....	Standard Fruit & S. S. Co.....	April 4	April 5	193	1,074
Lochmonar.....	Royal Mail Line, Ltd.....	April 4	April 5	302	6
Daytonian.....	Leyland S. S. Line.....	April 4	April 5	202	29
Real.....	Hans Elliot.....	April 4	April 5	24	10
Cristobal.....	Panama R. R. S. S. Line.....	April 5	.....	2,143	.....
San Vincente.....	Quaker S. S. Line.....	April 6	April 6	279	(²)
Santa Cecilia.....	Panama Mail Line, Ltd.....	April 6	April 7	366	356
Manizales.....	Grace Line.....	April 6	April 8	358	255
Santa Monica.....	Panama Mail S. S. Co.....	April 6	.....	1,717	.....
Zacapa.....	United Fruit Co.....	April 7	April 7	1,030	155
Veragua.....	United Fruit Co.....	April 7	April 7	278	31
Tillie Lykes.....	Lykes Brothers.....	April 7	April 7	405	65
R. L. Hustler.....	L. C. Bodden.....	.....	April 7	.....	1½
Carare.....	Elders & Fyffes, Ltd.....	April 7	April 7	3	(²)
Gertrude Maersk.....	A. P. Moller.....	April 7	April 7	185	(²)
Boskoop.....	Royal Netherlands S. S. Co.....	April 7	April 8	109½	60
Santa Elena.....	Panama Mail S. S. Co.....	April 8	April 8	492	180
Colombia.....	Colombian S. S. Line.....	April 8	.....	81	.....
Santa Marta.....	United Fruit Co.....	April 8	.....	344	.....
Crijnsen.....	Royal Netherlands S. S. Co.....	April 8	.....	4	.....
Durazzo.....	Hamburg-American Line.....	April 8		711	

* No cargo discharged.

* No cargo laded.

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Volume XXVI. Balboa Heights, C. Z., April 19, 1933. No. 38.

Cargo Through the Canal during March 1933.

On pages 516 and 517 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in March 1933. This cargo, segregated according to direction as compared with March 1932, and the differences, are shown in the following tabulation:

Direction.	March 1932.	March 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Atlantic to Pacific.....	530,497	393,927	-136,570
Pacific to Atlantic.....	1,113,455	1,344,300	+230,845
Total.....	1,643,952	1,738,227	+94,275

Total cargo through the Canal in March 1933, showed an increase of 94,275 tons, or 5.7 percent, in comparison with March 1932. The net gain was due to an increase of 230,845 tons, or 20.7 percent, in the Pacific to Atlantic movement, which gain was partially offset by a loss of 136,570 tons, or 25.7 percent, in the Atlantic to Pacific movement. This loss was caused principally by decreased shipments of cotton, manufactured goods, and sulphur. Substantial gains in the Pacific to Atlantic movement were made in shipments of mineral oils, wheat, nitrates, and sugar.

ATLANTIC TO PACIFIC CARGO MOVEMENT.

Origin.—Seventy-six and three-tenths percent of the cargo tonnage moving from the Atlantic to the Pacific originated on the eastern and Gulf seaboard of the United States, and 13.7 percent in Europe, these two areas contributing 90 percent of the total cargo moving in this direction in March 1933. Tonnage from the United States decreased 84,964 tons, or 22.0 percent, in comparison with March 1932, and that from Europe decreased 46,926 tons, or 46.6 percent. The United States contributed a greater proportion of the total tonnage than in the corresponding month last year, while Europe's proportion to the total declined.

Destination.—Thirty-seven and six-tenths percent of the Pacific-bound cargo was destined to the United States; 39.7 per cent to Asia; 10.0 percent to South America; and 5.7 percent to Australasia. In comparison with March 1932, an increase occurred in cargo routed to Asia, amounting to 3,773 tons, or 2.5 percent; shipments to all other areas declined as follows: To United States, 96,998 tons, or 39.6 percent; to South America, 4,087 tons, or 9.4 per cent; and to Australasia, 21,741 tons, or 49.1 percent. The percentage of the total cargo destined to the United States and Australasia decreased in comparison with that in the corresponding month a year ago, while the percentages to South America and Asia were higher.

PACIFIC TO ATLANTIC CARGO MOVEMENT.

Origin.—Of the total cargo moving from the Pacific to the Atlantic in March 1933, 563,073 tons, or 41.9 percent of the total, originated in the United States; 306,705 tons, or 22.8 percent in Canada; 210,094 tons, or 15.6 percent, in South America; 144,758 tons, or 10.8 percent, in Asia; and 47,839 tons, or 3.5 percent, in Australasia. Tonnage from the United States made an increase of 46,724 tons, or 9.0 percent in comparison with March 1932; substantial increases were also recorded in three other areas, as follows: From Canada, 102,988 tons, or 50.6 percent; from South America, 55,624 tons, or 36.0 percent; and from Asia, 32,342 tons, or 28.8 percent. Tonnage from Australasia declined 17,928 tons, or 27.3 percent. Declines were made in the percentage of total cargo for the United States and Australasia. The other areas showed higher percentages than the previous year.

Destination.—Segregated according to destination, 637,805 tons, or 47.4 percent of the total cargo moving from the Pacific to the Atlantic were reported destined to ports on the east coast of the United States, and 644,963 tons, or 48.0 percent, to European ports. These two areas absorbed 95.4 percent of the total cargo. Cargo destined to the United States made an increase of 6,643 tons, or 1.0 percent, in comparison with March 1932, and cargo to Europe increased 203,301 tons, or 46.0 percent. The percentage of the total to the United States was less than in the previous year, but Europe's percentage was higher.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC.

From the cargo declarations submitted it was possible to classify approximately 92 percent of the cargo in transit through the Canal from the Atlantic to the Pacific during the month of March 1933. The remaining 8 percent consisted, for the most part, of manufactured articles in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 5,000 tons for March 1932, or March 1933, are listed in the following tabulation, showing the differences:

Commodity.	March 1932.	March 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Ammonium compounds.....	10,123	2,392	-7,731
Automobiles.....	8,895	4,068	-4,827
Canned goods (fish, fruit, vegetables, etc.).....	13,064	8,166	-4,898
Cement.....	5,911	6,077	+166
Chemicals.....	6,740	5,931	-809
Coal and coke.....	9,423	7,689	-1,734
Corn.....	8,542	4,468	-4,074
Cotton.....	55,039	32,461	-22,578
Creosote.....		7,320	+7,320
Lumber.....	9,210	1,470	-7,740
Manufactures of iron and steel.....	66,220	43,265	-22,955
Machinery.....	6,483	3,921	-2,562
Tinplate.....	13,809	8,591	-5,218
Metal, scrap.....	10,544	35,230	+24,686
Oils, mineral.....	36,773	56,291	+19,518
Paper.....	18,066	16,673	-1,393
Phosphates.....	17,780	24,984	+7,204
Slag.....	6,721	2,400	-4,321
Sulphur.....	21,475	8,027	-13,448
Sugar.....	6,800	3,526	-3,274
Tobacco.....	2,214	5,800	+3,586
Textiles.....	8,090	6,734	-1,356
Railroad material.....	5,633	456	-5,177
Patent fuel.....	5,100		-5,100

The above 24 commodity groups for March 1933, comprise about 75 percent of the total cargo moving from the Atlantic to the Pacific. Six of the items made gains in comparison with March 1932, while the balance declined.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC.

It was possible to classify almost 99 percent of the cargo moving from the Pacific to the Atlantic during March 1933. Commodities which aggregated more than 5,000 tons during either the past month or March 1932, are listed below, showing the differences:

Commodity.	March 1932.	March 1933.	Difference.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Barley.....	11,168	23,753	+12,585
Beans.....	11,975	9,759	-2,216
Borax.....	7,183	8,501	+1,318
Canned goods (fish, fruit, vegetables, etc.).....	86,028	63,583	-22,445
Coffee.....	17,764	22,563	+4,799
Cold storage and refrigerated products	26,741	18,454	-8,287
Copra.....	5,553	14,930	+9,377
Flour.....	11,849	16,848	+4,999
Fruit, dried.....	31,590	19,863	-11,727
Fruit, fresh.....	26,496	29,724	+3,228
Lumber.....	143,908	137,579	-6,329
Metals, principally copper.....	29,409	33,117	+3,708
Nitrates.....	19,091	78,385	+54,294
Oats.....	10,370	18,192	+7,822
Oils, mineral.....	162,037	269,648	+107,611
Ores.....	65,566	8,751	-56,815
Paper.....	13,512	11,701	-1,811
Rice.....	3,260	2,117	-1,143
Sugar.....	171,636	201,434	+29,798
Wheat.....	159,241	253,382	+94,141
Wood pulp.....	9,827	10,722	+895
Wool.....	15,479	9,946	-5,533
Skins and hides.....	5,658	3,910	-1,748

* Does not include fresh fruit.

The above 23 commodity groups for March 1933, comprise almost 94 percent of the total cargo tonnage moving from the Pacific to the Atlantic. Thirteen of the items showed increases and the balance decreases in comparison with March 1932. Heavy increases were made in shipments of mineral oils, wheat, nitrates, and sugar.

(Continued on next page.)

Notice to Mariners.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 13, 1933.

No. 46.

Panama Canal, Pacific entrance, aids to navigation.—Gas buoy No. FB, on east prism line, south of Ferry Slip, Balboa Harbor, has been temporarily moved 300 feet south and 25 feet east of prism line, owing to dredging operations, effective April 12, 1933.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Two Weeks Ending April 15, 1933.

Name of vessel.	Line or charterer.	Arrived.	Departed.	Cargo—	
				Discharged.	Laded.
				<i>Tons.</i>	<i>Tons.</i>
Buenos Aires.....	Johnson Line.....	April 2	April 2	.....	87
Santa Monica.....	Panama Mail S. S. Co.....	April 4	April 6	14	1,292
Lochmonar.....	Royal Mail Lines, Ltd.....	April 5	April 5	.....	4
Sollund.....	Panama Mail S. S. Co.....	April 5	April 5	478	.....
Santa Cecilia.....	Grace Line.....	April 6	April 6	52	3
Gertrude Maersk.....	A. P. Moller.....	April 6	April 7	219	.....
Chaumont.....	U. S. Government.....	April 6	April 8	14	3
Chateau Thierry.....	U. S. Government.....	April 7	April 10	242	43
Point Gorda.....	McCormick S. S. Co.....	April 7	April 11	4,750	.....
Santa Elena.....	Panama Mail S. S. Co.....	April 8	April 9	161	9
Iocoma.....	International Petroleum Co.....	April 8	April 12	213	.....
Abraham Lincoln.....	Fred Olsen & Co.....	April 9	April 9	378	.....
Talamanca.....	United Fruit Co.....	April 9	April 9	240	78
Santa Paula.....	Panama Mail S. S. Co.....	April 10	April 10	59	.....
Santa Clara.....	Grace Line.....	April 12	April 12	97	.....
Santa Teresa.....	Grace Line.....	April 13	April 13	67	.....

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, March 1933.—Continued from page 515.

(Figures represent tons of 2,240 pounds.)

FROM—	NORTH AMERICA.						SOUTH AMERICA.						AUSTRALASIA.						ASIA.				Grand total.	Percent of total cargo.
	West coast of United States.	West coast of Canada.	West coast of Central America.	Balboa, C. Z. *	Hawaiian Islands.	Total, North America.	Chile.	Colombia.	Ecuador.	Petu.	West coast of South America. *	Total, South America.	Australia.	New Zealand.	Australasia. *	Philippine Islands.	China.	Japan.	Far East. *	Total, Asia.				
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports.	86,136	963	466	452	6,596	94,613	2,506	1,036	282	1,436	28	5,288	4,121	1,280		5,401	8,050	11,601	39,198	2,506	61,355	166,657	42.3	
South Atlantic ports	2,554					2,554											335	391	1,894	1,633	6,807	1,780	1.7	
Gulf ports	39,820	550				40,370							2,992	706		3,698	1,574	13,946	63,335	3,485	82,340	127,338	32.3	
Total, United States	128,510	1,513	466	452	7,516	138,457	2,506	1,036	282	1,436	28	5,288	7,113	1,986		9,099	9,959	25,938	104,427	6,244	147,948	300,792	76.3	
East coast of Canada	220					229							3,074	1,000		4,074			6,250		6,250	10,544	2.7	
East coast of Central America	192					508	7,278															7,786	2.0	
Cristobal, C. Z. *	277	5	2,589	42		2,913	839	1,353	647	497	891	4,257	26	3	3							7,173	1.8	
West Indies.	302	612		1		915	5,176					5,176			26			1				6,118	1.6	
Total, North America.	129,281	2,350	3,371	495	7,516	143,013	15,799	2,419	929	1,933	919	21,999	10,213	2,989		13,202	9,959	25,938	110,678	7,624	154,199	332,413	84.4	
EUROPE:																								
British Isles.	402,275	4,542				7,697	1,589	105	288	1,694		3,676				9,343						20,716	5.3	
Belgium.	5,206	84	236			5,526	888	319	44	211	588	2,050										7,576	1.9	
Denmark.												1,470										1,470	0.4	
France.	169	153	33			355	763			9		772										1,127	0.3	
Germany.	3,670	33	471	23		4,197	160	10	91	886	1,036	2,183										6,380	1.6	
Holland.	494	123	681			1,617	329	88	384			801										2,418	0.6	
Italy.	1,173	794	681			2,650	1,208		42			1,250										3,960	1.0	
Norway.	1,169	8	675	387		2,230	11	318	742	207		1,278										3,568	0.9	
Spain and Portugal.	126	750				876	13		78			91										367	0.2	
Sweden.	1,050	17	792			1,859	713	24	58	247		2,111										2,901	0.7	
Europe *	546		241			787					2,111	2,111										2,898	0.7	
Total, Europe.	13,998	5,715	7,671	410		27,794	5,674	2,246	1,311	3,753	3,735	16,724		9,343		9,343						53,861	13.7	
East coast of South America.	4,539	82				4,623						745					26	5	2,117		2,148	7,526	1.9	
Asia.	86			3		89																89		
Africa.	31					31																31		
Egypt.	4			3		7																7		
Grand total.	147,939	8,147	11,042	911	7,528	175,567	21,473	5,410	2,240	5,691	4,654	39,468	10,213	12,332		22,545	9,959	25,943	112,795	7,624	156,347	393,927	100.0	
Percent of total cargo:																								
March 1933.	37.6	2.1	2.8	0.2	1.9	44.6	5.4	1.4	0.6	1.4	1.2	10.0	2.6	3.1		5.7	2.5	6.6	28.7	1.9	39.7	100.0		
March 1932.	46.2	3.2	1.1	1.8	2.4	54.7	5.0	0.4	0.4	2.4	1.1	8.2	1.9	4.8	1.6	8.3	2.4	2.2	23.7	0.5	28.8	100.0		
March 1931.	47.8	3.1	1.6	1.5	2.0	56.0	6.1	1.2	0.8	1.9	1.1	11.1	0.8	9.4	2.0	12.2	2.3	4.5	11.9	2.0	20.7	100.0		

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, March 1933.
(Figures represent tons of 2,240 pounds.)

From—	NORTH AMERICA.										EUROPE.												Grand total.	Percent of total cargo.		
	UNITED STATES.					NORTH AMERICA.																				
	North Atlan- tic ports.	South Atlan- tic ports.	Gulf ports.	Total, United States.	East coast of Canada.	East coast of Cen- tral America.	Cristobal, C. Z. ²	West Indies.	Total, North America.	British Isles.	Belgium.	Denmark.	France.	Germany.	Holland.	Italy.	Norway.	Sweden.	Spain and Portugal.	Europe. ¹	Total, Europe.	East coast of South America.			Africa.	Asia.
NORTH AMERICA:																										
West coast of U. S.	340,461	3,101	73,725	417,287		270	7,173	6,359	431,089	51,596	2,644	3,141	21,175	16,413	9,729	372,151	8,085	75	11,733	126,482	4,288	810	404	563,073	41.9	
West coast Canada			608	608			91	3,595	4,294	190,035	14,255	3,595	8,424	16,825	1,013	10,825	5,507		47,568	299,047	3,364			306,705	22.8	
W. coast C. Amer.	179			179			6,518	543	7,240	4,103	40		3,069	4,239	144	4			1,661	607	13,927	9	10	21,186	1.6	
Balboa, C. Z.							312		312															312		
Hawaiian Islands.	47,833	295	1,891	50,019					50,019	235		43						36			314			50,333	3.7	
Total, N. A.	388,473	3,396	76,224	468,093		270	14,094	10,497	492,984	246,029	16,939	6,779	32,668	37,477	10,886	11,201	8,026	8,121	1,736	59,908	439,770	7,661	820	404	941,609	70.0
SOUTH AMERICA:																										
Chile.	4,500	2,950		7,450			1,151	1,210	9,811	6,394	2,281	25	15,759	4,767	3,510	3,405		2,600	142	66,954	105,807				115,618	8.6
Colombia.	2,846			2,846			4,713		7,559	11	48			69	23						151	300			8,010	0.6
Ecuador.	10,147			10,147			1,417		11,564		41			34							75				11,639	0.8
Peru.	2,755			2,755			199	10	19,772	42,017	4,170	200		944	20					6,611	53,962				73,734	5.5
W. coast S. Amer.	235			235			848		1,053					8	2						10				1,093	0.1
Total, S. A.	20,433	2,950		23,383			8,328	1,220	49,789	48,392	6,540	225	15,759	5,822	3,555	3,405		2,600	142	73,565	160,005	300			210,094	15.6
AUSTRALASIA:																										
Australia.	233			233	106		92		431	2,751											2,751				3,182	0.2
New Zealand.	2,009			2,009	211				2,220	24,760				3,660							24,760				26,980	2.0
Australasia.										6,469											7,548				17,677	1.3
Total, Aust. sia.	2,242			2,242	317		92		2,651	33,980			3,660								7,548				47,839	3.5
ASIA:																										
Philippine Islands.	111,002			16,025	127,027		2		127,029																127,029	9.5
China.	4,227	1,367		5,594			201	23	5,818																5,818	0.4
Japan.	9,136			9,136			250	62	9,448													31			9,479	0.7
Far East.	2,021			2,280			152		2,432																2,432	0.2
Total, Asia.	126,386	1,367	16,284	144,037			605	85	144,727													31			144,758	10.8
Grand total.	537,554	7,713	92,508	637,805	17,125	270	23,119	11,802	690,121	328,401	23,479	7,004	52,087	43,299	14,441	14,008	8,026	10,721	1,878	141,621	963,799	820	404	1,344	300,100	100.0
Percent, total cargo:																										
March 1933.	40.0	0.6	6.8	47.4	1.3		1.7	0.9	51.3	24.4	1.8	0.5	3.9	3.2	1.1	1.1	0.6	0.8	0.1	10.5	48.0	0.6	0.1		100.0	.....
March 1932.	53.0	0.7	3.0	56.7	0.5		1.5	1.0	53.7	18.7	1.4	0.3	5.1	2.0	1.5	0.2		3.1		8.3	39.6	0.7			100.0	.....
March 1931.	50.1	0.9	4.9	55.9	3.5		1.3	1.3	62.1	19.5	1.3	0.2	2.9	2.4	1.4	0.3		3.0		8.5	37.1	0.8			100.0	.....

¹ General cargo not routed so as to allow segregation between definite ports.

² Includes both local and transit cargo.

³ Included Norway and Sweden.

MOVEMENTS OF OCEAN VESSELS. Week ending at midnight, April 15, 1933.

THROUGH THE CANAL—ATLANTIC TO PACIFIC.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Abraham Lincoln	8	16.35	9	6.05	9	14.21	10	1.40	Norwegian.	435.0	56.0	19.5	Oslo, Norway.	General.	1,109	7,988	5,801
Covena	8	20.10	9	7.05	9	15.29	9	16.45	American.	253.4	43.7	22.0	New Orleans, La.	Lumber, rice.	2,704	2,816	1,783
S. A. Perkins	9	6.40	9	7.15	9	15.34	9	16.45	American.	380.5	53.1	23.0	Seattle, Wash.	General.	5,165	5,689	4,039
Santa Monica	6	14.15	9	9.10	9	17.38	9	17.48	American.	296.0	46.0	16.8	San Francisco, Cal.	General.	843	3,848	2,606
Atelhuquen	9	5.20	9	9.20	9	19.00	9	20.25	British.	471.2	62.0	19.3	Falmouth, England.	Ballast.	3,958	11,170	8,386
Port Hunter	9	1.40	9	10.35	9	20.02	9	20.02	British.	481.2	62.3	25.0	Dunedin, N. Z.	General.	3,958	11,170	8,386
Barbara Cates.	10	00.55	10	6.10	10	14.25	10	16.00	American.	409.5	64.2	23.0	Tacoma, Wash.	General.	4,034	6,604	4,852
Este	9	17.05	10	7.20	10	18.57	10	20.05	German.	495.0	63.0	23.7	Bremen, Germany.	General.	2,488	9,905	6,656
Puntarenas	10	6.30	10	9.20	10	20.40	10	20.25	Chilean.	376.0	51.7	8.6	Newcastle, Eng.	Ballast.	5,193	3,465	226
Nuevo Panama	9	18.15	10	11.15	10	18.50	10	20.05	Panamanian.	108.0	20.0	8.6	Cristobal, C. Z.	General.	110	226	101
Nordpol	10	9.48	10	12.00	10	21.40	10	22.47	Danish.	380.8	53.9	14.0	London, England.	Ballast.	6,252	4,558	252
Moravia	10	14.30	10	14.40	10	22.53	10	23.58	British.	385.0	52.0	20.0	Glasgow, Scotland.	General.	1,482	6,576	4,724
Ferbank	10	14.55	10	15.10	11	00.14	11	2.35	Norwegian.	382.7	53.4	24.11	Boston, Mass.	Scrap iron, rails.	7,154	6,112	4,265
Durazo	8	16.50	11	6.05	11	14.25	11	15.50	German.	227.0	34.0	13.8	Cristobal, C. Z.	General.	118	1,633	1,041
District of Columbia	11	3.55	11	7.05	11	15.50	11	17.10	American.	431.0	59.2	23.0	Pt. Arthur, Tex.	Fuel oil.	5,760	8,097	5,431
Fortdale	11	3.05	11	8.15	11	16.34	11	23.18	British.	600.0	63.0	24.0	Australia.	Ballast.	11,781	7,392	4,392
Steel Mariner	11	8.25	11	9.40	11	17.50	12	2.27	American.	424.2	56.2	15.0	Honolulu, T. H.	Ballast.	7,611	5,450	3,043
Swiftwag	11	11.50	11	11.55	11	20.00	11	21.40	American.	464.0	60.2	20.6	Los Angeles, Calif.	Ballast.	8,473	6,104	3,664
Wirral	11	11.00	11	12.45	11	21.40	11	23.10	British.	385.0	52.0	26.0	San Francisco, Calif.	General.	5,977	5,131	3,664
Iowan	11	14.10	11	14.40	11	22.45	11	23.59	American.	407.7	53.7	18.6	Seattle, Wash.	General.	2,208	7,070	5,018
Eagle, No. 58	6	13.30	12	8.05	12	16.57	12	18.15	American.	194.0	25.9	12.0	Washington, D. C.	Ballast.	.....	.....	.....
S-16	12	8.05	12	8.05	12	16.57	12	18.15	American.	231.0	21.1	.....	Cristobal, C. Z.	Ballast.	.....	.....	.....
Geo. W. McKnight	12	5.05	12	9.20	12	18.25	12	19.55	Danish.	519.0	70.0	20.9	Stettin, Germany.	Ballast.	.....	.....	.....
Taira	11	19.30	12	6.30	12	16.57	12	18.15	Panamanian.	64.2	20.0	.....	Cristobal, C. Z.	Ballast.	78	.....	49
Pire	11	19.30	12	6.30	12	16.57	12	18.15	Panamanian.	64.0	18.0	.....	Cristobal, C. Z.	Ballast.	32	.....	32
Real	11	17.30	12	8.35	12	18.57	12	18.57	Panamanian.	62.0	17.0	.....	Cristobal, C. Z.	Ballast.	46	.....	22
St. Jernegborg	13	1.15	13	6.25	13	14.23	13	15.40	Danish.	380.0	54.0	15.0	Manchester, Eng.	Ballast.	6,219	4,673	.....
Susan V. Luckenbach	13	4.30	13	7.15	13	15.24	13	16.30	American.	434.3	58.0	17.0	Boston, Mass.	General.	2,072	7,947	5,670
Villager	12	12.00	13	8.25	13	16.50	13	18.10	Norwegian.	398.0	54.7	15.6	Rotterdam, Holland.	Canned goods.	3,869	5,131	.....
Santa Teresa	13	1.05	13	11.00	13	18.07	14	1.03	American.	360.0	52.0	22.7	New York, N. Y.	General.	1,574	5,726	4,086
Kentuckian	13	16.50	13	15.00	13	22.55	14	20.27	American.	414.5	53.7	19.0	Portland, Ore.	General.	1,932	7,110	4,909
Entrance	13	7.30	13	10.13	13	18.05	13	20.00	Panamanian.	60.0	14.0	6.0	Boston, Mass.	Coconuts.	23	36	24
Santa Barbara	13	12.05	13	20.10	14	9.15	14	15.30	American.	465.0	64.0	24.0	New York, N. Y.	General.	2,352	10,687	6,630
President Polk	14	4.50	14	6.25	14	15.10	14	21.20	American.	502.0	62.0	26.0	New York, N. Y.	General.	2,628	12,660	9,254

L.L. Col. H. C.	THROUGH THE CANAL—PACIFIC TO ATLANTIC.									
	14	15	16	17	18	19	20	21	22	23
Shumun 6	0.25	15	6.30	14	8.48	15	15.50	15	98.0	22.0
Shohed Maru 2	0.25	15	6.10	15	16.32	15	15.50	15	345.0	17.6
Steelmaker	6.00	15	7.15	15	16.55	15	18.15	15	395.5	55.0
Tweedbank 2	6.05	15	8.25	15	17.59	15	19.24	15	426.7	57.4
California 2	7.45	15	9.35	15	18.25	15	20.10	15	445.0	59.8
Bodegraven	5.50	15	11.30	15	19.53	16	4.32	Dutch	400.0	58.0
Canadian	8.05	15	13.15	15	21.48	15	22.30	British	430.0	56.0
Cruiser	9.22	15	14.45	15	22.18	16	00.58	British	215.0	33.5
Salvador	12.45	15	16.10	15	23.57	16	00.58	French	470.0	61.0
Washington 2	13.50	15	15.55	16	1.04	16	2.21	Japanese	405.0	53.0
Bordeau Maru	13.50	15	15.55	16	1.04	16	2.21	Japanese	405.0	53.0

THROUGH THE CANAL—PACIFIC TO ATLANTIC.

L.L. Col. H. C.	THROUGH THE CANAL—PACIFIC TO ATLANTIC.									
	14	15	16	17	18	19	20	21	22	23
Anglo	8	20	05	9	4.45	9	13.20	9	426.0	58.0
Canadian 2	8	20	30	9	6.21	9	14.35	9	480.6	58.0
Eastern Sun	8	19	30	9	7.32	9	15.15	9	438.0	56.0
Kuruma Maru	9	3.25	9	8.33	9	16.50	9	16.50	409.8	54.2
Forbes Haupt-	9	3.30	9	9.50	9	18.10	9	18.10	464.4	61.2
Trondanger 2	9	8.45	9	10.07	9	18.15	10	11.15	108.5	20.6
Nuevo Panama	9	14.20	9	15.10	9	22.59	10	11.15	215.0	33.5
Salvador	9	17.30	10	1.25	10	22.59	10	11.15	395.5	52.5
Counselor	10	06.05	10	7.21	10	15.50	10	18.15	400.4	54.2
Victoria City	10	06.05	10	7.21	10	15.50	10	18.15	400.4	54.2
Kola Inten.	10	4.30	10	8.16	10	16.05	10	16.55	409.6	60.8
Montanan	9	20	10	9.45	10	18.15	10	18.15	404.6	53.9
Chateau	7	22	05	10	11.07	10	19.50	11	448.0	58.0
Thierry 2	10	13.30	10	14.45	10	21.40	10	21.40	415.6	55.6
Fresno City	10	10.20	10	15.38	10	23.30	11	14.10	484.4	72.2
San Paula	10	10.20	10	15.38	10	23.30	11	14.10	484.4	72.2
Gen. Wm. M.	10	15.55	10	17.53	11	8.30	11	13.05	156.0	32.0
Graham 6	10	15.55	10	17.53	11	8.30	11	13.05	410.2	53.6
Pennyworth	10	18.00	11	6.01	11	14.00	11	14.00	445.0	58.0
Horace Luck-	10	18.00	11	6.01	11	14.00	11	14.00	445.0	58.0
enbach	10	18.00	11	6.01	11	14.00	11	14.00	445.0	58.0
Julia Lucken-	11	00.04	11	7.25	11	15.20	11	15.20	436.6	57.2
bach	11	7.05	11	8.37	11	17.05	12	6.30	461.7	61.5
Kwango Maru	11	7.50	11	9.26	11	18.20	12	8.35	375.0	52.6
Silver 2	11	7.50	11	9.26	11	18.20	12	8.35	62.0	17.1
Real 2	11	7.50	11	9.26	11	18.20	12	8.35	64.0	20.0
Tura 2	11	3.00	11	10.27	11	19.25	12	6.30	64.0	18.0
Pirre 2	11	3.00	11	10.27	11	19.25	12	6.30	558.0	65.3
Indianaopolis	7	13.38	12	4.55	12	12.50	12	12.50	521.0	70.0
Peter Harli	11	14.05	12	6.22	12	14.40	12	14.40	315.0	30.0
Babbitt	7	13.38	12	7.25	12	15.05	12	15.05	421.2	54.5
Somersby	11	8.45	12	8.21	12	17.05	12	17.05	421.2	54.5

1 Motor ship.
 2 Motor schooner.
 3 Submarine.
 4 Tanker.
 5 General, coffee, canned goods.
 6 Patrol vessel.
 7 Motor schooner.
 8 Submarine.
 9 General, coffee, canned goods.
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MOVEMENTS OF OCEAN VESSELS.—Continued.

THROUGH THE CANAL—PACIFIC TO ATLANTIC.—Continued.

Ship.	Arrived at port.		Entered Canal.		Completed transit.		Nationality.	Line. (Charterer or operator.)	Length.	Beam.	Salt water draft.	From—	For—	Cargo.		Panama Canal tonnage.	
	Day.	Hour.	Day.	Hour.	Day.	Hour.								Nature.	Tons.	Gross.	Net.
Trevelyan.	11	20 15	12	9 45	12	17 40	British	Empire Shipping Co.	400.7	52.3	24.7	Vancouver, B. C.	St. Thomas, V. I.	Wheat.	7,480	5,835	4,100
Santa Clara.	12	5 45	12	10 46	12	18 55	American	Grace Line.	483.3	63.9	24.4	San Antonio, Chile.	New York, N. Y.	General.	3,998	11,688	7,456
Nassau Maru.	11	21 30	12	11 49	12	19 40	Japanese	Mitsui & Co.	361.4	50.0	23.4	Iloilo, P. I.	New York, N. Y.	Sugar, silks, gen.	5,270		
Carlier.	12	1 00	12	13 16	12	21 25	Belgium	Cie. Maritime Belge.	471.1	63.8	25.8	Vancouver, B. C.	London, England	General	10,440	9,264	7,044
Minnesota.	12	17 20	13	6 16	13	13 50	American	Amer.-Hawaiian Line.	407.7	59.7	24.6	Seattle, Wash.	Boston, Mass.	General	6,500		
Emergency Aid.	13	2 00	13	7 17	13	15 20	American	Pac.-Arg. Brazil Line.	400.7	52.4	18.9	Powell River, B. C.	Buenos Aires, Arg.	(¹)	4,663	6,334	4,812
Witram.	13	4 15	13	8 05	13	15 53	Germany	North German Lloyd.	403.1	58.0	24.2	Vancouver, B. C.	Bremen, Germany	General	7,319	7,819	5,661
Asuka Maru.	13	6 00	13	9 43	13	17 45	Japanese	Nippon Yusen Kaisha.	440.4	57.0	29.0	Manila, P. I.	New York, N. Y.	(¹)	8,582	8,138	5,400
Dinteldijk.	13	19 30	14	4 55	14	14 15	Dutch.	Holland-America Line.	485.6	62.9	29.6	Victoria, B. C.	Rotterdam, Holland	General	9,497	10,785	7,551
Sun.	14	4 20	14	6 04	14	14 30	American	Sun Oil Co.	480.5	66.0	30.0	Los Angeles, Calif.	Chester, Pa.	Gasoline.	13,740		
Granton.	14	7 55	14	9 00	14	17 10	British	R. Chapman & Son.	423.0	58.3	26.0	Vancouver, B. C.	Avonmouth, Eng.	Wheat.	9,497	6,823	4,827
Lightburne.	14	9 50	14	10 48	14	18 55	American	The Texas Co.	416.8	56.1	26.0	Los Angeles, Calif.	Baltimore, Md.	Gasoline.	8,431	6,931	4,933
Rockpool.	14	10 00	14	11 43	14	20 55	British	Anglo-Canada S. S. Co.	405.0	53.5	25.6	Bellingham, Wash.	Hull, England	Grain, lumber.	8,177	5,809	4,271
Fleisch.	14	10 00	14	13 32	14	22 15	Norwegian	Anglo-Saxon Pet. Co.	400.3	59.5	26.4	Los Angeles, Calif.	Lands End, Eng.	Gasoline	10,093	8,297	5,488
Benvorlich.	14	10 20	14	15 28	14	23 25	British	Ben Line, Ltd.	399.7	52.3	26.4	Vancouver, B. C.	Middlesbrough, Eng.	Lumber, general	7,746	5,770	4,073
S-48.	14	20 30	15	5 58	15	14 00	American	U. S. Navy.	231.0	20.0		Bahoa, C. Z.	Cristobal, C. Z.	General	949	1,572	1,011
Corlito.	14	22 45	15	6 11	15	14 15	German	Hamburg-American Line	227.6	34.4	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	8,210	10,334	7,048
Oregon.	14	22 45	15	7 20	15	15 05	French	French Line.	470.3	61.2	26.0	Vancouver, B. C.	Le Havre, France	General	10,434	7,555	5,049
El Alito.	15	6 32	15	8 39	15	16 35	British	Anglo-Ecuador. Oil Co.	440.8	57.5	28.0	La Libertad, Ecua.	Philadelphia, Pa.	Crude oil.	7,289	6,853	5,246
Branger.	15	10 40	15	11 35	15	20 55	Norwegian.	Interocean S. S. Corp.	398.0	54.7	27.0	Vancouver, B. C.	Rotterdam, Holland	General.	8,473	7,128	5,506
Sheaf Crown.	15	12 55	15	13 53	15	22 05	British	Canadian Transp. Co.	405.0	54.5	25.4	Vancouver, B. C.	London, England.	(²)			

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL.

* ARRIVALS.

* DEPARTURES.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
April 9	No. 9688 ¹⁷	Pan American Airways	San Salvador via waypts.	April 9	Santa Marta.	United Fruit Co.	New York via wayports.
April 9	No. 144-M ¹⁷	Pan American-Grace Airways	Talara via wayports.	April 9	Cristobal	Panama R. R. S. S. Line.	New York via Haiti.
April 10	Veragua.	United Fruit Co.	Port Limon, Costa Rica.	April 9	Colombia	Colombian Line	New York via wayports.
April 10	Magallanes	Spanish S. S. Line.	Barcelona via wayports.	April 10	No. 670-M ¹⁷	Pan American Airways	Baranquilla, Colombia.
April 10	No. 135-M ¹⁷	Urbina, Medellin & Cent. Airways	Medellin, Colombia.	April 10	Veragua.	United Fruit Co.	New York via wayports.
April 10	No. 670-M ¹⁷	Pan American Airways	Baranquilla, Colombia.	April 11	No. 18-V ¹⁷	Pan American-Grace Airways	Buenaventura, Colombia.
April 10	No. 9073 ¹⁷	Pan American Airways	Guatemala via wayports.	April 11	No. 9688 ¹⁷	Pan American Airways	San Salvador via waypts.
April 11	Contessa.	Standard Fruit & S. S. Co.	New Orleans via Habana.	April 11	Annetta I. ¹⁸	P. W. Hamilton	Colon, Rep. of Panama.
April 11	Annetta I. ¹⁸	P. W. Hamilton.	Colon, Rep. of Panama.	April 12	Contessa.	Standard Fruit & S. S. Co.	New Orleans via waypts.

PORT OF CRISTOBAL—Continued.

* ARRIVALS.				* DEPARTURES.			
Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
April 11.....	Inapaquina ¹⁸	A. Tagaropoulos.....	Colon, Rep. of Panama.	April 12.....	Inapaquina ¹⁸	A. Tagaropoulos.....	Colon, Rep. of Panama.
April 12.....	Cuba.....	French Line.....	Havre via wayports.	April 13.....	No. 145-M ¹⁷	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia.
April 12.....	H. M. Flagler.....	Standard Shipping Co.....	Aruba, D. W. I.	April 13.....	No. 9673 ¹⁷	Pan American Airways.....	Guatemala via wayp's.
April 12.....	No. 9685 ¹⁷	Pan American Airways.....	San Salvador via wayp's.	April 13.....	No. 670-M ¹⁷	Pan American Airways.....	Miami via wayports.
April 12.....	No. 22-V ¹⁷	Pan American-Grace Airways.....	Chiclayo via wayports.	April 13.....	Cuba.....	French Line.....	Havre via wayports.
April 13.....	Buenaventura.....	Panama R. R. S. S. Line.....	New York via Haiti.	April 13.....	H. M. Flagler.....	Standard Shipping Co.....	Aruba, D. W. I.
April 13.....	No. 660-M ¹⁷	Pan American Airways.....	Miami via wayports.	April 13.....	No. 22-V ¹⁷	Pan American-Grace Airways.....	Buenaventura, Colombia.
April 14.....	Eupatoria.....	Hamburg-American Line.....	Hamburg via wayports.	April 14.....	Eupatoria.....	Hamburg-American Line.....	Port Limon, Costa Rica.
April 14.....	Carrillo.....	United Fruit Co.....	New Orleans via Habana.	April 14.....	Quirigua.....	United Fruit Co.....	Port Limon, Costa Rica.
April 14.....	Quirigua.....	Royal Netherlands S. S. Co.....	New York via wayports.	April 14.....	Logician.....	T. & J. Harrison.....	New Orleans, La.
April 14.....	Colombia.....	T. & J. Harrison.....	Amsterdam via wayports.	April 15.....	No. 9685 ¹⁷	Pan American Airways.....	San Salvador via wayp'ts.
April 14.....	Logician.....	Uraba, Medellin & Cent. Airways.....	Liverpool via wayports.	April 15.....	No. 145-M ¹⁷	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia.
April 14.....	No. 145-M ¹⁷	Uraba, Medellin & Cent. Airways.....	Metallin, Colombia.	April 15.....	Magallanes.....	Spanish S. S. Line.....	New York via wayports.
April 14.....	Floreana ¹⁹	A. Tagaropoulos.....	Puerto Colombia, Colom.	April 15.....	Sixola.....	United Fruit Co.....	New York via wayports.
April 15.....	Haiti.....	United Fruit Co.....	New York via Kingston	April 15.....	Carrillo.....	United Fruit Co.....	New Orleans via wayp'ts.
April 15.....		Colombian Line.....	New York via wayports				

PORT OF BALBOA.

Date.	Vessel.	Line.	From—	Date.	Vessel.	Line.	For—
April 9.....	Talamanca.....	United Fruit Co.....	San Francisco, Calif.	April 9.....	Talamanca.....	United Fruit Co.....	San Francisco, Calif.
April 13.....	La Purisima.....	Union Oil Co. of Calif.....	Los Angeles, Calif.	April 11.....	Point Gorda.....	Swayne & Hoyt.....	San Francisco, Calif.
				April 13.....	Iocoma.....	International Petroleum Co.....	Talara, Peru.
				April 15.....	La Purisima.....	Union Oil Co. of Calif.....	Los Angeles, Calif.

¹ Tanker. ¹⁵ Motor ship. ¹⁶ Submarine ¹⁷ Air mail carrier. ¹⁸ Motor boat. ¹⁹ Motor schooner.
²⁰ Liquor, lumber, wheat. Other than ships passing through the Canal. ²¹ Paper, beans, rice, kerosene. ²² Sugar, tin, antimony, oil.

Traffic by Commodities for March 1933.

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of March in 1933, 1932, and 1931. Cargo statistics are compiled from cargo declaration submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Aircraft and parts.....			5	28
Agricultural implements.....	442	67	575	75
Alfalfa meal.....		741		741
Ammonium compounds.....	32	7	2,392	7
Animal foods.....	25	394	42	420
Apparel, wearing (hats, shoes, clothing, etc.).....	73	16	73	46
Asbestos.....	33		123	
Asphalt and tar.....	48		2,447	121
Automobiles (and autotricks).....	2,455	243	4,068	255
Automobile parts and accessories.....	876	50	2,618	61
Bags and bagging, textile.....	226		1,164	
Bananas.....				273
Barks, miscellaneous.....		15		276
Barley.....				23,753
Beans, edible, dry.....	135	6,278	158	9,759
Beer.....			10	2
Beverages, nonalcoholic.....	123		135	
Blood and tankage.....		27	202	27
Bones and bone meal.....			1,752	
Books and printed matter.....	18	41	174	41
Borax.....	47	673	109	8,501
Bran and pollards.....				4,638
Bricks and tile.....	15		125	
Camphor, crude.....				69
Canned and preserved goods:				
Fish.....	369	11,069	727	13,101
Fruit.....	794	19,601	799	33,859
Meat.....	57		513	226
Milk.....	31	396	229	722
Soup.....	2,817		2,845	75
Vegetables.....	1,215	2,223	1,275	2,249
Miscellaneous and unclassified.....	1,322	13,245	1,778	13,351
Carbon black.....	332		785	
Celite.....		472		591
Cement.....	176		6,077	
Chalk.....			764	
Charcoal.....	54		199	
Chemicals.....	3,014	1,285	5,931	1,824
Clay, china and fire.....	98		391	
Clay, filtering.....		112		112
Coal.....	906		6,039	
Cocoa and cacao beans.....	151	49	770	929
Coconuts and products.....	78	1,009	110	1,109
Coffee.....	128	50	2,305	22,563
Coke.....	452		1,650	
Cold storage and refrigerated products:				
Dairy products.....	25	45	157	7,676
Eggs.....		200		204
Fish.....	11		51	1,276
Lard.....	118		132	
Meats.....	22	28	54	8,756
Poultry.....	9	36	10	36
Vegetables.....			1	
Other and unclassified.....	51	127	61	506
Confectionery.....	1,094	263	1,100	263
Copra.....				14,930
Copra meal and cake.....				3,783
Corn.....	4,468		4,468	
Cotton, raw.....	158	836	32,461	2,479
Cresote.....	7,320		7,320	
Drugs and medicines.....	1,808	100	1,891	105

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Dyes			529	
Earthenware	101		128	255
Eggs, dried		36		36
Electrical apparatus and appliances	455	23	609	33
Explosives	69	12	306	90
Extract, quebracho			671	
Fertilizers	40		40	
Fish, salted or drycured	11	10	32	106
Fish meal				612
Floor coverings	542	333	572	754
Flour	254	8,773	1,649	16,848
Fruit, dried		11,570	19	19,863
Fruit, fresh		1,126	3	29,724
Furniture and household goods	759	80	702	81
Gallnuts				20
General	13,559	4,834	29,944	15,967
Glass and glassware	2,432	62	3,174	213
Glue	3		3	
Groceries	1,198	179	1,379	186
Guano				2,986
Gums		34		111
Hair, all kinds			2	7
Hay	41	253	41	261
Hemp, unmanufactured	27		41	658
Honey		36		193
Hops		89		89
Horns and hoofs			68	47
Infusorial earth		201		268
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.)	24,732	2,129	43,265	2,344
Ivory nuts				739
Jute, unmanufactured	25		60	265
Lard, substitute	165		165	
Liquors	72		1,100	
Lumber (including manufactured mill products)	966	95,705	1,470	137,579
Machinery	1,603	571	3,921	624
Malt			130	
Manufactured goods	3,242	1,323	5,519	1,630
Marble and granite	186		317	
Matches	265	97	313	173
Metals:				
Antimony			3	52
Copper	55	4,022	669	18,095
Gold and silver		40		60
Iron			118	
Lead	10	645	48	9,703
Scrap	424	84	35,230	318
Tin			23	2,634
Zinc	78		555	1,822
Other and unclassified	40	25	226	433
Milk, powdered	45	100	68	417
Molasses and syrups	450		452	
Nitrates	172		1,467	73,355
Nuts, edible (including meats)		115	37	139
Oats	66		324	18,192
Oils, mineral:				
Crude			13,020	57,700
Gas and fuel	16	64,227	16	79,927
Gasoline, benzine, and naphtha		113,746	7,673	121,906
Kerosene	6,290		15,255	8,301
Lubricating and greases	6,640	1,663	20,327	1,814
Oils, vegetable:				
Coconut			4	9,392
Cottonseed	757		797	23
Linseed	13		58	
Olive	36	12	1,075	12
Rapeseed				709
Wood		62		2,029
Other and unclassified	347		771	1,324
Oil, fish		1,441	31	2,343
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.)		281	126	301
Oilseed cake and meal	71		71	1,834
Ores:				
Antimony				31
Chrome				3,000
Copper			15	1,945
Gold and silver				6
Lead				600
Magnetite		311		311
Tin				468

* Except as otherwise classified.

Commodity.	United States intercoastal.		Total for all trade routes including U. S. intercoastal.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
Ores—Continued:				
Zinc.....				2,215
Other and unclassified.....				175
Paints and varnishes.....	558	18	856	23
Paper and paper products ¹	7,215	7,069	15,254	10,870
Paper scrap.....	202	831	1,419	831
Peanuts.....	678	57	678	57
Peas, dry.....	67	15	74	2,224
Peatmoss.....			114	
Phosphates.....	564	626	24,984	626
Plaster.....			42	
Porcelain ware.....	83	174	198	2,124
Potash.....		2,923	295	2,923
Pyrethrum flowers.....				108
Rags and waste.....	13	55	112	419
Railroad material.....	128		456	
Rice.....	505	221	2,371	2,117
Rope and twine.....	200	109	1,256	173
Rosin.....	324		2,474	
Rubber:				
Manufactured.....	618	23	821	23
Raw.....				34
Scrap.....		145	72	207
Salt.....	205		3,077	
Sand.....			1,230	
Seeds (except oilseeds).....	474	262	1,840	312
Shells, oyster.....	1,021		1,021	
Silk, raw.....		326	12	1,319
Skins and hides.....	5	1,780	73	3,910
Slag.....			2,400	
Slate.....	25		25	
Soaps and products.....	1,485	315	1,557	392
Soda and sodium compounds.....	742	85	1,495	85
Soy beans.....	140		186	
Sugar.....	36	15,567	3,526	201,434
Sulphur.....	6,962		8,027	663
Talc.....		252	5	252
Tallow.....		72	123	819
Tea.....	34	3	93	335
Textiles ²	3,807	149	6,734	736
Tinplate.....	2,116		8,591	
Tobacco and manufactures.....	1,215	49	5,800	90
Toilet preparations.....	199	5	209	5
Turpentine.....	110		122	28
Vegetables, dry ¹	14	441	23	1,017
Wall board.....	107		147	1,075
Wax, paraffin.....	568		2,678	
Wheat.....			110	253,382
Wines.....	50	296	125	818
Wood pulp.....	84	9,544	1,244	10,722
Wool.....	23	1,704	222	9,946
Total, March 1933.....	128,510	417,287	393,927	1,344,300
Total, March 1932.....	199,492	362,882	530,497	1,113,455
Total, March 1931.....	201,404	479,774	499,617	1,415,890

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Coal.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

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Volume XXVI.

Balboa Heights, C. Z., April 26, 1933.

No. 39.

Comparison of Canal Traffic in March 1933, with March Traffic in Previous Years

Commercial traffic through the Canal during the month of March 1933, showed an increase in comparison with March 1932, as follows: 36 transits, or 9.9 percent; 124,148 net tons (Panama Canal measurement), or 6.7 percent; and 94,275 in cargo tonnage, or 5.7 percent. In comparison with March 1931, it showed a decrease of 40 transits, or 9.1 percent; 222,890 net tons, or 10.1 percent; and 177,280 cargo tons, or 9.3 percent.

The peak month of March traffic since the opening of the Canal occurred in 1929, when 536 commercial vessels, aggregating 2,567,961 net tons (Panama Canal measurement), and carrying 2,743,768 long tons of cargo, were passed through. In comparison with these high figures last month's traffic was lower by 25.6 percent in transits, 22.5 percent in net tonnage (Panama Canal measurement), and 36.6 percent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of March each year from 1915 to 1933, inclusive, and, for comparison, the monthly averages for the corresponding fiscal year ending on June 30, following:

Calendar year	Month of March			Fiscal year	Average per month for fiscal year		
	Commer- cial transits	Panama Canal net tonnage	Tons of cargo		Commer- cial transits	Panama Canal net tonnage	Tons of cargo
1915	^a 137	475,984	607,276	1915	^a 102	361,197	465,567
1916	4	327	1	1916	63	199,687	257,843
1917	146	458,842	571,417	1917	150	483,213	588,213
1918	176	583,249	661,256	1918	172	547,839	627,669
1919	155	477,871	504,985	1919	169	510,416	576,385
1920	235	819,362	894,516	1920	206	712,170	781,208
1921	255	1,112,818	1,084,563	1921	241	951,323	966,601
1922	234	975,811	960,089	1922	228	951,455	907,075
1923	409	1,988,192	1,940,928	1923	331	1,550,482	1,630,656
1924	429	2,136,079	2,272,472	1924	436	2,179,073	2,249,559
1925	398	1,964,106	2,104,324	1925	389	1,904,596	1,996,570
1926	506	2,398,694	2,607,046	1926	433	2,064,549	2,169,787
1927	496	2,413,999	2,533,525	1927	456	2,185,651	2,312,351
1928	542	2,441,077	2,428,662	1928	538	2,454,886	2,469,226
1929	536	2,567,961	2,743,768	1929	534	2,468,483	2,555,250
1930	515	2,505,859	2,558,238	1930	515	2,498,385	2,502,519
1931	439	2,211,934	1,915,507	1931	461	2,316,012	2,090,233
1932	363	1,864,896	1,643,952	1932	376	1,968,785	1,650,667
1933	399	1,989,044	1,738,227	(^b)	376	1,910,879	1,480,947

^a Canal opened August 15, 1914.

^a Average for 10½ months.

^a Average for 9 months of fiscal year.

Publication of Notices and Circulars of Interest to Shipping

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

CANAL WORK IN MARCH 1933

The following is the report of the Governor to the Secretary of War, of Canal work in the month of March 1933.

BALBOA HEIGHTS, C. Z., April 18, 1933.

*The Honorable, the Secretary of War,
Washington, D. C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of March 1933:

TRANSITS AND TOLLS

During the month, 399 commercial vessels and 9 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 40 vessels belonging to the United States Army and Navy, and 4 transits of vessels solely for repairs, on which no tolls were collected, making a total of 452 transits for the month, or a daily average on all traffic of 14.58.

Tolls on the 399 commercial vessels amounted to \$1,718,908.41, and on the launches to \$99.15, a total of \$1,719,007.56, or a daily average on all traffic of \$55,451.86. In comparison with the previous month (February, 1933), commercial traffic for the past month made an increase of 31 transits, or 8.4 percent, and \$143,200.06 in tolls, or 9.1 percent. The daily averages on these features, however, were slightly lower than in February (2.1 percent and 1.5 percent, respectively). In comparison with March 1932, traffic for the past month made an increase of 36 transits, or 9.9 percent, and \$73,541.60 in tolls, or 4.5 percent.

In comparison with the first 9 months of the fiscal year 1932, commercial traffic this year shows a decrease of 1.6 percent in transits, 4.8 percent in net tonnage (Panama Canal measurement), 12.8 percent in cargo tonnage, and 6.5 percent in tolls collection; in comparison with the first 9 months of the fiscal year 1931, there was a decline of 20.2 percent in transits, 19.1 percent in net tonnage (Panama Canal measurement), 31.3 percent in cargo tonnage, and 21.5 percent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of March in the two preceding years and in 1933 are shown in the following tabulation:

	March 1931	March 1932	March 1933
Commercial vessels.....	439	363	399
Launches (under 20 tons measurement).....	12	6	9
Noncommercial vessels:			
United States Government.....	102	52	40
Panamanian Government.....	1		
For repairs.....	3		4
Total.....	557	421	452

In addition to the vessels listed above, Panama Canal equipment consisting of dredges, tugs, barges, etc., was passed through the locks as follows:

	North- bound	South- bound	Total
Gatun.....	10	9	19
Pedro Miguel.....	16	15	31
Miraflores.....	19	19	38
Total.....	45	43	88

COMMERCIAL TRAFFIC ¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, from the commercial traffic transiting the Canal each month from the beginning of the fiscal year 1933 to the end of March 1933, as compared with the same months in the previous year:

Month	No. of vessels		Panama Canal net tonnage		Tons of cargo		Tolls	
	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September..	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November...	376	388	2,001,745	2,035,796	1,577,523	1,581,509	1,762,036.19	1,756,865.84
December...	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
January....	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
February...	358	368	1,878,177	1,832,658	1,645,393	1,434,862	1,647,797.06	1,575,708.35
March.....	363	399	1,864,896	1,989,044	1,643,952	1,738,227	1,645,366.81	1,718,908.41
Total.....	3,443	3,388	18,061,619	17,197,913	15,282,919	13,328,521	15,846,547.93	14,818,853.46

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for March in the years 1931, 1932, and 1933, and comparison with the monthly averages for the calendar year 1932:

	March 1931	March 1932	March 1933	Average per month for calendar year 1932
Number of vessels.....	491	363	399	364
Panama Canal net tonnage.....	2,211,934	1,864,896	1,989,044	1,886,345
United States net tonnage.....	1,630,412	1,357,320	1,422,091	1,367,686
Registered gross tonnage.....	2,709,548	2,257,652	2,361,267	2,277,608
Registered net tonnage.....	1,640,107	1,367,660	1,440,031	1,381,155
Tolls.....	\$1,964,434.22	\$1,645,366.81	\$1,718,908.41	\$1,640,472.65
Tons of cargo carried.....	1,915,507	1,643,952	1,738,227	1,508,328

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and tons of cargo, are shown in the following statement, in comparative form, commercial vessels only.

	Average per day			Average per day for calendar year 1932
	March 1931	March 1932	March 1933	
Number of transits.....	14.16	11.71	12.87	11.93
Panama Canal net tonnage.....	71,353	60,158	64,163	61,847
Tolls.....	\$63,368.85	\$53,077.35	\$55,448.66	\$53,785.99
Tons of cargo.....	61,791	53,031	56,072	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of March in 1931, 1932, and 1933, and the average for the calendar year 1932 are shown in the following tabulation:

	Average per vessel			Average per vessel for calendar year 1932
	March 1931	March 1932	March 1933	
Panama Canal net tonnage.....	5,050	5,166	4,998	5,195
United States net tonnage.....	3,722	3,760	3,573	3,767
Registered gross tonnage.....	6,186	6,254	5,933	6,273
Registered net tonnage.....	3,745	3,788	3,618	3,804
Tolls.....	\$4,474.79	\$4,532.69	\$4,308.04	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,373	4,554	4,367	4,154
Tons of cargo (laden vessel only).....	5,163	5,252	5,097	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS

Sixteen nationalities were represented in the commercial traffic through the Canal in March 1933, in comparison with 15 in the previous month, and 14 in March 1932. Vessels of United States registry, with 149, led in the number of transits in the past month, while those flying the British flag, with 86, were second. Vessels of these two nationalities made up 58.9 percent of the total transits for the month. Transits of vessels of German, Norwegian, and Panamanian registry were next in numerical importance with 30 each. With respect to net tonnage (Panama Canal measurement), vessels of the United States, with 870,471 tons, made up 43.8 percent of the aggregate; British, with 473,538 tons, made up 23.8 percent; Norwegian, with 143,971 tons, 7.2 percent; Japanese, with 120,016 tons, 6.0 percent; and German, with 91,748 tons, made up 4.6 percent.

CARGO AND PRINCIPAL COMMODITIES

The total cargo through the Canal during the month of March 1933, was 1,738,227 tons, an increase of 94,275 tons, or 5.7 percent, in comparison with March 1932. Cargo from the Atlantic to the Pacific aggregated 393,927 tons, compared with 338,249 tons in the previous month, and 530,497 tons in March 1932. From the Pacific to the Atlantic cargo amounted to 1,344,300 tons, as compared with 1,096,613 tons in the previous month and 1,113,455 tons in March 1932. The combined cargo movement in March 1933, was 303,365 tons, or 21.1 percent higher than the tonnage passing through in the previous month.

From the Atlantic to the Pacific mineral oils comprised the leading commodity, with shipments totaling 56,291 tons, followed by manufactures of iron and steel with 43,265 tons, scrap metal with 35,230 tons, raw cotton with 32,461 tons, phosphates with 24,984 tons, and paper with 16,673 tons. Substantial increases occurred in shipments of scrap metal, mineral oils, phosphates, and creosote, while the balance of the above items declined in comparison with March 1932.

From the Pacific to the Atlantic, mineral oils, totaling 269,648 tons, formed the leading commodity, followed by wheat with 253,382 tons, sugar with 201,434 tons, lumber with 137,579 tons, nitrates with 73,385 tons, and canned goods with 63,583 tons. A heavy increase occurred in shipments of mineral oils and wheat, with smaller gains in nitrates and sugar. Lumber and canned goods declined in comparison with March 1932.

The gain in total cargo tonnage in March 1933, in comparison with March 1932, was due to the increase in the Pacific to Atlantic movement of 230,845 tons, or 20.7 percent, which was partially offset by a loss of 136,570 tons, or 25.7 percent, in the Atlantic to Pacific movement.

TOLLS

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.884 per net ton (Panama Canal measurement) and tolls on vessels in ballast averaged \$0.719 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of March 1933, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality	Tolls actually collected under present dual system	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage	Difference		Pro rata of tolls actually collected per Panama Canal net ton	
			Increase	Decrease	Laden	Ballast
Belgian.....	\$11,304.18	\$10,518.40		\$785.78	\$0.991	\$0.720
British.....	411,986.57	443,738.40	\$31,751.83		.898	.720
Chilean.....	4,085.00	4,167.00	82.00		.980	
Colombian.....	368.40	307.00		61.40	1.200	
Danish.....	38,922.65	44,900.00	5,977.35		.783	.720
Danzig.....	20,603.40	18,031.00		2,572.40	1.074	.720
Dutch.....	25,292.50	31,162.00	5,869.50		.812	
French.....	34,021.25	44,091.00	10,069.75		.766	
German.....	76,160.58	90,232.40	14,071.82		.835	.720
Italian.....	42,588.75	51,108.00	8,519.25		.833	
Japanese.....	125,400.40	120,016.00		5,384.40	1.045	
Norwegian.....	109,106.00	121,932.60	12,826.60		.786	.712
Panamanian.....	14,615.32	20,997.60	6,382.28		.692	.797
Swedish.....	21,815.35	26,739.00	4,923.65		.784	.720
United States.....	761,860.56	841,230.60	79,370.04		.889	.721
Yugoslav.....	20,777.50	21,560.00	782.50		.964	
Total.....	1,718,908.41	1,890,731.00	180,626.57	8,803.98	.884	.719
Net increase for all traffic.....			171,822.59			

* Includes \$1,075 collected on naval vessel at \$0.50 per ton displacement.

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$49,830.07
United States foreign trade.....	27,819.17
United States—Canal Zone trade.....	1,720.80
Total.....	79,370.04

RATIO OF CARGO TONNAGE TO NET TONNAGE

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in March 1933, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality	Atlantic to Pacific	Pacific to Atlantic	Total
Belgian.....		1.60	1.60
British.....	0.53	1.33	1.06
Chilean.....	.83		.83
Colombian.....		.98	.98
Danish.....	.56	1.43	1.14
Danzig.....		2.02	2.02
Dutch.....	.23	1.32	.71
French.....	.19	1.14	.70
German.....	.46	1.28	1.00
Italian.....	.22	.86	.59
Japanese.....	1.27	1.15	1.21
Norwegian.....	.76	1.53	1.26
Panamanian.....	.81	1.17	1.16
Swedish.....	.46	1.64	1.15
United States.....	.50	1.26	.91
Yugoslav.....		1.90	1.90
Average, March 1933.....	.55	1.30	1.00
Average, March 1932.....	.68	1.27	.99
Average, March 1931.....	.62	1.30	1.01

CLASSIFICATION OF VESSELS

A further classification of vessels passing through the Canal during the month of March 1933, is as follows:

Class	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Panama Canal net tonnage	Tolls	No. of ships	Panama Canal net tonnage	Tolls
Cargo-carrying ships:						
Tank ships—						
Ballast.....	22	138,030	\$99,381.60			
Laden.....	5	25,454	26,703.75	24	137,794	141,886.25
All others—						
Ballast.....	27	106,665	76,397.08	2	1,618	1,164.96
Laden.....	131	684,406	593,306.70	181	892,920	777,388.25
Noncargo-carrying ships:						
Yachts.....	1	239	197.25	5	1,918	1,407.57
Naval.....	1		1,075.00			
Total.....	187	954,794	797,061.38	212	1,034,250	921,847.03
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	116	612,030	530,400.69	146	733,621	666,656.21
Motor.....	58	342,151	265,026.57	51	298,160	253,104.80
Motor schooner.....	11	374	361.87	10	551	678.45
Other craft (yachts, naval, etc.).....						
Miscellaneous.....	2	239	1,272.25	5	1,918	1,407.57
Total.....	187	954,794	797,061.38	212	1,034,250	921,847.03

Of the steam driven vessels, 174 were oil burning, 84 coal burning, and 4 burned either oil or coal.

NONCOMMERCIAL VESSELS

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of March 1933. If tolls had been

assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Tonnage	Tolls	No. of ships	Tonnage	Tolls
U. S. Naval vessels:						
Cruisers.....	1	10,000	\$5,000.00	1	7,050	\$3,525.00
Cranes.....	2	20	15.00			
Destroyers.....	1	1,211	605.50			
Mine sweepers.....	4	3,800	1,900.00	4	3,800	1,900.00
Submarines.....	7	6,243	3,121.50	4	4,188	2,094.00
Tankers.....	1	5,278	3,800.16	1	5,035	6,293.75
Transports.....				1	3,908	4,885.00
U. S. Army vessels:						
Launches.....	5	50	37.50			
Mine planters.....	4	4,832	2,416.00			
Transports.....	1	16,192	20,240.00	2	10,076	12,595.00
Tugs.....	1	92	115.00			
Total, U. S. Government.....	27		37,250.66	13		31,292.75
Vessels for repairs:						
General cargo.....	1	698	502.56	1	698	502.56
Tankers.....	1	1,842	1,381.50	1	1,842	1,381.50
Grand total.....	29		39,134.72	15		33,176.81

* Indicates displacement tonnage. * Indicates Panama Canal net tonnage. * Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of March 1933, carried cargo as follows: Atlantic to Pacific, 1,844 tons; Pacific to Atlantic, 11,583 tons; total, 13,427 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of March 1933. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	No. of transits	Panama Canal net tonnage	Tolls	Tons of cargo
Atlantic to Pacific.....	4	41	\$47.85	20
Pacific to Atlantic.....	5	57	51.30	20
Total.....	9	98	99.15	40

STATEMENT OF TERMINAL OPERATIONS

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of March 1933, are shown in the following tabulation:

	Cristobal	Balboa	Total
Local cargo arriving..... tons	58,712	29,514	88,226
Local cargo shipped..... tons	4,217	356	4,573
Cargo received for transshipment..... tons	28,941	530	29,471
Cargo transhipped..... tons	28,716	420	29,136
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	110	40	150
Number of releases issued.....	892	203	1,095
Tons received.....	512	180	692
Tons withdrawn.....	522	214	736
Packages received.....	7,717	3,429	11,146
Packages withdrawn.....	8,219	2,985	11,204
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	30		30
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons	4,904		4,904
Coal issued, miscellaneous:			
Panama Canal departments..... tons	132	7	139
U. S. Army, including vessels..... tons	24	1	25
Individuals and companies..... tons	80		80
Transferred to Navy..... tons	8		8
Total sales and issues..... tons	5,148	8	5,156

		Cristobal	Balboa	Total
Coal on hand, March 1, 1933.....	tons..	18,735		18,735
Coal on hand, April 1, 1933.....	tons..	13,587		13,587
Coal received from Navy.....	tons..		8	8
Fuel oil issued from Panama Canal tanks:				
Panama Canal departments.....	bbls..	3,544.89	10,495.50	14,040.39
Panama Railroad Company.....	bbls..	17,715.03	529.90	18,244.93
U. S. Army and Navy.....	bbls..	565.50	755.80	1,321.30
Individuals and companies.....	bbls..		33.00	33.00
Total sales and issues.....	bbls..	21,825.42	11,814.20	33,639.62
Fuel oil on hand, April 1, 1933.....	bbls..	54,187.47	63,219.63	117,407.10
Diesel oil issued during March 1933.....	bbls..	210.21	1,033.66	1,243.87
Diesel oil on hand, April 1, 1933.....	bbls..	3,813.35	6,647.55	10,460.90
Miscellaneous transfers.....	bbls..		8,250.14	8,250.14
Gasoline and kerosene pumped for The Panama Canal.....	bbls..	3,004.93	11,995.99	15,000.92
Gasoline pumped for individuals and companies.....	bbls..	1,581.65	10,895.67	12,477.32
Oil pumped for individuals and companies:				
Receipts.....	bbls..	222,255.95	107,021.66	329,277.61
Issues.....	bbls..	156,874.93	65,413.04	222,287.97
Oil pumped for U. S. Navy.....	bbls..	54,033.60	12,422.00	66,455.60
Total fuel oil, gasoline, and kerosene handled.....	bbls..	459,786.69	228,846.36	688,633.05
Admeasurement of vessels:				
U. S. equivalent certificates issued.....		10	5	15
Measured for Panama Canal net tonnage.....		3	1	4
Remeasured for Panama Canal net tonnage.....		9	10	19
Panama Canal net tonnage corrected.....		1	3	4
U. S. equivalent tonnage corrected.....		6	11	17
Services of harbor equipment:				
Tugs, total operating hours.....		265½	127½	399½
Launches, total operating hours.....		932½	1,068	2,000½
Revenue from tug service, pilotage, etc.:				
Tug revenue.....		\$9,301.25	\$4,007.50	\$13,308.75
Pilotage.....		11,859.00	5,883.00	17,742.00
Seamen.....		8,302.00	9,488.00	17,790.00
Launch service.....		1,541.00	1,949.00	3,490.00
Wharfage.....			3,748.12	3,748.12
Ships measured.....		60.00		60.00
Miscellaneous.....		357.65	113.14	470.79
Clearances issued.....		267	184	451
Bills of health issued.....		276	184	460

ALL VESSELS ENTERING AND CLEARING PORT

	Port of Cristobal			Port of Balboa		
	No. of ships	Registered gross tonnage	Registered net tonnage	No. of ships	Registered gross tonnage	Registered net tonnage
<i>Ships entering</i>						
All vessels, including those transiting Canal.....	446	3,028,775	1,819,195	405	2,475,466	1,513,544
Vessels entering port but not transiting Canal.....	66	546,696	301,973	10	39,728	20,825
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	111	821,347	482,196	95	678,063	405,140
<i>Ships clearing</i>						
All vessels, including those transiting Canal.....	446	3,034,517	1,822,287	402	2,485,956	1,521,638
Vessels clearing port but not transiting Canal.....	64	544,537	300,670	9	39,683	20,796
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	112	830,678	487,567	95	678,063	405,140

MOVEMENT OF PASSENGERS

	At Cristobal			At Balboa			Total		
	First-class	Others	Total	First-class	Others	Total	First-class	Others	Total
Disembarking:									
Form Atlantic ports....	595	548	1,143	94	364	458	689	912	1,601
From Pacific ports.....	125	50	175	143	130	273	268	180	448
Total disembarking.....	720	598	1,318	237	494	731	957	1,092	2,049

	At Cristobal			At Balboa			Total		
	First-class	Others	Total	First-class	Others	Total	First-class	Others	Total
Embarking:									
For Atlantic ports.....	725	625	1,350	93	446	539	818	1,071	1,889
For Pacific ports.....	105	100	205	231	160	391	336	260	596
Total embarking.....	830	725	1,555	324	606	930	1,154	1,331	2,485
Remaining on board:									
From Atlantic to Pacific ports.....	1,084	1,249	2,333				1,084	1,249	2,333
From Pacific to Atlantic ports.....				1,368	1,460	2,828	1,368	1,460	2,828
From Atlantic to Atlantic ports.....	3,486	239	3,725				3,486	239	3,725
From Pacific to Pacific ports.....				22	63	85	22	63	85
Total remaining on board.....	4,570	1,488	6,058	1,390	1,523	2,913	5,960	3,011	8,971
Total arriving on Canal Zone.....	5,290	2,086	7,376	1,627	2,017	3,644	6,917	4,103	11,020
Total departing from Canal Zone.....	5,400	2,213	7,613	1,714	2,129	3,843	7,114	4,342	11,456

NOTE.—In passengers "remaining on board" those from the Atlantic to the Pacific and Pacific to the Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL

	Total commercial vessels	Passenger-carrying vessels	Percent of total transits	Number of passengers carried
Atlantic to Pacific.....	187	64	34.2	2,996
Pacific to Atlantic.....	212	62	29.2	3,542
Total.....	399	126	31.6	6,538

In addition to the aforesaid, 56 passenger-carrying vessels called at the port of Cristobal and 4 at the port of Balboa without transiting the Canal, making a total of 186 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING

During the month of March 1933, 46 commercial airplanes entered and cleared at Cristobal, and 1 entered and cleared at Balboa. A total of 110 passengers (67 from the north and 43 from the south) disembarked from the planes landing at Cristobal, and 94 passengers (62 for the north and 32 for the south) embarked. Three passengers (from the south) were reported as disembarking from the plane landing at Balboa.

COMMISSARY SALES TO VESSELS

The following is a statement of commissary sales to vessels during the month of March 1933, together with the total sales in the corresponding month in 1932 and 1931:

	Ice	Groceries	Cold storage	Laundry	Miscellaneous	Total
Sales at Cristobal to:						
Commercial vessels.....	\$785.06	\$3,632.04	\$9,959.46	\$17.78	\$2,027.90	\$16,422.24
Government vessels.....	111.20	1,377.56	2,416.47		248.87	4,154.10
P. R. R. vessels.....		204.80	16.04	355.95	4.11	580.90
Total sales, March 1933.....	896.26	5,214.40	12,391.97	373.73	2,280.88	21,157.24
Total sales, March 1932.....	938.80	6,754.07	14,877.37	525.92	3,950.92	27,047.08
Total sales, March 1931.....	2,533.50	12,901.59	37,012.99	681.97	9,580.46	62,710.51
Sales at Balboa to:						
Commercial vessels.....	265.34	2,204.12	4,135.96	449.48	1,592.66	8,647.56
Government vessels.....	413.40	2,883.32	17,390.78	939.75	1,144.55	22,771.80
Total sales, March 1933.....	678.74	5,087.44	21,526.74	1,389.23	2,737.21	31,419.36
Total sales, March 1932.....	660.30	7,241.00	28,859.31	571.69	6,289.80	43,652.10
Total sales, March 1931.....	3,435.61	14,485.30	90,634.13	3,159.66	34,507.02	146,221.72

The aggregate sales to commercial vessels during the month were \$25,069.80; to Government vessels, \$26,925.90; and Panama Railroad vessels, \$580.90, making a total sales to all vessels, \$52,576.60. The figures are subject to minor changes on final audit.

LOCK OPERATIONS

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of March 1933, as compared with the corresponding month in 1932 and 1931:

Locks	Number of lockages						Comparative grand totals		
	Commercial			Noncommercial ¹			March 1931	March 1932	March 1933
	North	South	Total	North	South	Total			
Gatun.....	197	168	365	11	10	21	474	371	386
Pedro Miguel.....	196	170	366	16	20	36	501	397	402
Miraflores.....	196	165	361	17	18	35	495	393	396
Number of vessels put through locks									
Gatun.....	212	187	399	39	44	83	597	437	482
Pedro Miguel.....	212	188	400	38	41	79	592	473	479
Miraflores.....	212	188	400	41	46	87	593	469	487

¹ Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS

	Gatun	Pedro Miguel	Miraflores
Army and Navy vessels.....	49	39	38
Panama Canal equipment.....	19	31	38
Launches under 20 tons measurement.....	11	5	7
Panama Government vessels.....	4	4	4

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in March 1933, as compared with the preceding month and the corresponding month in 1932:

	Gatun	Pedro Miguel	Miraflores
Lockages.....	<i>Cubic feet</i> 1,539,530,000	<i>Cubic feet</i> 1,145,890,000	<i>Cubic feet</i> 1,308,080,000
Leakage.....	30,000,000	150,000,000	30,000,000
Maintenance.....	3,670,000		11,440,000
Total, March 1933.....	1,573,200,000	1,295,890,000	1,349,520,000
Total, February 1933.....	1,547,990,000	1,183,030,000	1,179,550,000
Total, March 1932.....	1,500,020,000	1,191,600,000	1,200,750,000

HYDROGRAPHY

The hydrographic conditions in the Canal Zone and vicinity during the month of March 1933, are shown in comparative form in the following tabulation:

	March		March—Years of record		
	1932	1933	Maximum	Minimum	Mean
	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>	<i>C. f. s.</i>
Discharge of Chagres River at Alhajuela.....	622	788	1,625	382	728
Maximum momentary discharge for the month.....	784	4,380	22,500		
Gatun Lake watershed, total yield.....	784	970	1,792		1,079
Gatun Lake watershed, net yield.....	-157	85	823	-402	116
Draft on Gatun Lake for lockages and power.....	2,529	2,660			2,246

¹ March 23-24, 1886. ² 10-year mean, 1921-1930, inclusive.

³ One unit of Miraflores Diesel power plant in operation, 15th to 31st, inclusive.

The monthly mean discharge of the Chagres River at Alhajuela for March 1933, was 788 c. f. s., which is 8 percent above 32-year mean of 728 c. f. s. The maximum monthly mean discharge on record for March is 1,625 c. f. s. in 1910, and the minimum is 382 c. f. s. in 1912. The maximum momentary discharge for the month was 4,380 c. f. s. at elevation 94.70 feet on the 28th, and the minimum was 550 c. f. s. at elevation 91.89 feet on the 24th. The maximum momentary discharge on record for March is 22,500 c. f. s. at elevation 101.45 feet on March 23-24, 1886, and the

minimum is 303 c. f. s. at elevation 91.21 feet on March 31, 1926. There were no rises of 5 feet or more during the month.

Gatun Lake varied in elevation during March from a maximum of 85.16 feet on the 1st to a minimum of 83.55 feet on the 31st. The total yield of the Gatun Lake watershed for the month was 970 c. f. s., which is 10 percent below the 20-year March average of 1,079 c. f. s. The maximum total yield on record for March is 1,792 c. f. s. in 1915, and the minimum is 493 c. f. s. in 1926.

Miraflores Lake varied between elevations 54.33 feet on the 7th and 9th and 53.10 feet on the 6th, averaged 53.70 feet, and ended the month at elevation 53.50 feet.

SEISMOLOGY

Seven seismic disturbances were recorded during the month—on the 1st, 2d, 3d (two), 12th, 18th, and 28th. The disturbance of the 12th was felt by a few local residents. The Long Beach, Calif., heavy quakes were not registered here.

ELECTRICAL DIVISION

The gross generator output of the Gatun hydroelectric station for the month was 5,981,000 kilowatt hours, and the computed water consumption was 4,436,806,670 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross output of 934,300 kilowatt hours, and the fuel oil consumption was 1,861.46 barrels. From 7:32 a.m. on March 15, to 3:00 p.m., on April 6, one Diesel unit was on the bus carrying approximately a 2,400 kilowatt load, primarily for miscellaneous maintenance work on the generators at the Gatun hydroelectric station. In addition, one Diesel unit was on the bus seven times for short periods due to overload, including four times for drydock pump operations.

In connection with the laying of armored cable from existing telephone station at Salamanca to the new stations on the Boqueron and Pequeñi rivers to provide telephone service and circuits for river level recording equipment, camp site was cleared and camp was moved to Mono Conga from Salamanca. A trench was opened during the month in the Salamanca district, 12,000 feet of 8-conductor cable were spliced and laid, and the trench was backfilled.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 23 vessels during the month. There were 267 work orders issued during the month, as compared with 223 issued during the previous month.

MECHANICAL DIVISION

Marine work at the Cristobal and Balboa shops during the month of March 1933, is summarized as follows:

	Ships repaired (including those in drydock)		
	Remaining from previous month	Entered during month	Completed during month
At Cristobal:			
Commercial.....	2	16	18
United States Army and Navy.....	2	6	8
Other departments, U. S. Government.....	1	1	1
At Balboa:			
Commercial.....	2	6	7
United States Army and Navy.....	2	9	6
Panama Canal equipment.....	3	6	7
Total.....	11	44	47
Ships in drydock			
At Cristobal:			
None (drydock under repairs).....			
At Balboa:			
Commercial.....		2	2
United States Army and Navy.....		2	
Panama Canal equipment.....	2	2	3
Total.....	2	6	5

Work on the general overhaul of the Marine Division's tug *Gorgona* was completed during the month. Repairs on the U.S.S. *Memphis* and U.S.S. *Sturtevant* were carried forward.

MUNICIPAL ENGINEERING DIVISION

At the Cristobal drydock, which is being reconstructed, there were excavated 8,900 cubic yards of rock and 500 cubic yards of earth from dock, making the total excavation to date 21,243 cubic yards. Forms were constructed and steel reinforcing placed

in dock walls and floor; a total of 1,021 cubic yards of concrete was placed in this project. In connection with the grading and relocation of Gaillard Highway over Paraiso Hill, 2,911 cubic yards of fill were excavated and placed, 500 feet of roadside drain were constructed, 3,126 cubic yards of earth were excavated and placed in swampy area at foot of hill, and forms for concrete box culvert were constructed.

Work on a number of other improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 839,702,750 gallons.

DREDGING DIVISION

The movement of West Culebra slide on the 450-foot base line showed an average of 2.7 feet toward the Canal between stations 1773 plus 00 and 1794 plus 00 W., and one foot southward between stations 1773 plus 00 and 1776 plus 00 W. The reference points on this slide showed no movement during the month. Dredging equipment worked $3\frac{1}{2}$ days in this slide between stations 1773 plus 00 and 1785 plus 50 W., removing a total of 15,250 cubic yards, of which 9,150 cubic yards were rock and 6,100 cubic yards earth. The total excavation to date from West Culebra slide is 10,641,600 cubic yards.

There was no observed movement on any of the reference points on East Culebra slide during the month. Dredging equipment worked 14 days in this slide between stations 1770 plus 00 and 1781 plus 75 E., removing a total of 51,050 cubic yards of which 25,000 cubic yards were rock and 26,050 cubic yards earth. The total excavation to date from East Culebra slide, excluding East Culebra slide extension, is 20,513,200 cubic yards.

East Culebra slide extension showed no movement during the month. Drag surveys were made periodically. Dredging equipment worked $6\frac{1}{2}$ days in this slide between stations 1760 plus 25 and 1770 plus 00 E., removing a total of 18,000 cubic yards of which 8,900 cubic yards were earth and clay sluiced by the grader and 9,100 cubic yards were rock. The total excavation to date from this slide is 1,252,000 cubic yards.

There was no movement shown on any of the other slides during the month. There was no interference with shipping on account of slides during the month.

The total excavation during March 1933, was 718,400 cubic yards, as follows:

	Wet excavation		
	Earth	Rock	Total
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
West Culebra slide.....	6,100	9,150	15,250
East Culebra slide.....	26,050	25,000	51,050
East Culebra slide extension.....	8,900	9,100	18,000
Project No. 9.....		23,200	23,200
Canal prism, Pacific entrance—			
Project No. 1.....		20,600	20,600
Project No. 1-B.....	25,100	21,400	46,500
Maintenance.....	542,800		542,800
Plant excavation:			
Dredging sand at Chame.....	1,000		1,000
Total.....	609,950	108,450	718,400

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 31 days during the month. A total of 1,574 single trips were made, and 816 Panama Canal, 595 U. S. Army, and 14,174 other vehicles, a total of 15,585, were ferried across the Canal.

MADDEN DAM DIVISION

The average working force for both the Government and the contractor for March 1933, was 353 gold and 1,447 silver employees.

In the work on the main dam and power plant, excavation was carried on in blocks 4 to 10, inclusive; also the apron area downstream from these blocks, and the section for the upstream clay blanket. At the end of the month practically all common excavation and about 80 percent of the rock excavation for the dam were finished. Final excavation was made for blocks 8, 9, 10, and 11-C-R. The downstream cutoff trench was partially completed through blocks 8 to 11, and the cutoff trenches at the upstream edge of the clay blanket were finished.

Concrete placing was resumed on the 20th in block No. 11. The concrete plant is not working at full capacity, due largely to the lack of places to pour. There should, however, be no difficulty on this score in the future.

On the 25th, work was started on the construction of the clay blanket upstream from dam. A concrete cutoff was constructed, where necessary, under the upstream

area of the blanket, and 11,895 cubic yards of material from borrow pit CR-2 were placed in the blanket.

The present river diversion program is considered complete. Work during the month consisted of placing additional fill on top of the upstream cofferdam, and efforts to stop leakage. A 4-foot rise of the river about doubled the amount of water going through the cofferdams.

Work on the left ridge dam was continued throughout the month, special attention being given to the northerly half of the dam. During the month 20,435 cubic yards of earth embankment and 30,398 cubic yards of rock fill were placed. On saddle dam No. 8 there were placed 45,092 cubic yards of earth embankment, 7,678 cubic yards of rock fill, 2,910 cubic yards of gravel blanket, and 6,410 cubic yards of riprap. The earth embankment is now somewhat above the top of the concrete cutoff wall at elevation 265.

OCCUPANTS OF QUARTERS

The number of persons, including men, women, and children, occupying Panama Canal quarters on March 31, 1933, was 24,209, composed of 8,244 Americans, 2,882 of whom were men, 2,643 women, and 2,719 children; 156 Europeans, 70 of whom were men, 19 women, and 67 children; and 15,809 West Indians, 4,299 of whom were men, 2,831 women, and 8,679 children. The total number of persons in quarters on March 31, 1932, was 24,417.

WORKING FORCE

The following tabulation shows the number of gold and silver employees as of March 15, 1933, with a comparison of the working force for the preceding month and for March 1932:

	Total employees		As of March 15, 1933		
	March 1932	February 1933	Gold	Silver	Total
Operation and Maintenance:					
Office	103	121	55	58	113
Electrical	444	396	146	262	408
Municipal Engineering	1,064	1,319	107	1,202	1,309
Lock Operation	925	1,577	314	1,468	1,782
Dredging	1,031	963	163	819	982
Madden Dam	259	190	57	138	195
Mechanical	1,204	1,132	382	720	1,102
Marine	704	694	176	446	622
Fortifications	165	98	12	111	123
Total	5,899	6,490	1,412	5,224	6,636
Supply Department:					
Quartermaster	1,616	1,676	187	1,464	1,651
Commissary	1,499	1,453	223	1,234	1,457
Cattle Industry—Plantations	102	100	2	98	100
Hotel Tivoli	109	99	7	93	100
Hotel Washington	91	85	7	82	89
Transportation	299	304	80	222	302
Total	3,716	3,717	506	3,193	3,699
Accounting Department	199	194	189	5	194
Health Department	1,097	1,126	278	835	1,113
Executive Department	927	928	563	360	923
Total	2,223	2,248	1,030	1,200	2,230
Panama Railroad Company:					
General Manager	103	69	23	60	83
Transportation	337	317	72	246	318
Receiving and Forwarding Agency	858	708	83	615	698
Coaling Stations	121				
Total	1,419	1,094	178	921	1,099
Grand total, March 1932	13,257				
Grand total, February 1933		13,549			
Grand total, March 1933			3,126	10,538	13,664

Additions to the gold force on the Isthmus in March 1933, were as follows: Employed in the United States, 1; reemployed in the United States, 1; employed on the Isthmus, 2; reemployed on the Isthmus, 2; total, 6. Separations from the gold force totaled 17, as follows: Resigned, 6; discharged, 6; retired, 3; died, 2. At the end of the month there on file 915 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 463 and separations from service, 449; the number seeking employment was estimated at approximately 2,000.

VITAL STATISTICS

A total of 152 deaths occurred during the month of March 1933, among the population of the Canal Zone (42,070) and the cities of Panama (79,000) and Colon (30,000), total population of 151,070, which is equivalent to an annual death rate of 12.07 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 22; pneumonia (broncho and lobar), 18; diarrhea and enteritis, 18; nephritis (acute and chronic), 13; cancer, 9; organic diseases of the heart, 6. There were 4 deaths from syphilis, and one each from measles and leprosy. There were 41 deaths among nonresidents, which are not included in the above statistics.

There were 328 live births and 17 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 27.40. Deaths among children under one year of age numbered 36, giving an infant mortality rate, based on the number of live births reported, of 109.76.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 85, of whom 25 were employees (4 white and 21 colored), 11 were members of employees' families (1 white and 10 colored), 9 were employees of the Madden Dam contractor (all colored), 3 were Canal Zone agriculturists, 15 were other civilian nonemployees, and 22 were Army and Navy personnel. Of the 36 employees and members of employees' families, 26 were probably infected outside our sanitized areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There was one death from malaria among residents, that of a colored boy of 10 years, a resident of Colon, who was infected while on a visit to Santa Rosa, Republic of Panama, as were three other members of the same family.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$253,441.81, of which \$234,238.70 was for the Department of Operation and Maintenance, and \$19,203.11 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$37,384.48.

FINANCIAL STATEMENT

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of February 1933, as compared with February 1932, with the figures for the first eight months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of March at the time of writing this report, since all charges, etc., involved in the accounting have not been completed:

	February 1932	February 1933	Fiscal year	
			Last year	This year
Tolls.....	\$1,646,597.22	\$1,575,764.90	\$14,200,184.04	\$13,100,172.03
Other receipts.....	284,706.61	243,371.25	2,167,616.44	1,998,363.71
Total transit revenues.....	1,931,303.83	1,819,136.15	16,367,800.48	15,098,535.74
Total transit expenses.....	1,001,155.89	1,155,895.37	8,360,536.19	7,692,765.59
Net transit revenues.....	930,147.94	663,240.58	8,007,264.29	7,405,770.15
3% fixed capital charge.....	1,266,478.26	1,272,757.12	10,106,205.66	10,157,479.27
Surplus or (deficit).....	(336,330.32)	(609,516.54)	(2,098,941.37)	(2,751,709.12)
Business revenues.....	1,248,176.90	1,299,642.67	11,418,878.93	10,066,973.62
Business expenses.....	1,200,628.64	1,235,420.74	10,956,339.28	9,560,830.27
Net business revenues.....	47,548.26	64,221.93	462,539.65	506,143.35
3% fixed capital charge.....	59,719.95	60,007.90	503,380.02	504,640.89
Surplus or (deficit).....	(12,171.69)	4,214.03	(40,840.37)	1,502.46
Combined revenues.....	3,179,480.73	3,118,778.82	27,786,679.41	25,165,509.36
Combined expenses.....	2,201,784.53	2,391,316.31	19,316,875.47	17,253,595.86
Net revenues.....	977,696.20	727,462.51	8,469,803.94	7,911,913.50
3% fixed capital charge.....	1,326,198.21	1,332,765.02	10,609,585.68	10,662,120.16
Surplus or (deficit).....	(348,502.01)	(605,302.51)	(2,139,781.74)	(2,750,206.66)

() Indicates deficit.

Respectfully,

J. L. SCHLEY,
Governor.

MOVEMENTS OF OCEAN VESSELS

Week ending at midnight, April 22, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage		
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net	
Losmarf.....	15	17.40	16	6.05	16	14.47	16	16.12	American.....	Calmar Line.....	409.8	54.2	20.6	Philadelphia, Pa....	Seattle, Wash.....	5,993	6,581	4,795
Jacob Luckenbach.....	16	10.00	16	10.10	16	19.00	16	20.30	American.....	Luckenbach Gulf Line.....	434.3	57.7	24.0	Mobile, Ala.....	Seattle, Wash.....	7,266	7,982	5,913
S-15.....	16	6.10	16	6.10	16	14.45	16	21.01	American.....	U. S. Navy.....	231.0	21.1	.....	Cristobal, C. Z.....	Balboa, C. Z.....	.....	.....	.....
Invercorne.....	16	9.00	16	11.20	16	21.43	16	23.32	Venezuelan.....	Lago Oil & Transp. Co.....	210.0	34.0	14.0	Aruba, D. W. I.....	Buenaventura, Col.....	1,047	1,197	724
Annie Johnson.....	16	11.35	16	11.40	16	21.25	17	12.38	Swedish.....	Johnson Line.....	392.2	53.0	20.1	Stockholm, Sweden.....	Vancouver, B. C.....	2,777	6,650	4,919
Cape of Good Hope.....	16	18.15	16	18.20	17	11.27	17	13.30	British.....	Lyle Shipping Co.....	405.0	52.0	14.6	Pt. Arthur, Tex.....	Los Angeles, Calif.....	.....	5,551	4,284
Gothicstar.....	17	00.50	17	7.10	17	18.27	17	19.45	British.....	Blue Star Line.....	420.5	54.7	18.6	Newcastle, Eng.....	N. Westminster, B. C.....	.....	7,921	5,582
Henry D.....	17	1.20	17	8.20	17	19.39	17	21.03	American.....	Union Sulphur Corp.....	356.0	51.6	24.6	Galveston, Tex.....	Oakland, Calif.....	5,550	5,367	2,900
Sunol R. Mc.....	17	1.40	17	8.20	17	20.33	17	21.50	American.....	Sun Oil Co.....	480.6	66.0	21.0	Chester, Pa.....	Los Angeles, Calif.....	.....	9,619	6,456
Cormick.....	17	5.50	17	9.25	17	21.35	17	22.53	American.....	McCormick S. S. Co.....	401.0	53.2	20.0	New York, N. Y.....	Tacoma, Wash.....	3,388	7,082	5,167
Winton.....	17	7.15	17	9.35	17	22.33	17	23.46	British.....	Amer. & Australian Line.....	375.2	53.5	23.0	Tampico, Mex.....	Fremantle, Aus'lia.....	5,094	6,295	4,663
Heimvard.....	17	00.55	17	10.55	17	23.46	18	1.02	Norwegian.....	Lauritz Kloster.....	386.9	54.8	26.0	Jacksonville, Fla.....	Yawata, Japan.....	8,210	7,009	5,024
American Star.....	17	4.05	17	12.25	18	1.00	18	2.25	American.....	Nelson Line.....	386.8	52.2	19.1	New York, N. Y.....	Seattle, Wash.....	4,573	5,099	4,167
Cerigo.....	15	14.15	17	13.40	18	1.09	18	2.25	German.....	Hamburg-American Line.....	227.2	34.4	13.11	Cristobal, C. Z.....	Buenaventura, Col.....	485	1,572	1,011
S-48.....	15	12.20	17	14.55	17	20.05	18	19.05	American.....	U. S. Navy.....	240.0	21.1	.....	Cristobal, C. Z.....	Paraiso, C. Z.....	.....	.....	.....
Minden.....	15	12.20	18	6.00	18	17.53	18	19.05	German.....	North German Lloyd.....	360.7	51.0	17.2	Bremen, Germany.....	Corral, Chile.....	1,465	4,822	3,272
Nebraska.....	18	6.25	18	7.10	18	18.50	18	20.05	American.....	Amer-Hawaiian Line.....	471.0	59.0	17.1	Boston, Mass.....	Seattle, Wash.....	1,897	9,037	6,640
Waimana.....	18	9.45	18	9.50	18	19.53	18	21.15	British.....	Shaw, Savill & Albion.....	477.6	63.0	22.2	Newcastle, Eng.....	Wellington, N. Z.....	10,973	7,848	.....
Sollund.....	17	16.00	18	12.05	18	20.57	18	22.30	Norwegian.....	Panama Mail S. S. Co.....	221.0	32.0	11.5	Cristobal, C. Z.....	Acajula, Salvador.....	.....	980	579
Vega.....	16	7.50	19	5.55	19	.....	.....	.....	American.....	U. S. Navy.....	390.0	54.0	20.1	Boston, Mass.....	Bremerton, Wash.....	2,789	.....	.....
Chevink.....	.....	.....	19	6.00	19	.....	.....	.....	American.....	U. S. Navy.....	180.0	35.6	.....	Cristobal, C. Z.....	Balboa, C. Z.....	.....	.....	.....
S-17.....	18	22.15	19	6.10	19	17.04	19	18.24	Norwegian.....	Flood Brothers.....	385.0	53.0	21.6	Antwerp, Belgium.....	Balboa, C. Z.....	.....	.....	.....
Vestard.....	18	22.15	19	7.10	19	17.04	19	18.24	Norwegian.....	Flood Brothers.....	385.0	53.0	21.6	Antwerp, Belgium.....	Balboa, C. Z.....	.....	.....	.....
No. 353.....	18	21.20	19	13.05	19	15.42	19	21.55	American.....	U. S. Navy.....	105.0	14.9	.....	Cristobal, C. Z.....	Seattle, Wash.....	4,800	6,168	4,343
La Paz.....	18	21.20	19	13.05	19	20.42	19	21.55	British.....	Pacific Steam Nav. Co.....	406.0	54.0	19.7	Cristobal, C. Z.....	Seattle, Wash.....	2,873	7,216	4,912
Tura.....	18	18.40	19	6.30	19	15.54	19	16.55	Panamanian.....	Hans Eliot.....	64.2	20.0	.....	Valparaiso, Chile.....	Balboa, C. Z.....	78	49	.....
Porto Bello.....	18	7.20	19	7.20	19	17.01	19	17.43	Panamanian.....	A. Tagaropoulos.....	46.0	15.6	.....	Colon, R. P.....	Balboa, C. Z.....	22	31	19
Real.....	18	18.40	19	11.00	19	20.42	19	21.55	Panamanian.....	Hans Eliot.....	62.0	17.0	.....	Cristobal, C. Z.....	Coconuts.....	18	46	22
Willmote.....	19	16.45	20	6.10	20	18.30	20	20.15	American.....	Williams S. S. Line.....	390.0	54.2	18.0	Baltimore, Md.....	Pto. Arnuelles, R.P.....	2,138	6,162	4,433
Harry Luckenbach.....	19	21.10	20	7.00	20	19.35	20	21.28	American.....	Luckenbach S. S. Line.....	448.9	60.2	19.0	Boston, Mass.....	Seattle, Wash.....	2,224	9,262	6,853
Cape Horn.....	10	1.45	20	8.25	20	20.53	20	22.30	British.....	Cape York M/S Co.....	425.0	56.0	17.6	Glasgow, Scotland.....	Los Angeles, Calif.....	.....	6,813	4,838
Balboa.....	20	6.15	20	8.30	20	21.56	20	23.29	Swedish.....	Johnson Line.....	427.0	56.2	26.0	Gothenburg, Swed.....	Honolulu, T. H.....	7,735	7,480	5,533
Lycia.....	20	1.35	20	9.50	20	22.53	20	23.58	British.....	Duncan Fox & Co.....	300.5	44.2	12.5	Greenock, Scotland.....	Perth, Scot.....	3,333	3,333	2,207

Oakland ²	20	8 35	20	14 39	21	00 15	21	1 25	German	Hamburg-American Line	433.0	59.0	20.0	Hamburg, Germany	Vancouver, B. C.	General	2,358	8,510	6,387
President Wilson	20	15 20	21	6 00	21	14 04	21	21 30	American	Dollar Line	516.5	72.2	27.6	New York, N. Y.	San Francisco, Cal.	General	2,221	15,286	10,568
Pennsylvania	21	4 50	21	7 05	21	15 36	20	00 25	American	Panama-Pacific Line	588.4	80.3	26.8	New York, N. Y.	San Francisco, Cal.	General	2,286	25,262	18,103
Nuevo Panama	20	17 15	21	6 10	21	14 13	21	15 45	Panamanian	Hans Eliot	108.0	20.0	7 10	Boats, R. P.	Buenaventura, Col.	General	70	286	101
San Rafael	20	21 20	21	8 15	21	17 21	21	18 40	American	States Steamship Co.	410.0	54.0	18.4	New York, N. Y.	Seattle, Wash.	General	3,594	6,484	4,675
Heranger	20	7 50	21	9 30	21	18 08	21	19 30	Norwegian	Westfal, Larsen & Co.	398.1	54.8	16.0	Rotterdam, Holl'd	Vancouver, B. C.	Ballast	4,854	5,260	
Port Fairy	20	17 20	21	15 25	21	23 00	22	1 34	British	Com'lt & Dom. Line	477.3	63.0	29.5	London, England	N. Plymouth, N. Z.	Basic slag, gen	6,480	10,673	7,767
Santa Lucia	21	17 15	22	6 05	22	13 55	22	21 35	American	Panama Mail S. S. Co.	484.0	72.0	23.5	New York, N. Y.	Seattle, Wash.	Coffee, general	4,442	13,948	9,217
Skramstad	21	17 20	22	7 10	22	15 56	22	17 00	Norwegian	Fern Line	382.7	53.4	24.1	New Orleans, La.	Shanghai, China	Gen., cotton	6,585	6,082	4,236
Overton	22	6 20	22	7 20					American	U. S. Navy	310.0	30.1		Bocas, R. P.	Gatun, C. Z.	General	4,261	9,576	6,618
Silverexpress	21	18 30	22	8 30	22	16 56	22	18 10	British	Kerr S. S. Co.	456.3	62.9	22.0	Philadelphia, Pa.	Manila, P. I.	Ballast	9,664	6,562	
Northern	21	20 45	22	8 30	22	18 16	22	19 40	American	Sun Oil Co.	480.6	66.0	22.0	Baltimore, Md.	Los Angeles, Calif.	Ballast	4,986	5,706	4,160
Sun	21	21 45	22	9 30	22	19 25	22	20 50	American	Swayne & Hoyt	387.0	52.2	22.0	Houston, Tex.	Seattle, Wash.	General	4,370		
Point Salinas	22	8 25	22	11 10	22	20 30	22	22 00	American	Swayne & Hoyt	379.9	53.1	20.7	Corpus Christi, Tex	Powell River, B. C.	General, coke	1,440	11,911	8,994
Point Ancha	22	11 10	22	11 55	22	21 30	23	3 13	British	N. Z. Shipping Co.	485.0	62.3	24.5	London, England	Wellington, N. Z.	General	1,440	11,911	8,994
Remuna	20	15 25	22	12 15	22	19 15	23	1 03	Canadian	Royal Can. M'd Police	112.3	19.0	7 0	Halifax, N. S.	Vancouver, B. C.	Ballast	162		5
Adversus	20	15 25	22	12 15	22	19 15	23	1 03	Canadian	Royal Can. M'd Police	112.3	19.0	7 0	Halifax, N. S.	Vancouver, B. C.	Ballast	162		5
Anna Maersk	22	12 35	22	13 35	22	23 00	23	00 37	Danish	Isbrandtsen Moller Co.	441.4	57.0	23.5	New York, N. Y.	Iloilo, P. I.	General	4,954	7,729	5,975

THROUGH THE CANAL—PACIFIC TO ATLANTIC

S-11 ¹	16	4 40	16	12 35	16	13 45	American	U. S. Navy	231.0	20.0	Balboa, C. Z.	Cristobal, C. Z.	Gasoline	8,816	7,331	5,111	
S. M. Spalding	16	6 15	16	13 45	16	13 45	American	Standard Shipping Co.	435.0	50.0	Los Angeles, Calif.	Boston, Mass.	Gasoline				
President Grant	16	5 00	16	16 25	16	22 35	American	Dollar Line	517.0	72.2	Manila, P. I.	New York, N. Y.	General	6,580	15,234	10,470	
Endurance ²	16	7 00	16	7 27	16	15 50	Panamanian	R. Peillibois	60.0	14.5	Panama, R. P.	Colon, R. P.	General	5	36	24	
Alaskan	16	10 50	16	11 33	16	19 15	American	Amer-Hawaiian Line	415.0	53.7	Portland, Oreg.	Boston, Mass.	Lumber, general	6,183			
San Felipe	16	14 50	16	15 49	16	23 30	17	1 00	Quaker Line	409.8	54.2	Seattle, Wash.	Philadelphia, Pa.	Lumber, general	7,150	6,821	4,927
Oratio ³	16	17 00	16	20 34	17	9 00	18	6 25	Italia Line	482.8	61.8	Valparaiso, Chile.	Genoa, Italy	General	3,017	12,977	9,373
Overton	17	6 30	17	13 47			American	U. S. Navy	310.0	30.0	Balboa, C. Z.	Cristobal, C. Z.	Coffee, general	865			
No. 259 ⁴	17	1 40	17	7 03	17	16 00	18	12 05	Panama Mail S. S. Co.	421.0	32.2	Corinto, Nicaragua	Cristobal, C. Z.	Coffee, general	7,786	7,611	5,450
Sollund	17	11 15	17	12 29	17	21 25	18	1 45	Isbrandt S. S. Lines	224.2	56.2	Vancouver, B. C.	Avonmouth, Eng.	General	210	226	101
Steel Ranger	17	10 40	17	11 29	17	21 18	18	9 45	Hans Elliot	108.5	20.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee	7,743	7,329	5,233
Nuevo Panama	17	3 28	17	14 10	17	22 45	18	10 15	Roosevelt S. S. Co.	395.0	55.0	Hilo, P. I.	New York, N. Y.	General, sugar	3,350	2,458	1,645
Potter	17	13 50	17	14 55	17	23 35	18	00 55	A. P. Moller	284.9	42.4	Mazatlan, Mexico.	London, England	Sugar	8,610	7,482	5,143
Emile Maersk	17	13 25	17	14 55	17	23 35	18	00 55	Union Oil Co.	435.0	56.0	Los Angeles, Calif.	Tiverton, R. I.	Gasoline	13,514		
Cathwood	17	13 25	17	14 55	17	23 35	18	00 55	Shell Oil Co.	480.5	60.0	Los Angeles, Calif.	Perth Amboy, N. J.	Gasoline	5,830	24,506	17,563
Mercury Sun ⁵	18	2 51	18	6 28	18	13 50	18	13 50	Panama-Pacific Line	574.4	80.3	San Francisco, Cal.	New York, N. Y.	General	5,830	24,506	17,563
Calumet	17	11 00	18	6 28	18	15 20	18	16 29									
Dorothy	18	2 33	18	7 08	18	16 10	18	16 10	Luckenbach Line	448.9	60.2	Seattle, Wash.	Boston, Mass.	Lumber, general	7,956	9,303	6,870
Laurits Swenson	18	5 45	18	8 12	18	16 55	19	12 30									
Rea	18	8 00	18	9 38	18	19 00	19	11 00	Fred Olsen & Co.	435.9	56.2	Vancouver, B. C.	Oslo, Norway	Grain, general	7,677	7,993	5,837
Tura ⁷	18	8 00	18	8 55	18	18 40	19	6 30	Hans Elliot	62.2	17.6	Darien, R. P.	Cristobal, C. Z.	Bananas	33	46	22
Odenwald ⁸	18	6 30	18	9 38	18	19 00	19	12 00	Hans Elliot	64.0	20.0	Darien, R. P.	Cristobal, C. Z.	Bananas	50	78	49
Pacific Ranger ⁹	18	10 00	18	11 00	18	19 55	18	20 35	Hamburg-American Line	399.5	54.3	Corral, Chile	Hamburg, Germany	General	8,140	6,608	4,979
	18	10 00	18	11 00	18	19 55	18	20 35	Furness, Withy & Co.	436.4	60.3	Vancouver, B. C.	Glasgow, Scotland	General	8,209	9,725	6,942
															</		

Destroyer.

Auxiliary sloop.

Motor schooner.

Mine sweeper.

Cargo ship.

Submarine.

Motor ship.

Towing submarine S-17.

For orders.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Point Palmas.	18	11 30	18	12 36	18	21 10	18	21 10	American	386.8	52.2	26.0	Portland, Oreg.	General	6,273		
China Arrow ¹ .	18	13 35	18	14 30	18	22 55	18	22 55	U. S. Navy	468.3	62.7	28.3	Los Angeles, Calif.	Gasoline, oil	12,550	10,084	7,388
Raleigh ¹⁴ .	17	7 00	19	4 56	19	13 05	19	13 05	American	555.6	55.4	19.2	Boston, Mass.	Fruit, general	6,005	6,882	5,035
John Bakke ¹⁷ .	18	13 25	19	6 10	19	13 15	19	23 45	Swedish	390.8	54.7	27.0	Gothenburg, Norw.	Fruit, general	5,567	6,719	4,979
Modavia ¹⁷ .	19	1 00	19	7 18	19	14 15	19	15 15	Norwegian	387.0	53.7	25.0	Valparaiso, Chile	Fruit, general	4,948	6,014	4,492
Gladie Star.	19	4 00	19	8 17	19	16 50	19	17 45	British	389.8	53.7	26.0	Vancouver, B. C.	Newcastle, Eng.	6,198	5,659	4,138
Charles Nelson.	19	7 05	19	9 20	19	17 45	19	17 45	British	380.4	53.2	25.0	New York, N. Y.	General	8,000		
Mexican.	18	23 30	19	10 55	19	18 30	19	18 30	American	472.3	57.2	26.0	San Francisco, Cal.	Lumber, general	7,447	8,454	6,344
Los Angeles.	19	9 30	19	11 51	19	19 45	19	19 45	American	448.0	59.0	26.0	Hamburg, Germany	General			
S-48 ¹⁵ .	19	9 30	19	17 45	19	22 45	19	22 45	U. S. Navy	240.0	21.0		Cristobal, C. Z.				
Durban ¹⁴ .	18	7 50	20	6 10	20	14 05	20	14 05	British	445.0	46.0	16.0	Callao, Peru				
Chewink, No. 39 ¹⁶ .			20	6 26	20	13 40			American	180.0	35.0		Batboa, C. Z.				
George W. McKnight ¹⁷ .	20	2 30	20	7 13	20	15 30	20	15 30	Danish	520.1	70.1	28.5	Talara, Peru	Naphtha.	15,785	12,642	8,121
Hokkai Maru ¹⁷ .	19	20 10	20	9 25	20	19 10	21	6 00	Japanese	445.0	60.6	26.0	Batboa, Peru	General	7,632	7,097	5,277
Unicoi ¹⁷ .	20	5 35	20	12 35	20	21 25	20	21 25	American	401.9	54.2	26.0	Manila, P. I.	Sugar, temp.			
Fairfax.									Roosevelt S. S. Co.				Manila, P. I.				
No. 93 ¹⁸ .	20	8 20	20	14 05	20	22 34	25	7 55	American	314.0	32.0	11.0	San Diego, Calif.				
S-15 ¹⁸ .			20	14 07	20	22 30			U. S. Navy	231.0	20.0		Batboa, C. Z.				
Santa Ana.	20	9 50	20	15 21	20	24 00	21	10 35	American	390.2	51.6	23.5	Cristobal, C. Z.	Cohee, general	1,637	5,710	4,011
Point Sur.	18	13 00	21	4 45	21	12 55	21	12 55	American	324.0	46.2	24.4	New York, N. Y.	General	2,371	3,984	2,612
Brazos ¹ .	20	6 45	21	6 10	21	14 15	24	8 15	American	455.0	56.2	26.0	Beaumont, Tex.	Gasoline.	544		
Toten ¹⁷ .	20	19 30	21	7 15	21	14 45	21	15 25	British	421.3	56.0	27.0	Coco Solo, C. Z.	General	7,000	7,384	5,459
Steel Age.	20	23 00	21	8 20	21	17 30	21	20 00	American	395.5	55.0	23.0	Antwerp, Belgium	Sugar, pineapples	8,577	7,330	5,245
Claxton 140 ¹⁸ .	21	6 15	21	9 05	21	18 30			Isthmian S. S. Lines	310.0	31.0	10.0	Baltimore, Md.				
Wright ¹⁶ .	21	22 01	22	4 53	22	13 35	24	22 00	American	448.0	58.0	22.0	New Orleans, La.	Navy stores.	1,287		
Nitro ²⁰ .	21	2 30	22	6 28	22	13 25	24	22 00	American	460.0	61.0	23.0	Cristobal, C. Z.	General	8,108	6,566	4,960
Ves Cape.	21	22 05	22	7 23	22	16 00	22	16 00	American	409.5	54.2	24.1	Boston, Mass.	General	1,000	1,105	698
Call.	22	3 50	22	8 22	22	17 07			North German Lloyd	216.5	32.9	16.0	Albany, N. Y.	Ballast.	1,197	724	
Invercorrie ¹ .	22	8 30	22	9 55	22	18 55	22	20 20	German	46.0	34.6	10.0	Guayaquil, Ecuador	Colon, R. P.	5	31	19
Porto Bello ¹⁷ .	22	6 30	22	7 35	22	16 00	22	16 00	American	187.0	37.0		Corinto, Nicaragua	Sugar, rice.			
Lapping ¹⁶ .	22	13 24	22	13 24	22	19 55			U. S. Navy	187.0	37.0		Cristobal, C. Z.				
Swan ¹⁸ .	22		22	13 36	22	19 55			U. S. Navy	187.0	34.0		Corinto, Nicaragua				

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS				* DEPARTURES		
Date	Vessel	Line	From—	Date	Vessel	Line
April 16.....	Marques de Comillas.....	Spanish S. S. Line.....	Barcelona via waypoints	April 16.....	Buenaventura.....	Panama R. R. S. S. Line.....
April 16.....	Eupatoria.....	Hamburg-American Line.....	Port Limon, Costa Rica	April 16.....	Haiti.....	Colombian Line.....
April 16.....	No. 9685 ²¹	Pan American Airways.....	Talara via waypoints	April 17.....	No. 660-M ²¹	Pan American Airways.....
April 17.....	No. 18-V ²¹	Pan American Airways.....	Port Limon via waypoints	April 17.....	Marques de Comillas.....	Royal Netherlands S. S. Co.....
April 17.....	Conte Grande.....	Societa Italia-Flotte Riunite.....	New York via waypoints	April 17.....	Quirigua.....	Spanish S. S. Line.....
April 17.....	No. 660-M ²¹	United Fruit Co.....	Port Limon, Costa Rica	April 17.....	Conte Grande.....	United Fruit Co.....
April 17.....	No. 9673 ²¹	Pan American Airways.....	Barranquilla, Colombia	April 18.....	No. 19-V ²¹	Societa Italia-Flotte Riunite.....
April 17.....	Cefalu.....	Pan American Airways.....	Guatemala via waypoints	April 18.....	No. 9685 ²¹	Pan American Airways.....
April 18.....	No. 145-M ²¹	Standard Fruit & Cent. Airways.....	New Orleans via Habana	April 18.....	Inapaquina ²²	Pan American Airways.....
April 18.....	Anachucuna ²²	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia	April 18.....	A. Tagaropoulos.....	Colon, Rep. of Panama
April 18.....	Anachucuna ²²	A. Tagaropoulos.....	Colon, Rep. of Panama	April 18.....	P. W. Hamilton.....	Colon, Rep. of Panama
April 18.....	Anachucuna ²²	A. Tagaropoulos.....	Colon, Rep. of Panama	April 18.....	Standard Fruit & S. S. Co.....	New Orleans via waypoints
April 19.....	No. 9688 ²¹	Pan American Airways.....	New York via Haiti	April 19.....	Hamburg-American Line.....	Europe via waypoints
April 19.....	No. 22-V ²¹	Pan American Airways.....	San Salvador via waypoints	April 19.....	Eupatoria.....	Miami via waypoints
April 20.....	No. 670-M ²¹	Pan American Airways.....	Chidayo via waypoints	April 20.....	No. 9688 ²¹	Guatemala via waypoints
April 21.....	Cavina.....	Elders & Fyffes, Ltd.....	Miami via waypoints	April 20.....	No. 145-M ²¹	Medellin, Colombia
April 21.....	Turrialba.....	United Fruit Co.....	Avonmouth via waypoints	April 21.....	No. 15-V ²¹	Chidayo via waypoints
April 21.....	Peten.....	United Fruit Co.....	New Orleans, La.	April 21.....	Cavina.....	Avonmouth via waypoints
April 21.....	No. 145-M ²¹	Uraba, Medellin & Cent. Airways.....	New York via waypoints	April 21.....	No. 145-M ²¹	Port Limon, Costa Rica
April 22.....	Pastores.....	Colombian Line.....	Medellin, Colombia	April 22.....	No. 9673 ²¹	Medellin, Colombia
April 22.....	Metapan.....	United Fruit Co.....	New York via Kingston	April 22.....	Turrialba.....	San Salvador via waypoints
April 22.....	Colombia.....	Royal Netherlands S. S. Co.....	Port Limon, Costa Rica			New Orleans via waypoints

PORT OF BALBOA

Date	Vessel	Line	From—	Date	Vessel	Line
April 16.....	Chiriqui.....	United Fruit Co.....	San Francisco, Calif.	April 16.....	Chiriqui.....	United Fruit Co.....
April 20.....	Point Reyes.....	McCormick S. S. Co.....	San Francisco, Calif.	April 23.....	Heyo Maru ¹⁷	Nippon Yusen Kaisha.....
April 22.....	Costa Rica II ¹⁷	Nippon Yusen Kaisha.....	Hongkong, China			Valparaiso, Chile
April 22.....		Frank Gargas.....	Los Angeles, Calif.			

¹ Tanker.¹⁴ Cruiser.¹⁵ Submarine.¹⁶ Tug.¹⁷ Motor ship.¹⁹ Destroyer.²⁰ Supply ship.²¹ Air mail carrier.²² Motor boat.

* Other than ships passing through the Canal.

Tourists in 1932-33 Winter Season

The last of the regularly scheduled tourist cruises from the United States or Europe to the Canal in the winter season of 1932-33 was that of the steamship *Conte Grande*, calling at Cristobal on April 17, 1933. During the season 45 cruises, including 4 of the United Fruit Co., visited the Isthmus, carrying 15,713 passengers. Of the passengers arriving, 7,765 made the trip across the Isthmus and return by special train. During the previous season there were 55 of these cruises, carrying 17,109 passengers, of whom 9,425 made the special train trip. The number of tours decreased by about 18 percent, the number of passengers arriving by about 8 percent, in the past season in comparison with that of 1931-32.

The figures for tourist cruises do not include the considerable number of passengers who arrive on the various lines operating to the Isthmus or through the Canal and spend time ashore between the arrival and departure of vessels.

Notices to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 22, 1933.

No. 49

Colombia, north coast, shoal reported:

1. S.S. *Santa Lucia* reports that at 5:30 p.m., April 20, 1933, in latitude 10°24'40" N., longitude 75°35'50" W. the ship rolled, steered off its course and stirred up a quantity of mud; draft 23 feet aft. Chart gives 6 to 12 fathoms in this vicinity.

2. The master of the S.S. *Santa Paula* reports a similar experience in the same place.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., April 25, 1933.

No. 50

Colombia, north coast, Puerto Colombia, Cupino Beach light extinguished.—The master of the S.S. *Point Sur* reports that Cupino Beach light was extinguished on the night of April 24, 1933. Approximate position, latitude 11°00'15" N., longitude 74°57'55" W.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending April 22, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
La Purisima.....	Union Oil Co.....	April 13	April 14	539	.....
Santa Teresa.....	Grace Line.....	April 13	April 13	67	50
Santa Barbara.....	Grace Line.....	April 14	April 14	106	30
Bodegraven.....	Royal Netherlands S. S. Co.....	April 15	April 15	184	.....
Annie Johnson.....	Johnson Line.....	April 16	April 17	179	.....
Chiriqui.....	United Fruit Co.....	April 16	April 16	90	15
Potter.....	Roosevelt S. S. Co.....	April 17	April 17	203	.....
Point Sur.....	Swayne & Hoyt.....	April 18	April 21	2,502	.....
John Bakke.....	Knute Knutsen, O. A. S.....	April 18	April 19	80	.....
Vega.....	U. S. Government.....	April 19	April 19	2	.....
Brazos.....	U. S. Government.....	April 20	April 21	5,714	.....
Santa Ana.....	Panama Mail S. S. Co.....	April 20	April 20	25	.....
Point Reyes.....	McCormick S. S. Co.....	April 20	.....	4,255	.....
President Wilson.....	Dollar Line.....	April 21	April 21	1	.....
Heiyo Maru.....	Nippon Yusen Kaisha.....	April 22	April 23	19	.....
Anna Maersk.....	Isbrandtsen Moller Co.....	April 22	April 22	.....	7

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Two Weeks Ending April 22, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Cristobal	Panama R. R. S. S. Line		April		514
Santa Monica	Panama Mail S. S. Co.		April	9	721
Colombia	Colombian S. S. Line		April	9	705
Santa Marta	United Fruit Co.		April	9	585
Crijnsen	Royal Netherlands S. S. Co.		April	9	495
Nuevo Panama	Hans Elliot	April	April	9	225
Kurama Maru	Kokusai Kisen Kaisha	April	April	9	54
Este	North German Lloyd	April	April	10	248
Salvador	Pacific Steam Navigation Co.	April	April	15	983
Santa Paula	Panama Mail S. S. Co.	April	April	11	361
Veragua	United Fruit Co.	April	April	11	5
Magallanes	Spanish S. S. Line	April	April	15	104
Kwanto Maru	Osaka Shosen Kaisha	April	April	12	189
Contessa	Standard Fruit & S. S. Co.	April	April	12	376
H. M. Flagler	Standard Oil Co.	April	April	13	12,229
Santa Clara	Grace Line	April	April	13	163
Cuba	United Fruit Co.	April	April	13	205
Asuka Maru	Nippon Yusen Kaisha	April	April	13	8
Witram	North German Lloyd	April	April	13	67
Santa Teresa	Panama Mail S. S. Co.	April	April	13	61
Santa Barbara	Grace Line	April	April	13	152
Buenaventura	Panama R. R. S. S. Line	April	April	13	1,253
Quirigua	United Fruit Co.	April	April	14	370
Eupatoria	Hamburg-America Line	April	April	14	252
Dinteldijk	Holland-America Line	April	April	14	116
Logician	T. & J. Harrison	April	April	14	307
Carrillo	United Fruit Co.	April	April	15	815
Colombia	Royal Netherlands S. S. Co.	April	April	15	80
Canadian Cruiser	Canadian National Steamships	April	April	15	75
Bodegraven	Royal Netherlands S. S. Co.	April	April	15	75
Oregon	French Line	April	April	15	159
Washington	French Line	April	April	15	78
Haiti	Colombian S. S. Line	April	April	15	213
Sixaola	United Fruit Co.	April	April	15	355
Minden	North German Lloyd	April	April	15	111
Cerigo	Hamburg-American Line	April	April	15	1,045
Durazzo	Hamburg-American Line		April	11	181
Buenaventura	Panama R. R. S. S. Line		April	16	462
Washington	French Line		April	16	35
Haiti	Colombian S. S. Line		April	16	436
Sixaola	United Fruit Co.		April	16	168½
President Grant	Dollar Line	April	April	16	555
Marques de Comillas	Spanish Line	April	April	16	8
Eupatoria	Hamburg-American Line	April	April	16	423
Cerigo	Hamburg-American Line		April	17	485
Colombia	Royal Netherlands S. S. Co.		April	17	16
Quirigua	United Fruit Co.	April	April	17	17
American Star	Nelson S. S. Line	April	April	17	398
Potter	Roosevelt S. S. Co.	April	April	18	182
Sollund	Panama Mail S. S. Co.	April	April	18	980
Nuevo Panama	Hans Elliot	April	April	18	225
Orazio	Italian Line	April	April	18	596
Minden	North German Lloyd		April	18	323
Cefalu	Standard Fruit & S. S. Co.	April	April	19	242
Laurits Swenson	Fred Olsen Line	April	April	19	650
Odenwald	Hamburg-American Line	April	April	19	60
La Paz	Pacific Steam Navigation Co.	April	April	19	13
Ancon	Panama R. R. S. S. Line	April	April	19	1,809
John Bakke	Scandinavian-South Pacific Line	April	April	19	187
Los Angeles	Hamburg-American Line	April	April	20	189
Oakland	Hamburg-American Line	April	April	20	192
Hokkai Maru	Osaka Shosen Kaisha, Ltd.	April	April	21	143
San Rafael	States S. S. Line	April	April	21	65
Nuevo Panama	Hans Elliot	April	April	21	202
Santa Ana	Panama Mail S. S. Co.	April	April	21	277
Peten	United Fruit Co.	April	April	21	296
Santa Lucia	Panama Mail S. S. Co.	April	April	21	133
Turrialba	United Fruit Co.	April	April	22	690
Pastores	United Fruit Co.	April	April	22	186
Metapan	United Fruit Co.	April	April	22	565
Colombia	Royal Netherlands S. S. Co.	April	April	22	4
Cali	North German Lloyd	April	April	22	1,000

* No cargo discharged.

* No cargo laded.

Telegraphic Address of The Panama Canal

The cable and radio address of The Panama Canal, on the Isthmus, is "Pancanal, Panama;" in the United States, "Pancanal, Washington."

Prices of Miscellaneous Supplies at Panama Canal Storehouses

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective April 18, 1933:

Commodities	Unit	Price
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, ammonia, cylinder.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.31
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Lubricating Oils

The following is a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils with a statement of the purpose for which it is generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list:

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, No. 2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, No. 2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, No. 2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, No. 2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Tractor, heavy, No. 3100.—A very heavy body oil for aircraft engines, high speed gasoline engines, motor trucks, motor boats, motorcycles, and diesel engines S. A. E.-50.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive and for tempering.

Lord.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

THE PANAMA CANAL RECORD

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., May 3, 1933.

No. 40.

Canal Traffic during April 1933

During the month of April 1933, 370 commercial vessels and 9 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,554,250.14, and on the launches, \$129.45, or a total tolls collection of \$1,554,379.59.

The daily average of commercial vessels was 12.33, and the daily average tolls collection was \$51,808.34, as compared with an average of 12.87 transits and \$55,448.66 in tolls for the previous month, and an average of 12.33 transits and \$53,621.16 in tolls for the month of April 1932. The average amount of tolls paid by each of the commercial transits was \$4,200.68, as compared with \$4,347.66 for the month of April 1932.

In comparison with the previous month (March 1933), the past month's traffic decreased by 29 transits, or 7.3 percent, and \$164,658.27 in tolls, or 9.6 percent. The loss on the daily averages of these two features was slightly lower, however—4.2 percent in transits and 6.6 percent in tolls collected. In comparison with the corresponding month last year, last month's traffic was the same insofar as the number of transits was concerned, but tolls collection decreased \$54,384.53, or 3.4 percent.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 10 months of the current fiscal year, with the daily averages of transits and tolls and the totals for the first 10 months of the fiscal years 1932 and 1931:

Month	Total for month		Daily averages	
	Transits	Tolls	Transits	Tolls
July.....	326	\$1,468,728.36	10.52	\$47,378.33
August.....	314	1,440,848.87	10.13	46,479.00
September.....	353	1,598,265.98	11.77	53,275.53
October.....	394	1,714,779.06	12.71	55,315.45
November.....	388	1,756,865.84	12.93	58,562.19
December.....	431	1,781,940.03	13.90	57,481.94
January.....	415	1,762,808.56	13.39	56,864.79
February.....	368	1,575,708.35	13.14	56,275.30
March.....	399	1,718,908.41	12.87	55,448.66
April.....	370	1,554,250.14	12.33	51,808.34
Total, first 10 months fiscal year 1933.....	3,758	16,373,103.60	12.36	53,858.89
Total, first 10 months fiscal year 1932.....	3,813	17,455,182.60	12.50	57,230.11
Total, first 10 months fiscal year 1931.....	4,701	20,900,595.66	15.46	68,751.96

In comparison with the first 10 months of the fiscal year 1932, the corresponding period this year has had 55 fewer transits and \$1,082,079 less tolls, decreases of 1.4 percent and 6.2 percent, respectively; in comparison with the first 10 months of the fiscal year 1931, there occurred a decrease of 943 transits and \$4,527,492.06 in tolls, losses of 20.1 percent and 21.7 percent, respectively.

Delfdijk	26	15.25	27	13.56	27	6.00	27	13.56	27	15.15	Dutch.	N. Pacific Coast Line	496.0	64.6	20.8	Rotterdam, Holl'd	Portland, Oreg.	General.	2,930 11,724	8,266
Santa Cecilia	27	3.00	27	19.35	28	13.05	27	19.35	28	2.30	American.	Panama Mail S. S. Co.	363.0	51.0	22.5	New York, N. Y.	San Francisco, Cal.	General.	1,473 5,797	4,188
Santa Clara	27	6.05	27	21.34	28	11.38	27	21.34	28	11.38	American.	Grace Line	483.0	63.9	23.8	New York, N. Y.	San Francisco, Cal.	General.	1,901 11,680	7,456
Isis	27	2.30	27	14.25	27	22.30	27	22.30	27	23.05	German.	Hamburg-American Line	392.2	51.6	18.0	Hamburg, Germany	Valparaiso, Chile.	General.	2,365 5,788	4,027
Steel Engineer	27	13.55	27	22.30	27	15.05	27	22.30	27	20.35	American.	Isthmian S. S. Lines	424.2	56.2	20.0	Baltimore, Md.	Seattle, Wash.	General.	4,717 7,611	5,450
Endurance	27	9.50	27	20.05	27	6.00	27	20.05	27	21.00	Panamanian.	Esteban Garcia	436.0	44.0	14.0	Cristobal, C. Z.	Balboa, C. Z.	Coconut.	.....	24
Wright	22	13.25	28	6.05	28	14.25	1	10.54	American.	.....	.....	U. S. Navy	630.0	60.6	8.0	Cristobal, C. Z.	San Diego, Calif.	Coconut.	.....	36
Nuevo Panama	27	15.30	28	5.55	28	14.30	28	16.00	Panamanian.	.....	.....	Hans Elliot	108.5	20.6	.....	Cristobal, C. Z.	Buenaventura, Col.	General.	55	226
President	28	5.15	28	7.20	28	15.36	28	22.45	American.	.....	.....	Dollar Line	502.0	62.2	26.0	New York, N. Y.	San Francisco, Cal.	General.	2,934 12,512	8,266
Adams	28	2.55	28	8.25	28	15.38	28	17.50	British.	.....	.....	Bowling & Co.	402.5	52.2	14.0	New York, N. Y.	Chile ..	General.	5,503 4,069	1,078
W. S. Miller	28	17.45	28	17.55	28	10.35	28	17.05	American.	.....	.....	Shell Oil Co.	435.0	55.6	20.0	Fall River, Mass.	San Francisco, Cal.	Ballast.	.....	1,144
Porro Bello	28	7.30	28	17.30	28	15.41	28	17.30	Panamanian.	.....	.....	A. Tzaropoulos	46.0	15.6	.....	Balboa, C. Z. ....	.....	Coconut.	22	31
Virgilio	28	13.20	29	6.00	29	14.08	29	15.25	Italian.	.....	.....	Soc. Italia-Flotte Riunite	482.8	62.0	25.4	Genoa, Italy	Valparaiso, Chile.	General.	746 12,941	9,329
Wisconsin	28	18.30	29	7.05	29	10.00	29	17.30	French.	.....	.....	French Line	473.0	61.0	19.1	Dunkerque, France	Vancouver, B. C.	General.	870 10,459	7,110
K. I. Luckenbach	29	7.10	29	8.30	29	18.13	30	3.41	American.	.....	.....	Luckenbach Line	446.0	56.0	23.0	Boston, Mass.	Los Angeles, Calif.	General.	3,266 8,552	6,236
Hawanan	29	9.35	29	9.50	29	19.29	29	22.40	American.	.....	.....	Amer.-Hawanan Line	404.6	53.9	16.0	Boston, Mass.	Portland, Oreg.	General.	1,772 6,741	4,756
Acajutla	25	17.40	29	12.30	29	19.35	29	20.55	British.	.....	.....	Pacific Steam Nav. Co.	215.0	33.0	15.8	Cristobal, C. Z.	Champerico, Guat.	General.	907 1,273	706
Marie Bakke	24	4.05	29	10.20	29	20.26	30	7.00	Norwegian.	.....	.....	Knut Knutsen, O. A. S.	375.6	52.6	16.1	Oslo, Norway	Corral, Chile.	General.	1,914 6,077	4,586
U. S. Yard, No. 119	24	12.25	29	6.15	29	15.58	.....	.....	American.	.....	.....	U. S. Navy .....	.....	.....	.....	U. S. port.	Balboa, C. Z.	Ballast.	.....	.....
Whaleboat .....	.....	.....	29	8.26	.....	.....	.....	.....	American.	.....	.....	U. S. Navy .....	.....	.....	.....	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	.....	.....
Walraven .....	.....	.....	29	8.26	.....	.....	.....	.....	American.	.....	.....	P. Leevitt .....	.....	.....	.....	Cristobal, C. Z.	Gatun, C. Z.	Ballast.	.....	2

THROUGH THE CANAL—PACIFIC TO ATLANTIC

New Westminster City	22	19.30	23	6.12	23	13.58	23	15.10	British.	.....	.....	Bunge N. A. Grain Co.	400.5	54.3	27.0	Vancouver, B. C.	Cobh, Ireland ..	Wheat.	8,250 7,000	5,407
Manzanillas	22	19.45	23	7.12	23	15.10	24	16.10	German.	.....	.....	Grace Line	216.5	32.9	16.0	Guayaquil, Ecuador ..	Cristobal, C. Z.	General.	805 1,132	741
Persephone	22	21.15	23	8.07	23	16.20	23	16.30	Danzig.	.....	.....	W. Tanskisch Rueder	408.6	63.0	28.0	Cabo Blanco, Peru ..	Southampton, Eng.	Crude oil.	11,496 9,201	6,363
Belfast Maru	22	23.55	23	9.17	23	17.30	23	17.30	Japanese.	.....	.....	Kawasaki Kisen Kaisha	465.0	53.0	19.0	Kobe, Japan	New York, N. Y.	General.	880	.....
Pennsylvania	23	5.15	23	10.15	23	18.45	23	18.45	American.	.....	.....	Amer.-Hawanan Line	407.7	53.7	26.0	Portland, Oreg.	Boston, Mass.	General.	7,430	27
Rolling Stone	16	19.00	23	10.27	23	18.35	23	18.35	Panamanian.	.....	.....	Robert Wilcox	48.0	11.6	.....	Balboa, C. Z.	Cristobal, C. Z.	Ballast.	.....	20
Ponsicola	22	6.00	24	4.45	24	12.20	24	23.05	American.	.....	.....	U. S. Navy	585.6	61.0	19.0	San Diego, Calif.	Hampton Rds, Va.	Cruiser.	3,067 5,956	4,172
Canadian Victor	23	23.15	24	6.09	24	14.20	24	18.15	British.	.....	.....	Can. Nat. Steamships	400.0	52.6	17.5	Bluff, N. Z.	Montreal, Canada.	General.	7,448 10,277	7,304
Tacoma	23	23.30	24	7.20	24	17.15	24	23.10	German.	.....	.....	Hamburg-American Line	477.5	63.1	26.0	Vancouver, B. C.	Hamburg, Germany ..	General.	7,528 7,581	5,595
Alameda	24	7.25	24	8.23	24	17.40	24	17.40	American.	.....	.....	Calmar S. S. Corp.	399.7	56.2	27.0	Seattle, Wash.	Baltimore, Md.	Lumber.	8,153 7,503	5,242
Alameda	24	7.35	24	8.55	24	18.55	25	00.30	French.	.....	.....	French Line	425.7	55.0	27.0	Tacabano, Chile.	Havre, France	General.	7,916 9,594	6,829
Tai Fung	24	5.40	24	11.22	24	20.15	25	00.55	Norwegian.	.....	.....	Barber S. S. Line	401.9	60.9	27.0	Davao, P. I.	New York, N. Y.	General.	6,392 6,755	4,750
Charles H. Cramp	24	10.14	24	12.12	24	23.25	24	23.25	American.	.....	.....	Argonaut S. S. Co.	404.6	53.9	27.0	Seattle, Wash.	New York, N. Y.	Lumber, general.	5,069 13,948	9,217
Santa Rosa	24	8.00	24	14.30	24	22.44	25	14.05	American.	.....	.....	Grace Line	484.4	72.2	26.0	Seattle, Wash.	New York, N. Y.	General.	.....	.....
No. 353 .....	.....	.....	24	13.50	.....	.....	.....	.....	American.	.....	.....	U. S. Navy	105.0	14.0	.....	Balboa, C. Z.	Cristobal, C. Z.	General.	7,000 8,508	6,179
Katrina Luckenbach	24	16.55	25	6.16	25	14.30	25	14.30	American.	.....	.....	Luckenbach Gulf Co.	446.0	56.1	26.0	Portland, Oreg.	Mobile, Ala.	General.	.....	.....
Badger, No. 126	21	12.00	25	7.09	25	16.08	.....	.....	American.	.....	.....	U. S. Navy	310.0	30.1	16.0	San Diego, Calif.	Norfolk, Va.	General.	.....	.....

* Auxiliary sloop.

* Aircraft tender.

* Towing barge No. 44.

* Motor schooner.

* Launch.

* Tug.

* Yacht.

* Destroyer.

* Motor ship.

* Sub chaser.

* Tanker.

* For orders.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	
Tattnall, No. 125 ¹³	19	20.00	25	7.26	25	16.20	American	U. S. Navy	310.0	31.0	11.0	San Diego, Calif.	Norfolk, Va.	General	420	1,273
Jacob Jones ¹³	21	7.50	25	7.12	25	16.24	American	Pacific Steam Nav. Co.	215.7	33.6	14.0	San Diego, Calif.	Norfolk, Va.	General	13,000	9,798
Daylight ¹⁴	24	17.10	25	9.20	25	17.40	British	Stand. Vap. Transp. Co.	480.5	66.0	29.0	Los Angeles, Calif.	Cristobal, C. Z.	Gasoline	8,281	8,543
Edward Luck-entach	25	1.45	25	10.11	25	19.00	American	Stand. Vap. Transp. Co.	480.5	66.0	29.0	Los Angeles, Calif.	New York, N. Y.	Gasoline	9,993	7,481
S. C. T. Dodd ¹⁵	25	3.00	25	10.40	25	20.15	American	Luckenbach Line	436.6	57.2	30.0	Seattle, Wash.	Boston, Mass.	General, lumber	8,543	6,427
Sun ¹⁵	25	8.25	25	11.14	25	21.30	American	Shell Oil Co.	425.0	57.2	27.3	San Francisco, Calif.	Seawen, N. J.	Kerosene	13,724	9,620
Canadian Con-structor	25	8.35	25	11.48	25	22.45	American	Sun Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Gasoline	842	7,680
Republic	25	9.45	25	13.05	26	21.10	British	Can. Nat. Steamships	430.0	56.2	16.0	Brisbane, Australia	Montreal, Canada	General	580	580
Real ¹⁵	25	3.48	25	14.24	26	00.45	American	U. S. Army	615.0	68.0	29.0	Honolulu, T. H.	Brooklyn, N. Y.	Army stores	39	46
Tura ¹⁵	25	10.30	25	9.31	25	18.50	Panamanian	Hans Elliot	62.2	17.1	6.0	Darien, P.	Cristobal, C. Z.	Bananas	62	78
Marquita ¹⁵	24	20.51	26	6.11	26	15.15	Venezuelan	A. A. Valdez	279.2	46.6	13.0	Bayamo, P.	Cristobal, C. Z.	Bananas	2,051	1,101
Santa Maria ¹⁴	26	2.39	26	8.26	26	16.00	American	Grace Line	466.0	64.0	26.3	Balboa, C. Z.	Maracaibo, Venez.	Ballast	4,068	10,626
India ¹⁴	25	15.00	26	9.15	26	17.40	Danish	East Asiatic Co.	456.7	61.9	31.0	San Antonio, Chile	New York, N. Y.	General	12,251	4,775
Timountain ¹⁵	25	17.55	26	10.45	26	18.50	American	The Texas Co.	416.9	56.2	27.0	Vancouver, B. C.	Copenhagen, Den.	Fuel oil	9,472	6,728
Willboro	25	18.00	26	11.13	26	20.05	British	Amer.-Hawaiian Line	414.7	55.7	28.0	Los Angeles, Calif.	Pt. Arthur, Tex.	Lumber, general	9,348	7,717
Lockkatrine ¹⁴	26	1.00	26	11.36	26	21.45	American	Royal Mail Lines, Ltd.	501.2	62.0	29.0	Seattle, Wash.	Albany, N. Y.	General	9,276	10,802
Sage Brush	26	6.30	26	12.07	26	22.25	American	Shepard S. S. Co.	409.8	54.2	25.0	Vancouver, B. C.	Rotterdam, Holl'd	General	7,327	6,227
Steel Inventor.	26	9.15	27	6.15	27	14.35	American	Ishman S. S. Lines	424.2	56.2	24.6	Hilo, T. H.	Boston, Mass.	Lumber, general	8,382	7,611
S-16 ¹⁶	27	7.15	27	15.25	27	15.25	American	U. S. Navy	231.0	20.0		Balboa, C. Z.	New Orleans, La.	Sugar	217	226
Nuevo Pana-ma ¹⁴	26	23.00	27	7.18	27	15.30	Panamanian	Hans Elliot	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee	6,500	5,419
Gerrude Kel-logg	27	9.15	27	10.21	27	18.45	American	Kellogg S. S. Corp.	391.9	51.2	25.3	Shanghai, China	New York, N. Y.	Sugar	8,000	6,715
Bronxville ¹⁴	27	8.10	27	10.21	27	18.55	Norwegian	Fern Line	386.3	54.2	25.0	Manila, P. I.	New York, N. Y.	War Dept. gen.	4,653	10,657
Grant ¹³	27	10.45	27	14.11	27	21.10	American	War Department	508.0	53.3	25.0	San Francisco, Cal.	New York, N. Y.	Frozen, general	9,400	7,817
Taini	27	23.20	28	6.14	28	14.10	British	Shaw, Savill & Albion	477.8	51.1	24.0	Auckland, N. Z.	Trieste, Italy	General	7,070	6,858
Rialto ¹⁴	27	16.30	28	7.17	28	15.35	Italian	Nav. Libera-Priestina	436.6	55.4	26.6	Vancouver, B. C.	Rotterdam, Holl'd	General	1,500	5,905
Taranger	28	9.00	28	9.52	28	17.20	Norwegian	Interocean Line	398.1	54.7	26.9	Vancouver, B. C.	Montreal, Canada	General	4,416	4,321
Canadian Scot-tish	28	15.25	28	16.25	29	11.45	British	Can. Nat. Steamships	399.2	52.2	17.0	Auckland, N. Z.	Hamburg, Germany	General	975	3,512
Jason	28	22.30	29	6.13	29	15.30	Dutch	Royal Neth. S. S. Co.	346.4	48.4	21.9	Corral, Chile	Bremen, Germany	Coffee, general	8,555	10,440
Attika	29	00.24	29	6.32	29	15.30	German	North German Lloyd	315.7	46.0	15.2	Pto. Angel, Mexico	Le Havre, France	General	1,142	1,632
Wyoming	29	5.30	29	7.21	29	16.55	German	French Line	470.3	61.2	26.0	Vancouver, B. C.	Colon, R. P.	Ballast	7,000	6,108
Durand	29	6.00	29	7.16	29	16.35	Panamanian	E. Garcia	61.0	15.4	5.6	Panama, R. P.	East coast, U. S. A.	General	1,500	5,905
Endurance ¹⁴	29	8.00	29	9.31	29	17.15	German	Hamburg-American Line	227.5	34.4	14.9	Guayaquil, Ecuador	Cristobal, C. Z.	General	1,500	5,905
Nordvard ¹⁴	29	8.20	29	9.42	29	18.50	Norwegian	Fern Line, Oslo	377.6	54.0	24.6	Manila, P. I.	East coast, U. S. A.	Sugar	1,500	5,905

Sollund.....	29	9	00	29	10	27	19	10	Norwegian.....	Panama Mail S. S. Co.	221	6	32	2	11	3	Acapulco, Guat.	Cristobal, C. Z.	General	2681	1,015	579		
Axel Johnson.....	29	12	05	29	12	55	29	20	35	30	5	05	Swedish.....	Johnson Line	332	9	32	6	25	2	Gothenburg, Sweden	6,403	6,642	4,860
West Nilus.....	29	13	20	29	14	06	29	22	25	29	22	25	American.....	McCormick S. S. Co.	410	5	34	3	22	0	Buenos Aires, Arg.	3,962	6,583	5,095

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS

* DEPARTURES

Date	Vessel	Line	From—	Date	Vessel	Line	For—
April 23	Nokomis	U. S. Navy	High seas	April 23	Metapan	United Fruit Co.	New York via waypoints
April 23	Dakarian	Leyland S. S. Line	Liverpool via waypoints	April 23	Colombia	Royal Netherlands S. S. Co.	Amsterdam via waypoints
April 23	No. 414-H ¹⁹	Pan American Airways	Pan Salvador via waypoints	April 23	Ancon	Panama R. R. S. S. Line	New York via Haiti
April 23	No. 19-V ¹⁹	Pan American-Grace Airways	Talara via waypoints	April 23	Pasos	Colombian Line	Barranquilla, Colombia
April 24	Camden	United Fruit Co.	Curacao via Almirante	April 24	No. 670-M ¹⁹	Pan American Airways	New York via waypoints
April 24	Peten	United Fruit Co.	Port Limon, Costa Rica	April 24	Dakarian	Leyland S. S. Line	Kingston, Jamaica
April 24	No. 145-M ¹⁹	Medellin & Cent. Airways	Medellin via waypoints	April 24	Nokomis	U. S. Navy	High seas
April 24	No. 670-M ¹⁹	Pan American Airways	Barranquilla, Colombia	April 24	Peten	United Fruit Co.	Talara via waypoints
April 24	No. 9688 ¹⁹	Pan American Airways	Guatemala via waypoints	April 25	No. 22-V ¹⁹	Pan American-Grace Airways	Curacao via Bocas
April 24	No. 9688 ¹⁹	Pan American Airways	New Orleans via Habana	April 25	Camden	Pan American Airways	San Salvador via waypoints
April 25	Pearl Marie ¹⁵	Colon, Rep. of Panama	Colon, Rep. of Panama	April 25	No. 414-H ¹⁹	G. I. Bryan	Bluefields, Nicaragua
April 25	Clondyke ²⁰	Colon, Rep. of Panama	Colon, Rep. of Panama	April 25	Pearl Marie ¹⁵	A. Tagaropolos	Colon, Rep. of Panama
April 25	Inapaguina ²¹	A. Tagaropolos	Colon, Rep. of Panama	April 25	Annetta I. ²¹	P. W. Hamilton	Colon, Rep. of Panama
April 25	Anachucuna ²¹	P. W. Hamilton	Colon, Rep. of Panama	April 25	Annetta I. ²¹	A. Tagaropolos	Colon, Rep. of Panama
April 25	Annetta I. ²¹	Hamburg via waypoints	Hamburg via waypoints	April 26	Clondyke ²⁰	M. Newball	San Andres, Colombia
April 26	Magdalena	Norfolk, Va.	Norfolk, Va.	April 26	Contessa	Standard Fruit & S. S. Co.	New Orleans via waypoints
April 26	Thomas P. Beal	Panama R. R. S. S. Line	Pan Salvador via waypoints	April 26	No. 19-V ¹⁹	Pan American-Grace Airways	Talara via waypoints
April 26	No. 414-H ¹⁹	Pan American Airways	New York, N. Y.	April 27	Magdalena	Hamburg-American Line	Livingston via waypoints
April 27	Quayquil	Panama R. R. S. S. Line	Buenaventura, Colombia	April 27	No. 145-M ¹⁹	Uraba, Medellin & Cent. Airways	Medellin, Colombia
April 27	No. 19-V ¹⁹	Pan American-Grace Airways	Haere via waypoints	April 27	No. 9688 ¹⁹	Pan American Airways	San Salvador via waypoints
April 27	Colombie	French Line	Miami via waypoints	April 27	No. 670-M ¹⁹	Pan American Airways	Miami via waypoints
April 27	No. 66-M ¹⁹	Pan American Airways	Galveston via waypoints	April 27	Colombie	French Line	Port Limon, Costa Rica
April 27	Velma Lykes	Lykes Brothers S. S. Co.	New Orleans via waypoints	April 27	Velma Lykes	Lykes Brothers S. S. Co.	Jacmel via waypoints
April 28	Veragua	United Fruit Co.	New York via waypoints	April 28	Thomas P. Beal	Panama R. R. S. S. Line	Buenaventura, Colombia
April 28	No. 18-V ¹⁹	Pan American-Grace Airways	Buenaventura, Colombia	April 28	Veragua	United Fruit Co.	Port Arthur, Tex.
April 28	No. 145-M ¹⁹	Medellin & Cent. Airways	Medellin, Colombia	April 28	Thomas P. Beal	United Fruit Co.	Port Limon, Costa Rica
April 29	Colombie	French Line	Port Limon, Costa Rica	April 29	Tivives	Colombie	Haere via waypoints
April 29	Santa Maria	Colombian Line	New York via waypoints	April 29	No. 414-H ¹⁹	United Fruit Co.	New Orleans via waypoints
April 29		United Fruit Co.	New York via waypoints	April 29	No. 145-M ¹⁹	Pan American Airways	San Salvador via waypoints
April 29				April 29	No. 145-M ¹⁹	Uraba, Medellin & Cent. Airways	Medellin via waypoints

PORT OF BALBOA

April 23	Antigua	United Fruit Co.	San Francisco, Calif.	April 23	Antigua	United Fruit Co.	San Francisco, Calif.
April 25	Sambu ¹⁵	Haus Elliot	Los Angeles, Calif.	April 24	Costa Rica II ¹⁴	Frank Gargas	Los Angeles, Calif.
April 29	Acalin ¹⁴	Frank Acalin	Los Angeles, Calif.	April 25	Sambu ¹⁵	Haus Elliot	Panama Bay, R. P.
				April 26	Point Reyes	McCormick S. S. Co.	San Francisco, Calif.

¹ Tanker. ²³ Destroyer. ¹⁴ Motor ship. ¹⁶ Submarine. ¹⁷ Transport. ¹⁸ Coconut and wood oil. ¹⁹ Air mail carrier.

²⁰ Schooner. ²¹ Motor boat. ²² Other than ships passing through the Canal.

Charges for Services of Customs Inspectors Outside of Regular Hours

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,

BALBOA HEIGHTS, C. Z., April 25, 1933.

To all concerned:

1. The Comptroller General's decision No. A-48294 of April 11, 1933, addressed to the Secretary of Labor, has just been received.

2. This decision has been interpreted to affect the Panama Canal service to the extent of reducing the amount to be paid to Customs and Quarantine Inspectors for services outside of regular hours, by 15 percent. The decision states in part:

* * * effective April 1, 1933, all compensation paid for overtime services constitutes a part of "compensation" as defined in Section 1, Title II, of the Act, and is subject to 15 percent reduction under the terms of Sections 2 and 3 of the Act, and Executive Order of March 28, 1933, issued pursuant thereto.

Also:

* * * Since the overtime services * * * are rendered "in or under" a "branch or service of the United States Government" it must be held that this overtime compensation fixed pursuant to said statute as of March 31, 1933, is subject to 15 percent reduction beginning April 1, 1933, such saving not to be impounded in the Federal Treasury but to inure to the benefit of the master, owner, agent, or consignee of the vessel or other conveyance who is required by Section 2 of the Act of March 2, 1931, to pay such overtime compensation.

3. It is therefore directed that those persons authorized to render accounts against vessels in accordance with paragraph 2, Item 17, page 27, and the last paragraph of Item 14, page 26, of Tariff No. 11, shall do so for an amount equal to the tariff rate minus 15 percent only.

4. It is further directed that where vessels have already been charged full tariff rates for this overtime service during the month of April 1933, a refund to them of 15 percent shall be made.

J. L. SCHLEY,

Governor.

Passengers of Restricted Immigration Classes

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,

BALBOA HEIGHTS, C. Z., April 26, 1933.

To all concerned:

American citizens of the races whose immigration is restricted by the immigration laws of the Republic of Panama will be allowed temporary entry into the Canal Zone if not otherwise classified as undesirable, under the following conditions:

I. *Transit passengers*.—That such a person (Chinese excepted) is in transit by way of the Canal Zone and that he arrives and expects to depart from the Canal Zone on the same voyage of the vessel; provided further that he is a bona fide member of the crew of the vessel, or, if a passenger, that he has a through ticket to a designated port of call of the vessel.

II. *Transient passengers*.—That such a passenger arrives at a Canal Zone port for subsequent departure by a different vessel, and complies with the following—

(a) That he has a prepaid ticket to a stated destination by a designated vessel, or makes immediate purchase of transportation for such a vessel;

(b) That he surrender his transportation and passport, or other identification papers, to the quarantine officer pending departure of the vessel;

(c) That he agrees in writing to the quarantine officer not to enter the Republic of Panama during the period while awaiting outward transportation;

(d) That he has ample funds for his maintenance while in the Canal Zone, or makes deposit of a cash bond in an amount to be determined by the quarantine officer if it is felt that such procedure is justified.

III. All such passengers who may be given temporary permission to enter the Canal Zone shall be warned that they must remain in the Canal Zone pending departure and that illegal entry into the Republic of Panama will subject them to arrest and detention.

J. L. SCHLEY,

Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending April 29, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
Ancon.....	Panama R. R. S. S. Line.....		April 23		772
Pastores.....	United Fruit Co.....		April 23		1,044
Metapan.....	United Fruit Co.....		April 23		168
Colombia.....	Royal Netherlands S. S. Co.....		April 23		418
Pacific Trader.....	Furness, Withy & Co.....		April 23		94
Hollywood.....	McCormick S. S. Line.....	April 23	April 23	7	(²)
Panamam.....	American-Hawaiian Line.....	April 23	April 23	(¹)	105
Dakarian.....	Leyland S. S. Line.....	April 23	April 24	248	(²)
Manizales.....	Grace Line.....	April 23	April 24	875	111
Tai Ping.....	Barber S. S. Line.....	April 24	April 24	373	(²)
Tacoma.....	Hamburg-American Line.....	April 24	April 24	86	219
Canadian Victor.....	Canadian National Steamships.....	April 24	April 24	10	(²)
Camden.....	United Fruit Co.....	April 24	April 25	6,487	(²)
Santa Rosa.....	Panama Mail S. S. Co.....	April 24	April 25	199	12
Alabama.....	French Line.....	April 24	April 25	172	(¹)
Peten.....	United Fruit Co.....	April 24	April 24	25	56
Calif.....	North German Lloyd.....		April 25		267
Fella.....	Navigazione Libera-Triestina.....	April 25	April 25	55	(²)
Pearl Marie.....	R. Feuillebois.....	April 25	April 25	(¹)	14
Contessa.....	Standard Fruit & S. S. Co.....	April 25	April 26	239	567
Acajutla.....	Pacific Steam Navigation Co.....	April 25	April 29	420	908
Canadian Constructor.....	Canadian National Steamships.....	April 26	April 26	37	698
Magdalena.....	Hamburg-American Line.....	April 26	April 26	223	27½
India.....	Danish East Asiatic Line.....	April 26	April 26	(¹)	52
Santa Maria.....	Grace Line.....	April 26	April 26	366	269
Lochkatrine.....	Royal Mail Lines, Ltd.....	April 26	April 27	28	74
Thomas P. Beal.....	Panama R. R. S. S. Line.....	April 26	April 28	9,255	(²)
Guayaquil.....	Panama R. R. S. S. Line.....	April 27		1,044	(²)
Delftdijk.....	Holland-America Line.....	April 27	April 27	276	123
Santa Cecilia.....	Panama Mail S. S. Co.....	April 27	April 27	48	309
Isis.....	Hamburg-American Line.....	April 27	April 27	42	302
Colombie.....	French Line.....	April 27	April 27	80	(²)
Velma Lykes.....	Lykes Brothers S. S. Co.....	April 27	April 28	336	123
Nuevo Panama.....	Hans Elliot.....	April 27	April 28	249	52
Santa Clara.....	Grace Line.....	April 27	April 27	110	386
Veragua.....	United Fruit Co.....	April 28	April 28	326	18
Rialto.....	Navigazione Libera-Triestina.....	April 28	April 28	(¹)	324
Tivives.....	United Fruit Co.....	April 28	April 29	489	523
Wisconsin.....	French Line.....	April 28	April 29	93	2
Virgilio.....	Italian Line.....	April 29	April 29	118	(²)
Canadian Scottish.....	Canadian National Steamships.....	April 29	April 29	12	(²)
Reina del Pacifico.....	Pacific Steam Navigation Co.....	April 29		59	
Colombie.....	French Line.....	April 29	April 29	½	104½
Sollund.....	Panama Mail S. S. Co.....	April 29		307	
Marie Bakke.....	Knute Knutsen.....	April 29	April 29	14	72
Granville.....	Fred Olsen & Co.....	April 29		263	
Jason.....	Royal Netherlands S. S. Co.....	April 29		603	
Durazzo.....	Hamburg-American Line.....	April 29		1,260	
Attika.....	North German Lloyd.....	April 29	April 29	18	95
Kyphissia.....	Hamburg-American Line.....	April 29		83½	
Wyoming.....	French Line.....	April 29		286	
Colombia.....	Colombian S. S. Line.....	April 29		150	
Santa Marta.....	United Fruit Co.....	April 29		437	

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C. Z., for Week Ending April 29, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
Santa Lucia.....	Panama Mail S. S. Co.....	April 22	April 22	Tons 135	Tons 36
Antigua.....	United Fruit Co.....	April 23	April 23	168	36
Santa Rosa.....	Grace Line.....	April 24	April 24	64	
Tai Ping.....	Barber S. S. Line.....	April 24	April 24	130	
Mariquita.....	Caribbean Petroleum Co.....	April 24	April 26	2,063	
Republic.....	U. S. Government.....	April 25	April 25	315	32
Santa Maria.....	Grace Line.....	April 26	April 26	45	
Santa Cecilia.....	Grace Line.....	April 27	April 27	27	33
Santa Clara.....	Grace Line.....	April 27	April 28	157	25
U. S. Grant.....	U. S. Government.....	April 27	April 27	1	6
President Adams.....	Dollar Line.....	April 28	April 28	193	
Marie Bakke.....	Knute Knutsen.....	April 29	April 29		462
Reina del Pacifico.....	Pacific Steam Navigation Co.....	April 30	April 30		193

Prices of Miscellaneous Supplies at Panama Canal Storehouses

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective May 2, 1933:

Commodities	Unit	Price
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, gun and ice machine.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.31
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Provisions Required by Ships

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

Coal

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Publication of Notices and Circulars of Interest to Shipping

All of the Panama Canal notices to mariners, notices to steamship lines and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

Hours of Departure of Passenger Trains

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sundays and holidays, 9.25 a. m., 12.30 p. m., 4.40 p. m.; Sundays and holidays, 9.25 a. m., 4.00 p. m.

From Panama: Daily except Sundays and holidays, 7.05 a. m., 12.35 p. m., 4.45 p. m.; Sundays and holidays, 7.05 a. m., 6.05 p. m.

The time required for passage from one terminal to the other is 1 hour and 35 minutes.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., May 10, 1933.

No. 41.

Traffic by Nationality for April 1933

The following tabulation shows the commercial traffic through the Canal during the month of April 1933, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for April 1932 and 1931:

ATLANTIC TO PACIFIC.

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
British.....	41	245,574	174,260	286,662	175,567	\$197,535.08	70,302
Chilean.....	1	3,465	2,713	4,553	2,755	2,494.80	.....
Danish.....	7	30,954	18,973	32,534	20,053	23,563.82	9,248
Danzig.....	2	14,484	12,132	21,398	12,138	12,352.12	12,011
Dutch.....	2	14,284	9,328	15,761	9,721	11,660.00	4,250
French.....	4	23,021	13,979	26,898	14,758	17,473.75	3,442
German.....	13	38,570	25,443	43,882	26,061	31,803.75	14,872
Italian.....	2	15,372	8,845	17,790	10,498	11,056.25	2,792
Japanese.....	8	45,601	37,305	58,525	37,005	46,631.25	49,853
Norwegian.....	17	74,788	48,055	80,787	48,021	55,452.82	46,794
Panamanian.....	17	13,775	7,813	13,580	7,738	9,614.54	3,227
Swedish.....	2	10,452	6,320	10,514	7,890	7,900.00	10,390
United States.....	70	397,041	282,318	468,081	281,834	331,457.71	167,805
Venezuelan.....	2	1,825	1,686	3,173	2,356	2,107.50	3,110
Total, April 1933.....	188	929,236	649,170	1,084,138	656,395	761,103.39	398,096
Total, April 1932.....	193	973,522	709,349	1,195,467	714,343	816,868.45	378,606
Total, April 1931.....	235	1,185,143	868,561	1,451,908	880,283	994,696.30	553,609

PACIFIC TO ATLANTIC.

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,708.75	10,440
British.....	36	203,493	138,627	246,530	147,786	175,848.75	231,963
Danish.....	5	20,526	13,727	22,531	13,968	17,158.75	31,826
Danzig.....	4	30,854	26,089	45,866	26,085	32,611.25	59,951
Dutch.....	4	22,733	15,566	25,337	15,673	19,457.50	25,814
French.....	4	25,366	15,922	28,420	16,614	19,902.50	27,457
German.....	15	43,719	28,038	48,709	28,787	35,047.50	50,719
Italian.....	2	15,385	8,899	17,762	10,547	11,123.75	12,417
Japanese.....	7	37,635	30,303	48,145	29,817	37,878.75	43,845
Norwegian.....	16	78,328	49,110	82,786	49,753	61,387.50	113,809
Panamanian.....	16	763	771	1,356	795	912.75	1,198
Swedish.....	2	10,521	6,187	10,602	7,985	7,733.75	15,221
United States.....	67	406,961	290,369	481,318	289,881	362,961.25	495,802
Yugoslav.....	1	5,208	3,280	5,283	3,292	4,100.00	9,420
Venezuelan.....	2	1,825	1,686	3,191	2,765	1,314.00	.....
Total, April 1933.....	182	910,361	633,141	1,075,053	648,146	793,146.75	1,129,882
Total, April 1932.....	177	890,170	635,553	1,084,703	649,745	791,766.22	1,065,125
Total, April 1931.....	218	1,107,662	817,962	1,362,440	831,310	1,019,652.83	1,457,508

* Includes naval vessel of 5,130 tons displacement (tolls \$2,565) in transits and tolls, but not in tonnage.

COMBINED TRAFFIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Belgian.....	1	7,044	4,567	7,217	4,398	\$5,708.75	10,440
British.....	* 77	449,067	312,887	533,192	323,353	373,383.83	302,265
Chilean.....	1	3,465	2,713	4,553	2,755	2,494.80	.....
Danish.....	12	51,510	32,700	55,065	34,021	40,722.57	41,074
Danzig.....	6	45,338	38,221	67,264	38,223	44,963.37	71,962
Dutch.....	6	37,017	24,894	41,098	25,394	31,117.50	30,064
French.....	8	48,387	29,901	55,318	31,372	37,376.25	30,899
German.....	28	82,289	53,481	92,591	54,848	66,851.25	65,691
Italian.....	4	30,757	17,744	35,552	21,045	22,180.00	15,209
Japanese.....	15	83,236	67,608	106,670	66,822	84,510.00	93,698
Norwegian.....	33	153,116	97,165	163,573	97,774	116,840.32	160,603
Panamanian.....	33	14,538	8,584	14,936	8,533	10,527.29	4,425
Swedish.....	4	20,973	12,507	21,116	15,875	15,633.75	25,611
United States.....	137	804,002	572,687	949,399	571,715	694,418.96	663,607
Yugoslav.....	1	5,208	3,280	5,283	3,292	4,100.00	9,420
Venezuelan.....	4	3,650	3,372	6,364	5,121	3,421.50	3,110
Total, April 1933.....	370	1,839,597	1,282,311	2,159,191	1,304,541	1,554,250.14	1,527,978
Total, April 1932.....	370	1,863,692	1,344,902	2,280,170	1,364,088	1,608,634.67	1,443,731
Total, April 1931.....	453	2,292,805	1,686,523	2,814,348	1,711,593	2,014,349.13	2,011,117

* Includes naval vessel of 5,130 tons displacement (tolls \$2,565) in transits and tolls, but not in tonnage.

Notices to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., May 6, 1933.

No. 55.

Panama Canal, Galun Lake section, whistle sign discontinued.—The northbound whistle sign on the east bank of the Canal just north of Juan Grande P. I. (about 1½ miles east of Darien Radio Station) was permanently discontinued on May 5, 1933.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., May 6, 1933.

No. 56.

Panama Canal, Pacific approach, aids to navigation.—Gas buoy No. FB, on east prism line, south of ferry slip, Balboa Harbor, which was temporarily moved April 13, 1933 (see Notice to Mariners No. 46, Balboa Heights, C. Z.) has been replaced in position, effective May 2, 1933.

J. L. SCHLEY,
Governor.

Tanker Traffic Through the Panama Canal in April 1933

During the month of April 1933, 48 tank ships transited the Canal, with an aggregate net tonnage (Panama Canal measurement), of 268,177, on which tolls of \$244,635.98 were paid. Cargo amounted to 293,838 tons, comprised of 287,188 tons of mineral oils and 6,650 tons of vegetable oils.

In point of net tonnage, tanker traffic decreased 31,040 tons, or 10.4 percent, while cargo tonnage made a gain of 49,127 tons, or 20.1 percent.

Tank ships comprised 13.0 percent of the total commercial transits through the Canal during April 1933; made up 14.6 percent of the total Panama Canal net tonnage; were the source of 15.7 percent of the total tolls collected; and carried 19.2 percent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of April 1933, segregated by direction of transits and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for April 1932:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>Atlantic to Pacific</i>				
British.....	4	26,497	\$19,077.84	.....
Danzig.....	2	14,484	12,352.12	12,011
Norwegian.....	3	14,962	12,270.57	8,193
United States.....	12	72,078	55,565.20	6,930
Venezuelan.....	2	1,825	2,107.50	3,110
Total, April 1933.....	23	129,846	101,873.23	30,244
Total, March 1933.....	27	163,484	126,085.35	44,496
Total, February 1933.....	25	147,021	108,673.97	7,046
Total, April 1932.....	27	169,732	123,833.92	7,521
<i>Pacific to Atlantic</i>				
British.....	2	9,121	9,876.25	18,233
Danzig.....	4	30,854	32,611.25	59,951
Norwegian.....	2	11,971	12,562.50	23,235
United States.....	15	84,560	86,898.75	162,175
Venezuelan.....	2	1,825	1,314.00	.....
Total, April 1933.....	25	138,331	143,262.75	263,594
Total, March 1933.....	24	137,794	141,886.25	264,306
Total, February 1933.....	27	162,694	166,279.45	305,446
Total, April 1932.....	22	129,485	134,602.03	237,190

¹ Includes 6,650 tons vegetable oils.

The following tabulation shows the tanker traffic through the Canal during April 1933, classified according to trade route:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>Atlantic to Pacific</i>				
United States intercoastal.....	10	58,028	\$43,534.52	1,170
United States to South America.....	1	5,049	3,635.28	.....
United States to Australasia.....	1	4,331	4,616.25	8,193
Mexican intercoastal.....	1	5,431	5,825.00	5,760
South American intercoastal.....	1	6,363	6,505.00	12,011
South America to Balboa.....	1	1,101	1,312.50	2,063
West Indies to South America.....	1	724	795.00	1,047
Europe to United States.....	5	34,144	24,583.68	.....
Europe to South America.....	2	14,675	10,566.00	.....
<i>Pacific to Atlantic</i>				
United States intercoastal.....	14	80,773	82,973.75	155,525
United States to Europe.....	2	9,560	10,197.50	17,862
South America to United States.....	1	5,049	5,493.75	10,434
South American intercoastal.....	1	724	521.28	.....
South America to Europe.....	5	37,337	39,355.75	73,123
Balboa to South America.....	1	1,101	792.72	.....
Philippine Islands to United States.....	1	3,787	3,925.00	² 6,650

² Vegetable oils.

Of the tanker traffic through the Canal in April 1933, the following is a summary of the vessels giving Los Angeles as their port of origin or destination, together with the totals for the two preceding months and for April 1932:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>To Los Angeles</i>				
April 1933.....	11	71,697	\$51,621.84	.....
March 1933.....	11	68,785	50,942.92	7,147
February 1933.....	15	87,125	64,355.79	5,946
April 1932.....	14	85,801	63,194.43	7,521
<i>From Los Angeles</i>				
April 1933.....	14	80,103	82,252.50	152,219
March 1933.....	13	74,878	76,745.00	144,844
February 1933.....	13	79,789	80,608.75	151,236
April 1932.....	9	57,078	58,383.75	108,545

MOVEMENTS OF OCEAN VESSELS Week ending at midnight, May 6, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Reina del Pacifico ¹	29	20 45	30	6 00	30	15 02	British	Pacific Steam Nav. Co.	550.0	76.3	27.8	Liverpool, England	Talcahuano, Chile.	General	1,583	18,871	13,099
Granville ²	29	13 30	30	6 50	30	16 38	Panamanian	Fred Olsen Line	426.0	58.3	18.3	Oslo, Norway	Vancouver, B. C.	Cement, general	1,410	8,388	6,005
Florence	29	20 40	30	8 20	30	17 56	American	Luckenbach Gulf Co.	401.8	52.0	23.9	Houston, Tex.	Seattle, Wash.	General	5,013	6,002	4,621
Constance	30	4 20	30	8 25	30	19 28	American	Arrow Line	409.6	54.2	19.0	Baltimore, Md.	Seattle, Wash.	General	2,734	6,989	4,891
Aldington	30	5 40	30	9 40	30	20 30	British	Canadian Transp. Co.	405.6	55.6	22.5	Bristol, England	Vancouver, B. C.	Sugar	7,000	6,989	5,251
Georgian	30	5 45	30	9 55	30	21 37	American	Williams S. S. Line	434.3	57.7	17.7	Baltimore, Md.	Seattle, Wash.	Coal, general	2,040	7,980	5,945
Kyphasia	29	16 30	30	11 10	30	22 15	German	Hamburg-American Line	337.3	48.2	15.1	Hamburg, Germany	Champerico, Guat.	General	1,091	4,112	2,931
San Bernardino	30	12 40	30	15 00	30	23 07	American	Quaker S. S. Line	410.6	54.0	17.1	New York, N. Y.	Seattle, Wash.	General	2,630	6,755	4,873
Swan ³	30	15 00	30	6 15	30	14 35	American	U. S. Navy	180.0	33.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Vancouver	30	15 00	1	6 14	1	14 10	German	Hamburg-American Line	477.7	63.0	21.9	Hamburg, Germany	Vancouver, B. C.	General	1,824	10,267	7,252
Brandanger ²	30	18 15	1	7 15	1	15 04	Norwegian	General S. S. Corp.	381.6	53.6	14.7	Buenos Aires, Arg.	Vancouver, B. C.	General	1,595	6,289	4,732
Athletempus ²	1	00 05	1	8 20	1	16 08	British	United Molasses Co.	475.0	63.3	18.7	Cardiff, Wales	Los Angeles, Calif.	Ballast		9,581	6,497
Northumberland	1	6 00	1	8 25	1	19 09	British	N. Z. Shipping Co.	530.5	63.5	27.0	Newport, England	Pt. Chalmers, N. Z.	General	5,730	13,268	9,124
SouthernSun ¹	1	7 30	1	9 20	1	20 01	American	Sun Oil Co.	480.5	66.0	21.0	Chester, Pa.	Los Angeles, Calif.	Ballast		9,716	6,544
Durazzo	29	17 15	1	12 35	1	20 54	German	Hamburg-American Line	226.0	34.0	13.7	Cristobal, C. Z.	Buenaventura, Col.	General	530	1,633	1,041
Breckenridge ⁴			1		1	8 29	American	U. S. Army	40.0	10.6		Cristobal, C. Z.	Gatun, C. Z.	Ballast			
Sydney M.	1	20 10	2	6 05	2	14 58	American	McCormick S. S. Co.	401.4	53.2	16.7	Albany, N. Y.	Tacoma, Wash.	Steel, general	1,429	7,082	5,167
Nurturton	1	21 10	2	7 05	2	16 45	British	R. Chapman & Sons	423.0	58.0	17.6	Pto. Ferrão, Italy	Vancouver, B. C.	Ballast		6,854	4,746
Ohioan	2	5 35	2	8 25	2	17 53	American	Amer-Hawaiian Line	407.7	53.7	20.1	Boston, Mass.	Seattle, Wash.	General	1,664	7,087	5,019
Acacia ⁵	2	7 45	2	8 25	2	17 33	American	U. S. Government	172.0	32.0	13.0	San Juan, P. R.	Balboa, C. Z.	Ballast			
Victoria Maru	2	7 20	2	9 30	2	18 44	Japanese	Kokusai Kisen Kaisha	385.0	51.0	23.1	New York, N. Y.	Yawata, Japan	(*)	5,827	6,250	4,700
Lt. Col. H. C. Schumann ⁶			2	6 20	2	14 50	American	U. S. Army	98.0	22.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Breckenridge ⁴			2	8 19			American	U. S. Army	40.0	10.6		Cristobal, C. Z.	Balboa, C. Z.	Ballast			
Athelprincess ²	2	17 25	3	6 10	3	13 49	British	United Molasses Co.	475.0	63.2	22.0	Grangemouth, Eng.	Talara, Peru	Ballast			
Taira ⁷	3	17 20	3	6 20	3	15 15	Panamanian	Hans Eliot	64.2	25.3		Cristobal, C. Z.	Balboa, C. Z.	Ballast	78		49
Graia	3	4 00	3	6 20	3	16 25	Panamanian	Donaldson Brothers	415.5	54.3	20.11	Glasgow, Scotland	Vancouver, B. C.	General	1,208	6,839	4,842
Hoysan Maru	3	10 55	3	11 00	3	18 36	Japanese	Mitsui & Co.	407.0	50.0	26.6	Yokohama, Japan	Yawata, Japan	Cotton, rosin	7,430	6,488	4,786
El Aleo ⁸	3	12 37	3	12 45	3	19 55	British	Anglo-Ecuador. Oil Co.	440.0	57.6	22.0	Philadelphia, Pa.	La Libertad, Ecua.	Ballast		7,555	5,049
Real ⁹	3	16 35	3	14 20	3	21 15	Panamanian	Hans Eliot	62.0	17.0		Cristobal, C. Z.	Balboa, C. Z.	Ballast		46	22
Herborg ²	3	19 45	4	6 15	4	15 55	Norwegian	Anglo-Saxon Pet. Co.	457.2	59.7	18.6	Falmouth, Eng.	Los Angeles, Calif.	Ballast		8,214	5,719

Robert Luckenbach ¹	4	5	35	4	7	15	4	15	44	4	17	05	American	Luckenbach Line	445.0	58.0	19.9	Boston, Mass	Tacoma, Wash.	General	3,336	8,695	6,375
Lt. Col. H. C. Schumir ⁶													American	U. S. Army	98.0	22.0		Cristobal, C. Z.	Gatun, C. Z.	(*)			
Grant	4	14	35	5	5	55	5	13	46	5	21	50	American	Dollar Line	517.0	72.2	26.8	New York, N. Y.	San Francisco, Cal.	(*)	1,762	15,234	10,470
California	5	4	55	5	7	00	5	15	31	6	00	35	American	Panama-Pacific Line	574.4	80.3	27.1	New York, N. Y.	San Francisco, Cal.	General	2,303	24,506	17,563
Tamara	5	5	40	5	8	20	5	17	07	6	1	35	British	Shaw, Savill & Albion	500.4	63.0	27.1	London, England	Lytelton, N. Z.	General	3,280	13,992	9,353
Makiki	4	22	20	5	9	05	5	18	25	5	19	45	American	Isthmian S. S. Lines	402.0	54.2	18.6	New York, N. Y.	Los Angeles, Calif.	General	2,053	6,926	5,003
Cheshire																							
Maersk ²	5	2	45	5	9	45	5	19	16	5	20	30	Danish	Intern'l Freighting Co.	378.2	50.2	13.0	New York, N. Y.	Liquine, Chile	Ballast	5,526		4,066
City of Tokio	5	6	50	5	11	20	5	20	15	5	21	50	British	Ellerman & Bucknall	442.5	59.0	26.0	Philadelphia, Pa.	Sydney, Australia	Flour, general	5,185	9,085	6,933
Tiradentes ²	5	13	00	5	13	05	5	21	10	5	22	50	Norwegian	Intern'l Freighting Co.	401.0	54.0	27.0	Baltimore, Md	Liquine, Chile	Ballast	6,594	4,956	
Santa Paula	5	12	55	6	6	10	6	14	19	6	21	47	American	Panama Mail S. S. Co.	484.0	72.0	24.5	New York, N. Y.	Seattle, Wash.	Coffee, general	3,043	13,948	9,217
Julia Luckenbach	5	21	30	6	7	10	6	16	12	6	17	30	American	Luckenbach Line	436.0	57.3	18.0	Boston, Mass	Los Angeles, Calif.	Ballast			
Nassau Maru	6	3	30	6	8	25	6	17	31	6	18	30	Japanese	Mitsui & Co.	361.5	50.0	14.4	Baltimore, Md	Seattle, Wash.	Ballast	4,551		3,207
R. J. Hanna	6	3	44	6	8	30	6	18	21	6	19	30	American	Standard Oil Co.	435.0	56.2	19.9	New York, N. Y.	Los Angeles, Calif.	Ballast	7,039	5,135	
American	6	8	40	6	9	50	6	19	30	6	20	45	American	Amer-Hawaiian Line	404.6	53.9	18.0	Boston, Mass	Portland, Ore.	General	1,748	6,768	4,743
Sollund	29	19	10	6	12	25	6	20	17	6	21	57	Norwegian	Panama Mail S. S. Co.	321.6	32.2	11.6	Cristobal, C. Z.	Acajutla, Salvador	General	500	1,015	579
Mercury Sun ²	6	14	50	6	14	55	6	22	32	6	24	00	Norwegian	Shell Oil Co.	480.5	66.0	21.0	Baltimore, Md	Los Angeles, Calif.	Ballast	9,713		6,627
Saugstad	6	15	30	6	15	35	6	23	30	7	1	02	Norwegian	Fearnley & Eger	382.7	53.4	25.0	Pt. Arthur, Tex.	Yokohama, Japan	Scrap iron	7,093	6,100	4,240
Launch													American	U. S. Navy				Cristobal, C. Z.	Gatun, C. Z.	Ballast			

THROUGH THE CANAL—PACIFIC TO ATLANTIC

Amberton	30	00	05	30	6	15	30	14	15	30	14	15	British	R. Chapman & Son	409.6	54.0	25.0	Vancouver, B. C.	Avonmouth, Eng.	Grain	8,360	5,756	4,139
Oilerance ²	29	16	45	30	7	10	30	15	00	30	15	00	British	Barring Hardy & Co.	410.0	53.5	27.0	Los Angeles, Calif.	Lands End, Eng.	Gasoline	7,799	5,987	4,072
Peter Kerr	30	6	30	30	8	25	30	16	15	30	16	15	American	Quaker Line	415.0	55.7	25.0	Portland, Ore.	Baltimore, Md	Lumber, general	7,810	7,704	5,696
Lica Maersk	30	9	30	30	10	25	30	17	55	30	17	55	Danish	A. P. Moller	299.8	42.6	21.0	Portland, Mex.	Greenock, Scotland	Sugar	3,880	3,361	2,562
Dakota	30	10	10	30	11	00	30	19	20	30	19	20	American	Amer-Hawaiian Line	407.7	53.7	27.0	Seattle, Wash.	Boston, Mass	General	6,608	7,158	5,066
President																							
Jackson	30	12	10	30	12	57	30	21	10	1	4	15	American	Dollar Line	517.0	72.2	29.0	San Francisco, Cal.	New York, N. Y.	General	5,939	15,296	10,427
California																							
Standard ²	30	23	02	1	6	21	1	14	55	1	14	55	American	Standard Oil Co., Calif.	513.5	68.2	30.0	Los Angeles, Calif.	United Kingdom	Gasoline	15,280	11,719	8,619
Oakworth	1	8	40	1	9	38	1	17	10	1	17	10	British	Canadian Transp. Co.	400.1	53.2	26.0	Vancouver, B. C.	Montreal, Canada	Lumber, general	5,915	5,615	3,757
Cadillac	1	13	40	1	10	16	1	21	50	1	22	00	British	Anglo-American Oil Co.	530.2	66.3	30.4	Los Angeles, Calif.	London, England	Gasoline	15,216	12,092	8,508
Lisbon Maru	1	13	40	1	10	16	1	21	50	1	22	00	Japanese	Nippon Yusen Kaisha	445.0	62.0	27.0	Manila, P. I.	New York, N. Y.	Sugar, general	8,769	8,015	5,849
Oreona	2	20	45	2	6	28	2	14	15	2	15	15	British	Pacific Steam Nav. Co.	511.6	62.2	29.0	Talcahuano, Chile	Liverpool, England	General	6,575	12,417	8,305
Point Calera	2	20	45	2	7	12	2	15	15	2	15	15	American	Gulf-Pacific Line	386.8	52.2	24.0	Portland, Ore.	Tampa, Fla.	General	5,772	5,708	4,131
John Maersk	2	5	30	2	8	18	2	16	55	2	18	20	Danish	Bea & Gaggero	284.9	42.4	19.0	Antofagasta, Chile	Jacksonville, Fla.	Guano	3,125		
F. J. Luckenbach	2	6	30	2	9	05	2	17	20	2	17	20	American	Luckenbach Line	446.0	56.1	30.0	Seattle, Wash.	Boston, Mass	Lumber, general	7,467	8,508	6,179
Thorsholm ²	2	7	00	2	9	27	2	18	15	2	18	15	Norwegian	Thor Dall	435.3	62.7	28.0	Estero Bay, Calif.	Cette, France	Crude oil	10,679	7,188	4,594
Real ²	2	7	00	2	8	47	2	16	35	3	14	20	Panamanian	Hans Elliot	62.2	17.1	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas	40	46	22
Tura ²	2	2	2	2	8	50	2	17	25	3	6	20	Panamanian	Hans Elliot	64.0	20.0	6.0	Darien, R. P.	Cristobal, C. Z.	Bananas	53	78	49
Rangtane ²	1	22	00	2	12	10	2	19	15	2	19	15	British	N. Z. Shipping Co.	531.0	70.2	29.3	Auckland, N. Z.	London, England	Frozen, general	6,479	18,205	13,494
Nuevo Panama ²	2	22	25	3	6	07	3	15	15	3	22	55	Panamanian	Hans Elliot	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C. Z.	Coffee, general	209	226	101

* Scrap steel and cottonseed oil.

† Motor schooner.

‡ Lighthouse tender.

§ Launch.

|| Mine sweeper.

||| Machinery and automobiles.

|||| For orders.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Missourian ¹²	3	1.00	3	7.20	3	15.10	3	15.10	American...	Amer-Hawaiian Line...	445.1	59.8	28.0	Seattle, Wash.	Boston, Mass.	Lumber, general.	8,327	.....	.....
E. T. Bradford ¹	3	6.45	3	7.55	3	16.20	3	16.20	American...	Standard Shipping Co.	499.2	68.1	30.0	Talara, Peru	Montreal, Canada.	Crude oil	16,000	.....	.....
Lt. Col. H. C. Schumm ¹³	2	14.50	3	11.35	3	17.15	4	7.30	American...	U. S. Army	182.0	17.0	15.0	Balboa, C. Z.	Cristobal, C. Z.	.....	.....	.....	.....
R-1 ²⁴	1	9.30	3	13.37	3	21.40	3	23.15	Peruvian...	Peruvian Navy	182.0	17.0	15.0	Talara, Peru	Atlantic Ocean	.....	.....	.....	.....
R-4 ²⁴	1	9.30	3	13.37	3	21.40	3	23.15	Peruvian...	Peruvian Navy	182.0	17.0	15.0	Talara, Peru	Atlantic Ocean	.....	.....	.....	.....
Almirante Grau ¹⁵	1	9.30	3	14.05	3	21.35	3	23.15	Peruvian...	Peruvian Navy	370.0	24.0	14.4	Talara, Peru	Atlantic Ocean	.....	.....	.....	.....
Donau	3	22.50	4	6.14	4	14.40	5	12.00	German...	North German Lloyd	520.8	63.6	28.0	Vancouver, B. C.	Bremen, Germany	General	9,690	11,007	6,998
Moldague ¹²	4	1.30	4	7.18	4	14.55	4	14.55	Norwegian...	Intercean Line	464.4	61.2	28.0	N. Westster, B. C.	Rotterdam, Holland	General	8,500	9,344	6,977
Warkworth	4	5.30	4	8.17	4	16.25	4	16.25	British...	Canadian Transp. Co.	401.4	53.2	23.0	Vancouver, B. C.	Leith, Scotland	General	7,217	5,578	3,685
Brabantia ¹²	4	12.00	4	12.49	5	12.55	5	12.55	Norwegian...	Anglo Saxon Pet. Co.	451.1	59.2	27.0	San Francisco, Cal.	Lands End, Eng.	Benzine	10,663	8,333	5,737
Santa Elisa	4	4.33	4	13.27	4	21.05	5	11.40	American...	Grace Line	300.3	51.7	23.0	San Francisco, Cal.	New York, N. Y.	General	2,366	3,957	4,325
Katsuragi Maru ¹²	5	1.30	5	6.12	5	14.35	5	19.05	Japanese...	Kokusai Kisen Kaisha	443.6	60.0	26.0	Manila, P. I.	New York, N. Y.	General	8,515	8,820	6,408
Mamari	5	0.40	5	7.30	5	15.50	5	15.50	British...	Shaw, Savill & Albion	493.6	62.9	25.0	Nelson, N. Z.	London, England	Frozen, general	5,592	.....	.....
Steel Trader	5	2.10	5	8.29	5	17.10	5	18.45	American...	Isthmian S. S. Lines	424.2	56.2	26.0	Honolulu, T. H.	Brooklyn, N. Y.	Sugar	8,545	7,611	5,395
William A. McKenney	5	7.30	5	9.32	5	18.50	5	18.50	American...	McCormick S. S. Co.	395.0	55.1	28.2	Tacoma, Wash.	Philadelphia, Pa.	Lumber, general	5,810	6,993	5,099
Porto Bello ¹²	5	7.44	5	17.00	5	17.00	5	17.00	Panamanian...	Tagaropulos Bros.	62.0	16.0	4.0	Colon, R. P.	Colon, R. P.	General	17	31	19
Kina Maru ¹²	5	21.00	6	6.10	6	14.10	6	18.05	Japanese...	Osaka Shosen Kaisha	446.0	60.5	23.0	Shanghai, China	Baltimore, Md.	General	2,191	8,982	6,298
Real ¹⁶	6	1.35	6	6.16	6	15.37	6	15.37	Panamanian...	Hans Elliot	62.2	17.1	5.0	Panama, R. P.	RioConception, R. P.	Dynamite	10	46	22
Vernar	6	1.35	6	7.15	6	15.37	6	15.37	American...	Calmar S. S. Corp.	410.0	52.2	25.0	Aberdeen, Wash.	Baltimore, Md.	Lumber	7,650	6,585	4,791
Ensley City	6	2.10	6	8.29	6	16.00	6	16.00	American...	Isthmian S. S. Lines	395.0	55.0	22.3	Hilo, T. H.	Baltimore, Md.	Sugar, pineapples	6,269	7,330	5,239
Golden Hind	6	3.03	6	9.31	6	18.45	6	18.45	American...	Amer-Hawaiian Line	430.7	54.3	25.0	San Francisco, Cal.	Boston, Mass.	General	6,657	.....	.....
Utacarbon ¹	6	0.05	6	10.28	6	19.58	6	19.58	American...	Union Oil Co.	435.0	56.0	28.0	Los Angeles, Calif.	Baltimore, Md.	Gasoline	10,000	7,452	5,209
Cerigo	6	9.20	6	11.05	6	21.10	8	11.45	German...	Hamburg-AmericanLine	227.2	34.4	15.0	Guayaquil, Ecuador	Cristobal, C. Z.	General	1,147	1,582	1,011
Lulu Bud ¹⁷	.....	.....	.....	.....	.....	.....	.....	.....	American...	F. R. Per.	.....	.....	.....	Balboa, C. Z.	Gamboa, C. Z.	Ballast	.....	.....	.....

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS

* DEPARTURES

Date	Vessel	Line	From—	Date	Vessel	Line	For—
April 30	No. 9673 ¹⁸	Pan American Airways	San Salvador via waypts	April 30	Santa Maria	United Fruit Co.	New York via wayports
May 1	No. 22-V ¹⁸	Pan American-Grace Airways	Talara via wayports	April 30	Guayaquil	Panama R. R. S. S. Line	New York, N. Y.
May 1	Veragua	United Fruit Co.	Port Limon, Costa Rica	April 30	Colombia	Colombian Line	New York via wayports

PORT OF CRISTOBAL—Continued

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 1	No. 145-M ¹⁸	Uraba, Medellin & Cent. Airways	Medellin, Colombia	May 1	No. 660-M ¹⁸	Pan American Airways	Barraquilla, Colombia
May 1	No. 660-M ¹⁸	Pan American Airways	Barraquilla, Colombia	May 1	Veragua	United Fruit Co.	New York via Habana
May 1	No. 9688 ¹⁸	Pan American Airways	San Salvador via waypts	May 2	No. 124-M ¹⁸	Pan American-Grace Airways	Buenaventura, Colombia
May 2	Cefalu	Standard Fruit & S. S. Co.	New Orleans via waypts	May 2	Inapaguina ¹⁷	A. Tagaropulos	Colon, Rep. of Panama
May 2	Venezuela	Royal Netherlands S. S. Co.	Amsterdam via wayports	May 2	Annetta I. ¹⁷	P. W. Hamilton	Colon, Rep. of Panama
May 2	Inapaguina ¹⁷	A. Tagaropulos	Colon, Rep. of Panama	May 3	Cefalu	Standard Fruit & S. S. Co.	New Orleans via waypts
May 2	Anachucuna ¹⁷	A. Tagaropulos	Colon, Rep. of Panama	May 3	Venezuela	Royal Netherlands S. S. Co.	Port Limon, Costa Rica
May 2	Annetta I. ¹⁷	P. W. Hamilton	Colon, Rep. of Panama	May 3	C-Star ¹⁹	Samuel C. May	Colon, Rep. of Panama
May 3	Cristobal	Panama R. R. S. S. Line	New York via Haiti	May 3	Magdalena	Hamburg-American Line	Old Providence via waypts
May 3	Magdalena	Cooper III ²²	Livingston via wayports	May 3	No. 145-M ¹⁸	Uraba, Medellin & Cent. Airways	Hamburg via wayports
May 3	No. 19-V ¹⁸	Pan American-Grace Airways	Cartagena, Colombia	May 4	No. 660-M ¹⁸	Pan American Airways	Medellin, Colombia
May 3	No. 9673 ¹⁸	Pan American Airways	Chilayo via wayports	May 4	No. 9688 ¹⁸	Pan American Airways	Miami via wayports
May 3	C-Star ²⁰	Samuel C. May	San Salvador via wayports	May 4	No. 22-V ¹⁸	Pan American-Grace Airways	Guatemala via wayports
May 4	No. 670-M ¹⁸	Pan American Airways	Colon, Rep. of Panama	May 5	Ariguani	Elders & Fyffes, Ltd.	Chilayo via wayports
May 4	Ariguani	Elders & Fyffes, Ltd.	Miami via wayports	May 5	Quirigua	United Fruit Co.	Avonmouth via wayports
May 5	Zacapa	United Fruit Co.	Avonmouth via W. Indies	May 5	Davisian	Leyland S. S. Line	Port Limon, Costa Rica
May 5	No. 145-M ¹⁸	Uraba, Medellin & Cent. Airways	New Orleans via wayports	May 5	El Panquiao	J. Obaldia	Santiago, Cuba
May 5	Davisian	Leyland S. S. Line	Medellin, Colombia	May 6	No. 9673 ¹⁸	Pan American Airways	Colon, Rep. of Panama
May 5	Tillie Lykes	Lykes Brothers S. S. Co.	Liverpool via wayports	May 6	No. 145-M ¹⁸	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 5	Haiti	Colombian Line	Houston via wayports	May 6	Tillie Lykes	Lykes Brothers S. S. Co.	Sto. Domingo via waypts
May 6	Venezuela	Royal Netherlands S. S. Co.	New York via wayports	May 6	White Cloud ¹⁹	Cooper III ²²	Bocas, Rep. of Panama
May 6	Skadla	United Fruit Co.	Port Limon, Costa Rica	May 6	Zacapa	United Fruit Co.	New Orleans via waypts
May 6	El Panquiao	J. Obaldia	New York via Kingston	May 6	Venezuela	Royal Netherlands S. S. Co.	Amsterdam via wayports
May 6			Colon, Rep. of Panama				

PORT OF BALBOA

Date	Vessel	Line	From—
April 30	Talamanca	United Fruit Co.	San Francisco, Calif.
May 2	Mayflower ¹⁶	Mayflower Corporation	San Diego, Calif.
May 3	Cuzco	Grace Line	San Francisco, Calif.
May 3	Point Arena	McCormick S. S. Co.	Vancouver, B. C.
May 5	Patria ^{12 21}	Medina-Campbell-Campbell	San Francisco, Calif.
May 5			San Diego, Calif.

¹ Tanker.²⁰ Yawl.²¹ Fishing schooner.¹² Motor ship.¹³ Mine planter.¹⁴ Submarine.¹⁵ Cruiser.¹⁶ Motor schooner.¹⁸ Air mail carrier.¹⁹ Yacht.

* Other than ships passing through the Canal.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., May 8, 1933.

No. 57.

Panama Canal, Gatun Lake section, aids to navigation.—Two whistle signs have been established covering north and southbound approaches to the intersection of Gatun and Pena Blanca reaches of the Canal. Both signs are located on the east side of the Canal and are 1,500 yards from the intersection of the reaches.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C. Z., for Week Ending May 6, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons.	Tons.
Guayaquil	Panama R. R. S. S. Line		April 30		581
Reina del Pacifico	Pacific Steam Navigation Co.		April 30		301
Jason	Royal Netherlands S. S. Co.		April 30		159
Kyphissia	Hamburg-American Line		April 30		174
Axel Johnson	Johnson S. S. Line		April 30		143
Wyoming	French Line		April 30		235
Colombia	Colombian S. S. Line		April 30		1,409
Santa Marta	United Fruit Co.		April 30		377
San Bernardino	Quaker Line	April 30	April 30	69	(²)
President Jackson	Dollar Line	April 30	May 1	387	(²)
Vancouver	Hamburg-American Line	April 30	May 1	130	213½
Durazzo	Hamburg-American Line		May 1		569
Veragua	United Fruit Co.	May 1	May 1	67	7
Oreoma	Pacific Steam Navigation Co.	May 2	May 2	88	1
Lisbon Maru	Nippon Yusen Kaisha	May 2	May 2	86	(²)
Venezuela	Royal Netherlands S. S. Co.	May 2	May 3	143	2
Cefalu	Standard Fruit & S. S. Co.	May 2	May 3	221	677
Nuevo Panama	Hans Elliot	May 3	May 3	233	72
Magdalena	Hamburg-American Line	May 3	May 3	(¹)	479
Cristobal	Panama R. R. S. S. Line	May 3		1,942	
Donau	North German Lloyd	May 4	May 5	232	519
Santa Elisa	Panama Mail S. S. Co.	May 4	May 5	902	12
Quirigua	United Fruit Co.	May 5	May 5	328	9½
Katsuragi Maru	Kokusai Kisen Kaisha	May 5	May 5	101	(²)
Davisan	Leyland S. S. Line	May 5	May 5	172	(²)
Tillie Lykes	Lykes Brothers	May 5	May 6	418	29
Santa Paula	Panama Mail S. S. Co.	May 5	May 6	311	132
Zacapa	United Fruit Co.	May 5	May 6	1,244	462
Kinai Maru	Osaka Shosen Kaisha	May 6	May 6	250	(²)
Nuevo Panama	Hans Elliot	May 6	May 6	222	164
Venezuela	Royal Netherlands S. S. Co.	May 6	May 6	(¹)	244
Haiti	Colombian S. S. Line	May 6		175	
Sixaoia	United Fruit Co.	May 6		464	
Cerigo	Hamburg-American Line	May 6		1,286½	
Sollund	Panama Mail S. S. Co.		May 6		496

¹ No cargo discharged.

² No cargo laded.

Coal

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Ships' Chandlery Supplies

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., May 17, 1933.

No. 42.

Commercial Traffic Through the Panama Canal in April 1933, by Trade Routes

The following tabulation shows the commercial traffic through the Canal during the month of April 1933, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for April 1932 and 1931. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations.

ATLANTIC TO PACIFIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
United States intercoastal:							
United States.....	52	293,296	207,183	342,899	206,874	\$241,628.27	126,535
Europe to Canada:							
British.....	5	28,187	21,068	31,282	19,306	22,795.52	4,388
Danish.....	2	12,833	8,513	14,777	9,215	10,505.51	194
Dutch.....	1	8,266	6,197	10,220	6,385	7,746.25	2,714
French.....	3	19,224	10,890	21,781	11,682	13,612.50	2,341
German.....	3	19,387	12,394	21,425	12,946	15,492.50	6,091
Italian.....	1	6,043	3,669	6,072	3,748	4,586.25	2,046
Norwegian.....	4	23,175	13,280	22,327	13,728	16,600.00	1,117
Panamanian.....	1	6,065	3,447	5,745	3,507	4,308.75	1,410
Swedish.....	1	4,919	2,890	4,960	3,665	3,612.50	2,655
United States.....	1	5,245	3,843	6,188	3,822	4,803.75	4,292
Total.....	22	133,344	86,191	144,777	88,004	104,063.53	27,248
United States to Far East:							
British.....	5	27,961	18,588	31,208	19,107	23,235.00	13,169
Japanese.....	7	37,977	31,864	48,899	31,157	39,830.00	44,870
Norwegian.....	3	13,525	7,712	13,484	7,694	9,640.00	21,950
Panamanian.....	1	6,967	3,610	6,801	3,622	4,512.50	1,424
United States.....	1	5,454	3,465	5,719	3,472	4,331.25	3,819
Total.....	17	91,884	65,239	106,111	65,052	81,548.75	85,232
Europe to Australasia:							
British.....	11	91,548	63,443	103,861	64,486	75,581.53	18,819
Danish.....	1	4,336	2,649	4,409	2,725	3,311.25	4,100
French.....	1	3,797	3,089	5,117	3,076	3,861.25	1,101
Total.....	13	99,681	69,181	113,387	70,287	82,754.03	24,020
Europe to South America:							
British.....	4	26,772	19,687	35,419	21,313	22,650.13	4,456
Chilean.....	1	3,465	2,713	4,553	2,755	2,494.80	.....
Danish.....	1	1,338	760	1,370	777	950.00	.....
Danzig.....	1	8,121	6,928	12,442	7,097	5,847.12	.....
Dutch.....	1	6,018	3,131	5,541	3,336	3,913.75	1,536
German.....	3	11,322	7,809	13,072	7,786	9,761.25	6,081
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	746
Norwegian.....	1	4,586	2,535	4,307	2,565	3,168.75	1,829
Total.....	13	70,951	48,739	88,422	52,379	55,255.80	14,648
Europe to United States:							
British.....	3	19,732	16,445	26,499	16,173	14,207.04	.....
Danish.....	1	4,673	2,705	4,551	2,785	3,364.56	.....
Norwegian.....	3	14,974	11,572	19,282	11,355	10,779.32	4,800
United States.....	1	8,619	7,026	11,247	6,954	6,205.68	.....
Total.....	8	47,998	37,748	61,579	37,267	34,556.60	4,800

ATLANTIC TO PACIFIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
United States to Philippine Islands:							
British.....	1	6,618	3,677	6,770	3,693	\$4,596.25	4,261
Danish.....	1	5,975	3,170	5,339	3,346	3,962.50	4,954
United States.....	2	20,995	16,731	28,251	16,698	20,913.75	4,968
Total.....	4	33,588	23,578	40,360	23,737	29,472.50	14,183
United States to Hawaiian Islands:							
United States.....	4	21,128	15,006	24,226	14,918	17,265.61	5,095
Around the world:							
United States.....	2	18,432	12,651	21,017	12,651	15,813.75	5,267
United States to South America:							
British.....	2	9,118	7,508	12,169	7,492	6,564.96	
United States.....	1	6,630	3,839	8,061	3,839	4,798.75	2,378
Total.....	3	15,748	11,347	20,230	11,331	11,363.71	2,378
United States to Australasia:							
British.....	2	8,327	5,479	8,954	5,464	6,848.75	11,166
Norwegian.....	2	7,118	5,423	9,046	5,265	6,778.75	10,243
Total.....	4	15,445	10,902	18,000	10,729	13,627.50	21,409
Canadian intercoastal:							
British.....	2	10,111	5,948	10,000	6,026	6,296.42	442
South America to Canada:							
Norwegian.....	1	4,375	2,431	4,000	2,485	3,038.75	1,680
United States.....	1	5,033	3,503	5,513	3,520	4,378.75	4,323
Total.....	2	9,408	5,934	9,513	6,005	7,417.50	6,003
United States to Canada:							
Norwegian.....	1	4,610	2,961	4,904	2,939	3,701.25	5,175
United States.....	1	4,103	2,994	4,815	2,992	3,742.50	4,370
Total.....	2	8,713	5,955	9,719	5,931	7,443.75	9,545
South America to Far East:							
Japanese.....	1	7,624	5,441	9,626	5,848	6,801.25	4,983
Central American intercoastal:							
Danish.....	1	1,829	1,176	2,088	1,205	1,470.00	
United States.....	1	5,431	4,660	7,641	4,678	5,825.00	5,760
Total.....	2	7,260	5,836	9,726	5,883	7,295.00	5,760
South American intercoastal:							
Danzig.....	1	6,363	5,204	8,956	5,041	6,505.00	12,011
Europe to Hawaiian Islands:							
Swedish.....	1	5,533	3,430	5,554	4,225	4,287.50	7,735
Canada to Australasia:							
British.....	1	5,518	4,119	7,178	4,413	5,523.75	4,403
Cristobal to South America:							
German.....	6	4,930	3,497	6,421	3,590	4,371.25	1,848
Panamanian.....	4	404	412	812	404	484.80	315
Total.....	10	5,334	3,909	7,233	3,994	4,856.05	2,163
West Indies to Canada:							
British.....	1	5,251	2,997	4,891	2,979	3,746.25	7,000
Foreign vessels in ballast—							
United States intercoastal:							
British.....	1	4,284	3,077	4,963	3,157	3,084.48	
Europe to Central America:							
German.....	1	2,931	1,743	2,964	1,739	2,178.75	1,091
Cristobal to Central America:							
British.....	3	2,147	1,924	3,468	1,958	2,405.00	2,198
Norwegian.....	1	579	553	941	557	416.88	
Panamanian.....	2	44	48	90	58	52.80	27
Total.....	6	2,770	2,525	4,499	2,573	2,874.68	2,225
Cristobal to United States:							
United States.....	1	2,606	1,350	2,434	1,349	1,687.50	759
West Indies to South America:							
Norwegian.....	1	1,846	1,588	2,496	1,433	1,329.12	
Venezuelan.....	1	724	636	1,126	509	795.00	1,047
Total.....	2	2,570	2,224	3,622	1,942	2,124.12	1,047

ATLANTIC TO PACIFIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
South America to Balboa:							
Venezuelan	1	1,101	1,050	2,047	1,847	\$1,312.50	2,063
Cristobal to Balboa:							
Panamanian	9	295	296	132	147	255.69	51
Vessels not engaged in commerce (yachts):							
United States	2	69	67	70	67	63.15	.....
Grand total, April 1933	188	929,236	649,170	1,084,138	656,395	761,103.39	398,096
Grand total, April 1932	193	973,522	709,349	1,195,467	714,343	816,868.45	378,606
Grand total, April 1931	235	1,185,143	868,561	1,451,908	880,283	994,696.30	553,609

PACIFIC TO ATLANTIC

United States intercoastal:							
United States	52	325,078	231,942	384,744	231,586	\$289,927.50	404,979
Canada to Europe:							
Belgian	1	7,044	4,567	7,217	4,398	5,708.75	10,440
British	21	106,319	72,383	118,414	72,408	90,478.75	168,385
Danish	1	8,309	5,914	9,549	6,031	7,392.50	12,251
Dutch	1	7,551	5,776	9,399	5,814	7,220.00	9,497
French	2	14,495	8,247	15,768	8,886	10,308.75	16,637
German	4	25,975	16,420	28,277	17,072	20,525.00	29,801
Italian	1	6,012	3,676	6,093	3,768	4,595.00	9,400
Norwegian	6	33,621	20,675	34,189	21,094	25,843.75	46,819
Swedish	2	10,521	6,187	10,602	7,985	7,733.75	15,221
United States	1	5,450	3,465	5,687	3,450	4,331.25	7,786
Total	40	225,297	147,310	245,195	150,906	184,137.50	326,237
Philippine Islands to United States:							
Danish	1	5,500	3,081	5,038	3,155	3,851.25	7,445
Japanese	6	32,584	26,218	41,559	25,779	32,772.50	42,965
Norwegian	4	21,104	11,476	20,237	11,686	14,345.00	30,716
United States	6	36,461	28,471	44,751	28,354	35,588.75	46,370
Total	17	95,649	69,246	111,585	68,974	86,557.50	127,496
South America to Europe:							
British	1	3,823	3,180	5,075	3,208	3,975.00	6,853
Danish	1	2,510	1,938	3,252	1,985	2,422.50	4,900
Danzig	4	30,854	26,089	45,866	26,085	32,611.25	59,951
Dutch	2	9,208	5,115	8,747	5,309	6,393.75	12,677
French	1	5,242	3,332	5,645	3,326	4,165.00	8,153
German	1	4,979	3,010	5,098	3,007	3,762.50	8,140
Italian	1	9,373	5,223	11,669	6,779	6,528.75	3,017
Norwegian	2	11,518	8,174	13,849	8,266	10,217.50	19,177
Yugoslav	1	5,208	3,280	5,283	3,292	4,100.00	9,420
Total	14	82,715	59,341	104,484	61,257	74,176.25	132,288
Australasia to Europe:							
British	4	35,887	24,785	42,821	26,641	30,981.25	23,168
French	1	5,629	4,343	7,007	4,402	5,428.75	2,667
Total	5	41,516	29,128	49,828	31,043	36,410.00	25,835
Around the world:							
British	1	27,589	15,188	42,348	22,545	18,985.00	.....
Dutch	1	5,974	4,675	7,191	4,550	5,843.75	3,640
Total	2	33,563	19,863	49,539	27,095	24,828.75	3,640
South America to United States:							
British	1	5,049	4,395	7,203	4,382	5,493.75	10,434
United States	2	14,122	8,870	17,562	8,870	11,087.50	8,066
Total	3	19,171	13,265	24,765	13,252	16,581.25	18,500
Australasia to Canada:							
British	3	13,924	11,006	17,966	10,995	13,757.50	5,671
Central America to Europe:							
Danish	2	4,207	2,794	4,692	2,797	3,492.50	7,230
German	3	6,794	4,594	7,760	4,562	5,742.50	6,302
Total	5	11,001	7,388	12,452	7,359	9,235.00	13,532

PACIFIC TO ATLANTIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Hawaiian Islands to United States:							
United States.....	2	10,695	7,308	11,575	7,272	\$9,135.00	16,959
Far East to United States:							
Japanese.....	1	5,051	4,085	6,586	4,038	5,106.25	880
Norwegian.....	1	5,439	3,027	5,013	3,025	3,783.75	5,901
Total.....	2	10,490	7,112	11,599	7,066	8,890.00	6,781
Canada to South America:							
United States.....	2	9,937	6,945	10,979	6,970	8,681.25	8,625
United States to Europe:							
British.....	1	4,072	3,506	5,666	3,427	4,382.50	7,799
Norwegian.....	1	5,488	4,652	7,616	4,564	5,815.00	10,063
Total.....	2	9,560	8,158	13,282	7,991	10,197.50	17,862
South America to Cristobal:							
German.....	7	5,971	4,014	7,574	4,146	5,017.50	6,476
Panamanian.....	4	404	412	812	404	493.55	856
Total.....	11	6,375	4,426	8,386	4,550	5,511.05	7,332
Far East to Europe:							
British.....	1	5,389	2,898	4,739	2,876	3,622.50	8,250
Canada to United States:							
United States.....	1	2,612	2,018	3,286	2,030	2,522.50	2,371
United States to Cristobal:							
United States.....	1	2,606	1,350	2,434	1,349	1,687.50	646
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	1,403
Norwegian.....	2	1,158	1,106	1,882	1,115	1,382.50	1,133
Total.....	4	2,599	2,392	4,180	2,419	2,990.00	2,536
Balboa to South America:							
Venezuelan.....	1	1,101	1,050	2,047	1,847	792.72	.....
South American intercoastal:							
Venezuelan.....	1	724	636	1,144	918	521.28	.....
Balboa to Cristobal:							
Panamanian.....	12	359	359	544	391	419.20	342
Vessels not engaged in commerce (warships):							
British.....	1	.....	.....	.....	.....	2,565.00	.....
Grand total, April 1933.....	182	910,361	633,141	1,075,053	648,146	793,146.75	1,129,882
Grand total, April 1932.....	177	890,170	635,553	1,084,703	649,745	791,766.22	1,065,125
Grand total, April 1931.....	218	1,107,662	817,962	1,362,440	831,310	1,019,652.83	1,457,508

* Displacement tonnage, 5,130.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C.Z., for Two Weeks Ending May 13, 1933

Name of vessel	Line or charterer	Arrived		Departed		Cargo—	
						Discharged	Laded
						Tons	Tons
Granville.....	Fred Olsen Line.....	April	30	April	30	395	.....
Orcoma.....	Pacific Steam Navigation Co.....	May	1	May	2	.....	7
Cuzco.....	Grace Line.....	May	3	May	6	3,391	.....
Santa Elisa.....	Panama Mail S.S. Co.....	May	4	May	4	41	600
California.....	Panama-Pacific Line.....	May	5	May	5	1	.....
Point Arena.....	Swayne & Hoyt.....	May	5	May	9	4,788	.....
Kinai Maru.....	Osaka Shosen Kaisha.....	May	5	May	6	23	.....
Santa Paula.....	Grace Line.....	May	6	May	6	185	10
Chiriqui.....	United Fruit Co.....	May	7	May	7	216	1
Santa Elena.....	Grace Line.....	May	8	May	8	111	.....
Somerville.....	Isbrandtsen Moller & Co.....	May	8	May	9	167	.....
Manizales.....	Grace Line.....	May	9	May	9	.....	26
Point Lobos.....	Gulf-Pacific Mail Line.....	May	10	May	12	1,564	.....
Tulsagas.....	Tidewater Oil Co.....	May	10	May	11	8,028	.....
Taihun Maru.....	Japanese Navy.....	May	10	May	15	740	.....
West Camargo.....	McCormick S.S. Co.....	May	10	May	11	111	.....
San Antonio.....	French Line.....	May	11	May	12	365	.....
Santa Maria.....	Grace Line.....	May	12	May	12	236	49
Santa Ana.....	Grace Line.....	May	12	May	12	11	1
President Harrison.....	Dollar Line.....	May	12	May	12	2	.....

Speed of Vessels in Transit

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., May 13, 1933.

To all concerned:

By authority of Executive Order of May 10, 1933, Rule 54, of the "Rules and Regulations Governing Navigation of the Panama Canal and Adjacent Waters" is hereby amended to read as follows:

Rule 54. *Authorized speed of transit.*—The following speeds shall not be exceeded by vessels in transit through the Canal—

	Knots
Cristobal to Gatun Locks.....	10
Gatun Lake in the 1,000-foot channels.....	15
Gatun Lake in the 800-foot channels.....	12
Gatun Lake in the 500-foot channels.....	10
Rounding Bohio or Darien bend.....	10
Gaillard Cut—in the straight reaches—	
Vessels of 250 feet or over in length, 6 knots or as near thereto as possible,	
maintaining steerage way.....	6
Vessels under 250 feet.....	8
In or near a lock.....	2
Miraflores Locks to Pacific entrance.....	10
Entering or leaving either Canal port.....	10
Miraflores Lake.....	
Vessels under 300 feet in length.....	6
Vessels of and above 300 feet in length, to proceed as slowly as possible	
consistent with maneuverability.....	

J. L. SCHLEY,
Governor.

Notice to Mariners and Aviators

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., May 9, 1933.

No. 58.

The following are quoted from Notice to Mariners Numbers 16 and 17 dated Washington, D.C., April 22 and 29, 1933, respectively:

West Indies, St. Lucia, Port Castries, aircraft pontoon and light established.—An aircraft pontoon, 40 feet by 18 feet, has been established 230 yards $312^{\circ}30'$ from the observation spot, Point Bananes. A fixed red light is exhibited from the center of the pontoon.

Approximate position, latitude $14^{\circ}01' N.$, longitude $61^{\circ}00' W.$

West Indies, Trinidad Island, Port-of-Spain, aviation beacon light established.—Information has been received through the Department of State that a revolving white aviation beacon light making 7 revolutions per minute, with the beam elevated 5° above the horizon, has been established at the aviation station in Cocorite Bay, Port-of-Spain, Trinidad. The light is exhibited 21 feet above mean high water from a steel trelliswork tower. It is only exhibited after dark when airplanes are expected.

Approximate position, latitude $10^{\circ}40'20'' N.$, longitude $61^{\circ}32'50'' W.$

West Indies, Trinidad Island, Gulf of Paria, Fortin Point, pier under construction, light to be established.—A pier, 8,500 feet long, is in course of construction at Fortin Point, Trinidad. This pier extends in a 322° direction from the point. When completed a group flashing white light showing 2 flashes every 20 seconds will be established 36 feet above the water on the outer end. It is expected that the pier will be completed in May 1933.

Approximate position of light, latitude $10^{\circ}12' N.$, longitude $61^{\circ}43' W.$

Jamaica, north coast, St. Ann Bay, changes in lights:

1. The following changes have been made in the range lights in St. Ann Bay—

(a) The front light has been changed to show flashing white every 5 seconds. The light is exhibited 26 feet above mean high water from the roof of the customhouse and is visible 7 miles.

NOTE.—The name "customhouse" is to be inserted against this light and this name shown against the building about 200 yards eastward of the front light is to be expunged.

(b) The rear light has been moved to a point 192 yards 196° from the front light and changed to show flashing white every second. The light is exhibited 59 feet above mean high water from a white iron column 15 feet in height and is visible 7 miles.

The lights are unwatched.

NOTE.—The symbol for a beacon is to be inserted in the former position of the rear range light.

Approximate position, latitude $18^{\circ}26' N.$, longitude $77^{\circ}14' W.$

Island of Haiti, Haitian Republic, Port-au-Prince Harbor, beacon light established, buoy discontinued.—A flashing red light showing 10 flashes per minute, flash, 0.6 second; eclipse, 5.4 seconds; visible 2 miles, has been established 300 yards from the northwest corner of the main wharf on the bearings:

Hasco stack, 57°

North tower of Cathedral, 122°

Northwest corner of wharf, 224°

The light is exhibited from a small skeleton tower with battens, painted black. This tower replaces the dolphin shown on the charts in this position.

J. L. SCHLEY,
Governor.

MOVEMENTS OF OCEAN VESSELS Week ending at midnight, May 13, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Entered Canal				Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour							Nature	Tons	Gross	Net
Nuevo Panama	6	7 35	7	6 05	7	14 00	7	15 40	Panamanian	Hans Elliot	108.0	8.4	Bocas, R.P.	Buenaventura, Col.	General	175	226	101
Portmar	6	21 35	7	6 10	7	14 05	7	15 40	American	Calmor Line	409.8	54.2	Philadelphia, Pa.	Los Angeles, Calif.	General	4,456	6,581	4,795
Wind Rush	6	21 45	7	6 15	7	14 05	7	16 20	American	Shepard S.S. Co.	409.8	54.2	Boston, Mass.	Seattle, Wash.	General	1,000	6,583	4,903
Tai Ping Yang	7	0 25	7	8 25	7	15 54	7	16 58	Panamanian	Barber Wilhelmsen Line	435.0	60.0	New York, N.Y.	Manila, P.I.	General	1,208	9,866	6,955
Cathwood	7	2 45	7	8 30	7	16 54	7	18 08	American	Union Oil Co.	459.0	56.0	Tiverton, R.I.	Los Angeles, Calif.	Ballast	7,482	5,143	
Point Brava	7	2 45	7	9 35	7	18 28	7	19 45	American	Swayne & Hoyt	386.8	52.2	Houston, Tex.	Tacoma, Wash.	Grain, general	5,877	5,696	4,125
Troilus	7	9 20	7	11 15	7	19 27	7	20 40	British	Alfred Holt & Co.	459.1	56.0	Boston, Mass.	Yokohama, Japan	Lab. oil, paper	2,498	8,292	5,965
Malayan	7	13 40	7	13 45	7	20 52	7	22 10	British	Furness Prince Line	441.0	60.3	New York, N.Y.	Manila, P.I.	General	1,637	9,209	6,245
Prince	7	17 00	7	19 25	8	11 00	8	12 05	Japanese	Nippon Yusen Kaisha	445.0	58.0	Baltimore, Md.	Yokohama, Japan	Cotton, general	7,622	7,972	5,687
Taketoyo Maru	7	18 30	8	6 05	8	13 58	8	15 25	American	Isthmian S.S. Lines	424.0	56.0	Philadelphia, Pa.	Honolulu, T.H.	Ballast	6,290	7,611	5,450
Steel Exporter	8	5 45	8	7 15	8	15 00	8	16 10	Japanese	Osaka Shosen Kaisha	410.5	54.3	New York, N.Y.	Kobe, Japan	(¹)	2,212	6,407	4,766
Kwanto Maru	8	6 35	8	8 20	8	16 20	8	17 20	American	Argonaut S.S. Line	410.5	54.3	New York, N.Y.	Seattle, Wash.	General	310	1,572	1,011
Atlantie	8	21 10	8	11 45	8	20 10	8	21 30	German	Hamburg-American Line	227.6	34.4	Cristobal, C.Z.	Guayaquil, Ecuador	General	39	46	
Cerigo	8	1 15	8	12 40	8	20 14	8	21 30	Panamanian	Hans Elliot	62.0	17.0	Colon, R.P.	Pedregal, R.P.	General	2,127	9,267	8,834
Real	8	15 00	9	6 00	9	14 28	9	15 40	German	Hamburg-American Line	461.5	61.0	Hamburg, Germany	Vancouver, B.C.	General	12,286	8,218	
Seattle	8	19 25	9	7 15	9	17 19	9	18 25	British	Federal Steam Nav. Co.	498.0	63.0	London, England	Napier, N.Z.	Ballast	77	1,132	741
Cornwall	8	15 30	9	11 00	9	18 50	10	00 15	German	Grace Line	216.5	32.9	Cristobal, C.Z.	Buenaventura, Col.	General	7,427	6,213	4,672
Manzanitas	9	13 12	9	13 30	9	21 05	9	22 30	Japanese	Kokusai Kisen Kaisha	385.0	51.0	Chester, Pa.	Yawata, Japan	Zinc, cotton	1,020	5,410	3,761
San Francisco Maru	9	00 30	10	6 05	10	14 15	10	15 45	American	Stand. Vac. Transp. Co.	391.9	51.2	Beaumont, Tex.	Cebu, P.I.	Cottonseed oil	2,830	10,491	7,601
Elizabeth Kellogg	9	20 45	10	7 10	10	15 06	10	16 25	American	Amer-Hawaiian Line	421.5	58.2	Boston, Mass.	Seattle, Wash.	General	3,078	7,611	5,454
Virgman	10	7 30	10	7 55	10	17 15	11	00 15	American	Isthmian S.S. Lines	494.0	56.0	Baltimore, Md.	Belawan, Delhi, Sum	(²)	78	49	
Steel Scientist	9	15 35	10	7 20	10	17 05	10	18 05	Panamanian	Hans Elliot	64.2	20.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	47	32	
Taira	9	19 20	10	7 20	10	17 05	10	18 05	Panamanian	Hans Elliot	64.0	18.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	25	12	
Pirre	9	19 20	10	7 25	10	16 58	10	17 58	Panamanian	Hans Elliot	51.0	13.6	Cristobal, C.Z.	Balboa, C.Z.	Ballast	2,263	6,024	5,024
Sambu	9	14 30	10	7 25	10	16 58	10	17 58	American	McCormick S.S. Co.	410.5	54.0	Rosario, Argentina	Vancouver, B.C.	Coffee, general	8,771	6,292	
West Camargo	10	10 30	10	14 40	10	22 04	11	12 45	Belgian	Comp. Maritime Belge	476.2	60.7	London, England	Vancouver, B.C.	Ballast	2,249	4,994	3,395
Mercier	10	17 05	10	18 00	11	11 38	11	12 25	German	Hamp. Maritime Line	365.3	50.3	Hamburg, Germany	Valparaiso, Chile	General	7,125	6,291	4,530
Sesostri	10	15 10	11	6 00	11	13 28	11	14 45	German	Hamp. Maritime Line	381.4	53.8	New York, N.Y.	Moli, Japan	Scrap steel	5,246	7,209	5,172
Ferromor	10	18 00	11	7 15	11	14 37	11	16 00	Norwegian	Feru Line	395.5	55.0	New York, N.Y.	Fremantle, Aus. lia	General	3,000	11,487	8,762
Wichita	11	2 45	11	8 40	11	17 52	12	3 18	American	Roosevelt S.S. Co., S.B.	496.0	68.2	New York, N.Y.	Seattle, Wash.	General	6,044	7,043	5,051
Andrea F.	11	8 40	11	8 55	11	19 00	11	20 11	American	Luckenbach Line	405.0	63.9	New York, N.Y.	Kobe, Japan	(³)	269	13,787	9,800
Lukenbach	11	10 20	11	10 25	11	21 45	11	22 00	Japanese	Kawasaki Kisen Kaisha	523.0	64.0	New York, N.Y.	Vancouver, B.C.	General	2,144	10,626	6,666
Balfast Maru	11	5 30	11	12 24	11	20 51	12	2 00	Italian	Nav. Libera Triestina	460.0	64.0	Genoa, Italy	Valparaiso, Chile	General			
California	11	12 00	12	6 05	12	13 44	12	20 51	American	Grace Line			New York, N.Y.					
Santa Maria	11	12 00	12	6 05	12	13 44	12	20 51	American	Grace Line			New York, N.Y.					

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From —	For —	Cargo		Panama Canal tonnage		
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net	
Swiftagle	10	21	36	11	7	16	11	16	05	404	6	60	2	28	0	11,500	8,473	6,104
San Valerio	11	5	20	11	8	24	11	16	30	420	0	54	6	26	0	8,799	6,672	4,339
Resolute	11	6	00	11	12	09	11	19	55	500	3	72	3	28	0	20,449	12,000	8,275
Europa	11	12	25	11	13	05	11	21	10	405	4	62	2	29	0	9,512	11,226	8,275
Lycia	11	14	10	11	15	06	11	23	40	300	5	44	2	23	0	4,350	3,333	2,207
Point Lobos	10	9	45	12	6	22	12	14	20	380	1	53	1	20	0	3,458	5,683	4,244
Nuevo Panama	12	4	30	12	6	49	12	14	20	108	5	20	6	9	0	214	226	101
Sunol	12	7	00	12	7	54	12	15	35	185	6	66	0	29	0	13,500	9,619	6,456
Liberator	12	8	30	12	9	28	12	18	50	480	0	56	0	31	0	9,603	8,204	6,219
San Antonio	11	4	55	12	12	10	12	20	20	431	0	57	2	26	0	6,285	7,759	4,637
Lewis Luckenbach	12	13	15	12	13	57	12	21	45	496	0	68	2	30	0	11,227	11,487	8,762
District of Columbia	12	14	00	12	14	55	12	23	30	431	0	59	2	29	0	11,000	8,097	5,431
Sapelo	11	15	05	13	6	30	13	14	45	461	6	60	0	29	0	10,523		
Athleprincess	12	15	00	13	7	29	13	15	22	475	0	63	3	29	0	13,852	9,569	6,276
Steel Worker	12	16	35	13	8	13	13	16	30	424	2	56	2	25	2	8,593	7,611	5,497
Cal.	13	7	00	13	9	12	13	16	45	216	5	32	9	17	0	1,098	1,105	698
West Mahwah.	13	10	40	13	11	30	13	20	00	410	3	54	2	22	0	5,058	6,588	5,049
Toba Maru	13	14	30	13	14	55	13	22	45	445	0	53	0	26	3	8,193	8,058	5,734

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS										* DEPARTURES									
Date	Vessel		Line		From —		Date	Vessel		Line		Date	Vessel		For —		Date	Vessel	
	Day	Hour	Day	Hour	Day	Hour		Day	Hour	Day	Hour		Day	Hour	Day	Hour		Day	Hour
May 7	Santore		Panama Railroad S.S. Line		Norfolk, Va.		May 7	Sixola		United Fruit Co.		May 7	Cristobal		Panama Railroad S.S. Line		May 7	New York via waypoints	
May 7	No. 144-M	14	Pan American Airways		Talara via waypoints		May 7	Cristobal		Colombian S.S. Line		May 7	Quirigua		New York via waypoints		May 7	New York via waypoints	
May 7	No. 414-H	14	United Fruit Co.		San Salvador via waypoints		May 8	Haiti		United Fruit Co.		May 8	Quirigua		New York via waypoints		May 8	Buenaventura, Colombia	
May 8	No. 670-M	14	Pan American Airways		Port Limon, C.R.		May 8	Quirigua		Pan American Airways		May 9	No. 19-H	14	Pan American Airways		May 9	San Salvador via waypoints	
May 8	No. 9688	14	Pan American Airways		Barranquilla, Colombia		May 9	No. 414-H	14	G. I. Bryan		May 9	Pearl Marie	15	Standard Fruit & S.S. Co.		May 9	Bluefields via Limon	
May 9	No. 9688	14	Pan American Airways		Guatemala		May 9	Contessa		New Orleans via waypoints		May 10	Santore		Panama Railroad S.S. Line		May 10	New Orleans via waypoints	
May 9	No. 145-M	14	Standard Fruit & S.S. Co.		Medellin, Colombia		May 10	Santore		Colon, Rep. of Panama		May 10	Inapaquina	16	A. Tagarapulos		May 10	Daquiri, Cuba	
May 9	Pearl Marie	15	G. I. Bryan		Colon, Rep. of Panama		May 10	Inapaquina	16	A. Tagarapulos		May 10	Inapaquina	16	A. Tagarapulos		May 10	Colon, Rep. of Panama	

PORT OF CRISTOBAL—Continued

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 9.....	Annetta I. ¹⁶	P. W. Hamilton	Colon, Rep. of Panama	May 10.....	Anachuena ¹⁶	A. Tagarapulos	Colon, Rep. of Panama
May 10.....	No. 8817 ¹⁴	Pan American Airways	San Jose	May 11.....	No. 670-M ¹⁴	Pan American Airways	Miami via wayp'ts
May 10.....	No. 414-H ¹⁴	Pan American Airways	San Salvador via wayp'ts	May 11.....	No. 145-M ¹⁴	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 10.....	No. 22-V ¹⁴	Pan American Airways	Chichayo via wayp'ts	May 11.....	No. 9888 ¹⁴	Pan American Airways	San Salvador via wayp'ts
May 11.....	Anachuena ¹⁶	A. Tagarapulos	Colon, Rep. of Panama	May 12.....	Annetta I. ¹⁶	P. W. Hamilton	Colon, Rep. of Panama
May 11.....	No. 660-M ¹⁴	Pan American Airways	Miami via wayp'ts	May 12.....	No. 18-V ¹⁴	Pan American-Grace Airways	Buenaventura, Colombia
May 11.....	Buenaventura	Panama Railroad S.S. Line	New York, N. Y.	May 12.....	No. 945-M ¹⁴	Pan American-Grace Airways	Buenaventura, Colombia
May 12.....	Carrillo	United Fruit Co.	New Orleans via wayp'ts	May 12.....	Peten	United Fruit Co.	Port Limon, C.R.
May 12.....	No. 145-M ¹⁴	Uraba, Medellin & Cent. Airways	New York via wayp'ts	May 13.....	No. 414-H ¹⁴	Pan American Airways	San Salvador via wayp'ts
May 12.....	Pastores	Colombian S.S. Line	Medellin, Colombia	May 13.....	No. 145-M ¹⁴	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 13.....	Costa Rica	Royal Netherlands S.S. Co.	New York via wayp'ts	May 13.....	No. 8817 ¹⁴	Pan American Airways	Guatemala
May 13.....	Metapan	United Fruit Co.	Amsterdam via wayp'ts	May 13.....	Lizzie D. Peabody ¹⁵	Martinez & May	Concepcion, R.P.
May 13.....	Lizzie D. Peabody ¹⁵	United Fruit Co.	New York via Kingston	May 13.....	Carrillo	United Fruit Co.	New Orleans via wayp'ts
May 13.....		Martinez & May	Colon, Rep. of Panama				

PORT OF BALBOA

May 7.....	Chiriqui	United Fruit Co.	San Francisco, Calif.	May 6.....	Patria ¹¹	Medina-Campbell-Campbell	San Diego, Calif.
May 10.....	Talibun Maru ¹⁸	Japanese Navy	Tokuyama, Japan	May 7.....	Ciriqui	United Fruit Co.	San Francisco, Calif.
May 11.....	All America	All America Cables, Inc.	Callao, Peru	May 9.....	Point Arena	McCormick S.S. Co.	San Francisco, Calif.
May 13.....	Iwate ¹⁹	Japanese Navy	Acapulco, Mexico	May 14.....	Real ¹⁵	Hans Elliot	Panama Bay, R.P.
May 13.....	Yakumo ¹⁹	Japanese Navy	Acapulco, Mexico	May 15.....	Sambu ¹⁵	Hans Elliot	Panama Bay, R.P.
May 13.....	Real ¹⁵	Hans Elliot	Panama, Rep. of Panama				
May 13.....	Sambu ¹⁵	Hans Elliot	Panama, Rep. of Panama				

¹⁷ Tanker.¹¹ Motor ship.¹² For orders.¹³ Around the world.¹⁴ Air mail carrier.¹⁵ Motor schooner.¹⁶ Motor boat.

* Other than ships passing through the Canal.

¹⁷ Fishing schooner.¹⁸ Collier.¹⁹ Cruiser.

Traffic by Commodities for April 1933

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of April in 1933, 1932, and 1931. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Aircraft and parts		4	23	4
Agricultural implements	923	126	1,375	138
Alfalfa meal		1,276		1,276
Ammonium compounds	154		4,318	4,500
Animal foods	24	280	25	285
Apparel, wearing (hats, shoes, clothing, etc.)	49	14	70	52
Asbestos	59		732	
Asphalt and tar	58	65	2,663	802
Automobiles (and autotrucks)	2,718	37	4,680	47
Automobile parts and accessories	520	56	3,323	56
Bags and bagging, textile	95		908	461
Bananas			44	337
Barks, miscellaneous				119
Barley				16,565
Beans, edible, dry	76	6,347	108	10,563
Beer	95		128	
Beverages, nonalcoholic	317		357	
Blood and tannage	50		50	
Bones and bone meal			1,052	
Books and printed matter	86		162	
Borax		560	22	5,698
Bran and pollards				3,229
Bricks and tile	27	15	563	
Camphor, crude				116
Canned and preserved goods:				
Fish	647	7,665	1,186	9,130
Fruit	1,885	17,810	1,977	28,365
Meat	78	20	1,134	436
Milk		904	107	986
Soup	806	26	829	26
Vegetables	1,248	2,835	1,278	2,874
Miscellaneous and unclassified	2,378	16,174	2,576	16,393
Carbon black	57		380	
Celite		245		270
Cement	437		4,542	
Chalk			650	
Charcoal	80		156	
Chemicals	2,603	1,126	5,756	1,226
Clay, china and fire	91	36	190	36
Clay, filtering	170	372	170	395
Coal	2,971		3,297	
Cocoa and cacao beans	144	25	597	2,408
Coconuts and products		1,281	91	1,525
Coffee	312	178	4,062	17,401
Coke	761		4,551	
Cold storage and refrigerated products:				
Dairy products	42		401	4,343
Eggs		492		613
Fish			4	609
Lard	565		571	
Meats	2		36	4,525
Poultry		23		23
Vegetables				12
Other and unclassified			3	
Confectionery	1,105		1,250	8
Copra				5,822
Copra meal and cake				1,469
Corn	7,819		7,819	
Cotton, raw	258	774	13,186	2,036
Dextrine			10	
Drugs and medicines	1,125	2	1,277	2
Dyes				614
Earthenware	51	46	223	46

* Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Eggs, dried.....				5
Electrical apparatus and appliances.....	340	189	976	194
Explosives.....	162	105	335	221
Extract, quebracho.....			769	
Fertilizers.....	100	447	1,523	455
Fish, salted or dry cured.....				150
Fish meal.....	40		40	578
Floor coverings.....	255	344	257	707
Flour.....	577	13,774	1,510	19,152
Fruit, dried.....	117	12,012	146	17,500
Fruit, fresh.....	2	2,534	12	18,764
Furniture and household goods.....	352	68	373	68
Gallnuts.....				74
General.....	15,145	6,062	32,647	13,066
Glass and glassware.....	2,633	40	3,466	138
Glue.....		56	90	66
Groceries.....	117		206	5
Gums.....				155
Hair, all kinds.....	9	18	9	18
Hay.....		630	5	630
Hemp, unmanufactured.....	20	191	27	1,185
Honey.....		41		195
Hops.....		10	21	10
Horns and hoofs.....			31	
Infusorial earth.....		592		878
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	33,269	1,323	46,313	1,333
Ivory nuts.....			22	948
Jute, unmanufactured.....				35
Lard substitute.....	258		258	
Lime.....			78	
Liquors.....	97		1,327	136
Lumber (including manufactured mill products).....	2,392	84,695	3,003	122,622
Machinery.....	2,080	855	4,532	984
Malt.....	23		210	
Manufactured goods.....	3,042	343	6,073	1,068
Marble and granite.....	31		81	
Matches.....	365	132	752	149
Metals:				
Antimony.....				26
Copper.....	67	3,742	852	16,823
Gold and silver.....		3	4	28
Iron.....	85		864	500
Lead.....	63	2,070	63	8,642
Scrap.....	96	135	39,488	198
Tin.....	113	85	795	520
Zinc.....	63		499	4,120
Other and unclassified.....	84	2	155	19
Milk, powdered.....	48	218	152	349
Molasses and syrups.....	246		269	
Nitrates.....			2,738	11,469
Nuts, edible (including meats).....	31	95	171	95
Oats.....	893		924	4,509
Oils, mineral:				
Crude.....			437	51,264
Gas and fuel.....		32,214	18,221	36,955
Gasoline, benzine, and naphtha.....		113,343	13,113	158,868
Kerosene.....		9,993	73	10,556
Lubricating and greases.....	7,004	497	13,205	522
Oils, vegetable:				
Coconut.....		446	15	7,445
Cottonseed.....	214		218	
Linseed.....			455	
Olive.....		36	436	36
Rapeseed.....				196
Wood.....		13	6	3,459
Other and unclassified.....	1,030	282	1,334	2,018
Oil, fish.....				5
Oil, whale.....			5	
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		27		102
Oilseed cake and meal.....	357		357	516
Ores:				
Antimony.....		59		113
Copper.....				117
Gold and silver.....				51
Iron.....			150	
Lead.....				172
Manganese.....			110	305
Tin.....				1,559
Zinc.....				300
Other and unclassified.....				397

* Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Paints and varnishes.....	508	41	746	46
Paper and paper products ¹	5,856	7,026	19,358	10,424
Paper scrap.....		503	595	503
Peanuts.....	2,354	79	2,354	79
Peas, dry.....		386	30	681
Peatmoss.....			446	
Phosphates.....	148	946	9,916	948
Plaster.....			20	
Porcelain ware.....	15	230	69	1,627
Potash.....		702	6,559	1,153
Rags and waste.....	50	15	146	425
Railroad material.....	72		2,002	
Rice.....	1,471	103	1,991	2,708
Rope and twine.....	760	55	1,476	217
Rosin.....	1,020		4,790	
Rubber:				
Manufactured.....	886	4	1,049	41
Scrap.....	6	67	91	157
Salt.....	303		2,747	
Sand.....	27		2,828	
Seeds (except oilseeds).....	437	222	1,946	617
Shells, oyster.....	2,619		3,254	
Silk, raw.....		806		1,455
Skins and hides.....		2,634	189	5,437
Slag.....	70		4,771	
Soaps and products.....	1,333	172	1,553	183
Soda and sodium compounds.....	993		2,466	3,700
Soy beans.....	22		34	8,250
Sugar.....		30,798	7,013	175,124
Sulphur.....	6,084		16,724	179
Talc.....	20	50	20	50
Tallow.....	126	84	126	460
Tea.....	38	2	306	189
Textiles ²	4,857	286	7,745	969
Tinplate.....	273		5,655	
Tobacco and manufactures.....	862	50	3,902	82
Toilet preparations.....	119	7	131	7
Turpentine.....	204		588	
Vegetables, dry.....		456	103	1,867
Wall board.....		185		411
Wax, paraffin.....	329		1,604	55
Wheat.....		84		221,812
Wines.....	12	164	267	455
Wood pulp.....	651	8,806	2,436	9,501
Wool.....	36	2,901	323	11,080
Total, April 1933.....	135,267	404,399	398,096	1,129,882
Total, April 1932.....	121,479	305,398	378,606	1,065,125
Total, April 1931.....	199,662	444,023	553,609	1,457,508

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Coal

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Publication of Notices and Circulars of Interest to Shipping

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

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Volume XXVI.

Balboa Heights, C. Z., May 24, 1933.

No. 43.

Cargo Through the Canal During April 1933

On pages 576 and 577 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in April 1933. This cargo, segregated according to direction as compared with April 1932, and the differences, are shown in the following tabulation:

Direction	April 1932	April 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Atlantic to Pacific.....	378,606	398,096	+19,490
Pacific to Atlantic.....	1,065,125	1,129,882	+64,757
Total.....	1,443,731	1,527,978	+84,247

Total cargo through the Canal in April 1933, showed an increase of 84,247 tons, or 5.8 percent, in comparison with April 1932. From the Atlantic to the Pacific there was a gain of 19,490 tons, or 5.1 percent, while from the Pacific to the Atlantic, there occurred an increase of 64,757 tons, or 6.1 percent.

ATLANTIC TO PACIFIC CARGO MOVEMENT

Origin.—A total of 264,016 tons, or 66.3 percent of the cargo tonnage moving from the Atlantic to the Pacific, originated on the eastern and Gulf seaboard of the United States, and 73,742 tons, or 18.5 percent, in Europe, these two areas contributing about 85 percent of the total tonnage moving in this direction in April 1933. In comparison with April 1932, cargo tonnage originating in the United States registered a decline of 8,782 tons, or 3.2 percent, while from Europe there occurred an increase of 10,571 tons, or 16.7 percent. The United States contributed a smaller proportion of the total tonnage than in the corresponding month last year, while Europe's percentage to the total increased.

Destination.—One hundred sixty-one thousand eight hundred and five (161,805) tons, or 40.6 percent of the total cargo moving from the Atlantic to the Pacific, were destined to ports on the west coast of the United States; 101,050 tons, or 25.4 percent, to Asia; 49,762 tons, or 12.5 percent, to Australasia; and 33,823 tons, or 8.5 percent, to South America. In comparison with April 1932, tonnage destined to all the above areas, with the exception of Asia, made increases, which were as follows: To the United States, 11,987 tons, or 8.0 percent; to Australasia, 17,986 tons, or 56.6 percent; and to South America, 10,207 tons, or 43.2 percent. Tonnage to Asia registered a decrease in comparison with April 1932, of 31,081 tons, or 23.5 percent. The percentage of the total cargo destined to the United States was slightly higher in the past month than in April 1932; the proportion to South America and Australasia were also higher in the past month. The percentage of the

cargo routed to Asia made a substantial decrease in comparison with April 1932. An increase in the movement of general cargo from eastern ports of the United States was the principal reason for the increased tonnage to the west coast of the United States. The gain in tonnage routed to the west coast of South America was due to shipments of mineral oils approximating some 12,000 tons. The increase in tonnage destined to Australasia was due to gain in shipments of general cargo from both the United States and Europe. A decrease in shipments of cotton and phosphates was the principal contributing factor to the loss of tonnage destined to Asia.

PACIFIC TO ATLANTIC CARGO MOVEMENT

Origin.—Of the total cargo moving from the Pacific to the Atlantic in April 1933, 500,603 tons, or 44.3 percent of the total, originated in the United States; 260,296 tons, or 23.0 percent, in Canada; 158,120 tons, or 14.0 percent, in South America; 130,153 tons, or 11.5 percent, in Asia; and 31,506 tons, or 2.8 percent, in Australasia. Cargo tonnage from the United States made an increase of 77,327 tons, or 18.3 percent, in comparison with April 1932. Increases were also noted in tonnage coming from Asia and Australasia, these two areas registering gains of 29,024 tons, or 28.7 percent, and 9,265 tons, or 41.7 percent, respectively. Tonnage from Canada made a slight decrease—5,431 tons, or 2.0 percent—while that from South America fell off 32,169 tons, or 16.9 percent. The percentage of the total cargo originating in the United States, Asia, and Australasia, also increased in the past month as compared with April 1932, while that originating in Canada and South America decreased. The largest single factor in the gain in tonnage from the United States was an increase in mineral oil shipments. The increase in tonnage from Asia was due principally to a gain in shipments of sugar and general oriental cargo.

Destination.—Segregated according to destination, 574,524 tons, or 50.8 percent of the total cargo moving from the Pacific to the Atlantic, were reported destined to ports on the east coast of the United States, and 519,779 tons, or 46.0 percent, to European ports. These two areas absorbed 96.8 percent of the total cargo. Cargo destined to the United States made an increase of 42,234 tons, or 7.9 percent, in comparison with April 1932, and there was an increase of 58,028 tons, or 12.6 percent. The percentage of the total to the United States was approximately the same as in the previous year, and that to Europe slightly higher.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC

From the cargo declarations submitted it was possible to classify approximately 92 percent of the cargo in transit through the Canal from the Atlantic to the Pacific during the month of April 1933. The remaining 8 percent consisted, for the most part, of manufactured articles in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 5,000 tons for April 1932, or April 1933, are listed in the following tabulation, showing the differences:

Commodity	April 1932	April 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Ammonium compounds.....	5,730	4,318	-1,412
Automobiles.....	6,508	4,680	-1,828
Canned goods (fish, fruit, vegetables, etc.).....	6,130	9,087	+2,957
Chemicals.....	7,045	5,756	-1,289
Coal and coke.....	5,746	7,848	+2,102
Corn.....	1,042	7,819	+6,777
Cotton, raw.....	36,642	13,186	-23,456
Iron and steel, manufactures of.....	50,741	46,313	-4,428
Machinery.....	5,663	4,532	-1,131
Metal scrap.....	8,475	39,488	+31,013
Mineral oils.....	26,056	45,049	+18,993
Nitrates.....	6,325	2,738	-3,587
Paper.....	15,158	19,358	+4,200
Phosphates.....	28,723	9,916	-18,807
Potash.....	1,636	6,559	+4,923
Sugar.....	17,390	7,013	-10,377
Sulphur.....	7,013	16,724	+9,711
Textiles.....	6,534	7,745	+1,211
Tinplate.....	11,455	5,655	-5,800

The above 19 commodity groups for April 1933, comprise about 66 percent of the total cargo moving from the Atlantic to the Pacific. Nine of the items made gains in comparison with April 1932, while the balance declined.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC

It was possible to classify almost 99 percent of the cargo moving from the Pacific to the Atlantic during April 1933. Commodities which aggregated more than 5,000 tons either during the past month or April 1932, are listed below, showing the differences:

Commodity	April 1932	April 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Barley.....	15,435	16,565	+1,130
Beans, edible.....	7,794	10,563	+2,769
Borax.....	3,897	5,698	+1,801
Canned goods (fish, fruit, vegetables, etc.).....	55,546	58,210	+2,664
Coffee.....	12,608	17,401	+4,793
Cold storage (food products) ¹	12,295	10,125	-2,170
Copra.....	2,507	5,822	+3,315
Flour.....	9,628	19,152	+9,524
Fruit, dried.....	21,572	17,500	-4,072
Fruit, fresh.....	19,379	18,764	-615
Lumber.....	148,267	122,622	-25,645
Metals (principally copper).....	26,211	30,678	+4,467
Nitrates.....	18,875	11,469	-7,406
Oats.....	18,323	4,509	-13,814
Oils, mineral.....	230,821	258,165	+27,344
Oils, vegetable.....	13,206	13,154	-52
Ores.....	27,546	3,014	-24,532
Paper.....	13,789	10,424	-3,365
Skins and hides.....	4,900	5,437	+537
Soy beans.....	.....	8,250	+8,250
Sugar.....	130,375	175,124	+44,749
Wheat.....	185,670	221,812	+36,142
Wood pulp.....	17,741	9,501	-8,240
Wool.....	7,299	11,080	+3,781

¹ Does not include fresh fruit.

The above 24 commodity groups for April 1933, comprise over 94 percent of the cargo tonnage moving from the Pacific to the Atlantic. Fourteen of the items show increases in comparison with April 1932, and the balance decreases. Important increases were made in the shipments of sugar, wheat, and mineral oils, while ores and lumber made heavy decreases.

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, April 1933

(Figures represent tons of 2,240 pounds)

From—	NORTH AMERICA						SOUTH AMERICA						AUSTRALASIA					ASIA				Grand total	Percent of total cargo	
	West coast of United States	West coast of Canada	West coast of Central America and Mexico	Balboa, C.Z. 2	Hawaiian Islands	Total, North America	Chile	Colombia	Ecuador	Pern	West coast of South America 1	Total, South America	Australia	New Zealand	Australasia 1	Total, Australasia	Philippine Islands	China	Japan	Far East 1	Total, Asia			
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports.	86,862		498	490	7,135	94,985	1,668	429	312	946		3,355	4,272	700		4,972	8,641	9,216	35,975	506	54,338	157,650	39.6	
South Atlantic ports.	7,028					7,028							395				395	205	692	7,340	115	8,352	15,775	3.9
Gulf ports.	41,377	6,175				47,552												215	1,910	27,241	203	29,509	90,591	22.8
Total, United States.	135,267	6,175	498	490	7,135	149,565	1,668	429	312	946		3,355	11,569	7,268		18,837	9,061	11,818	70,556	824	92,259	264,016	66.3	
East coast of Canada.		442		70		512							3,025	761		4,333			6,500		6,500	11,345	2.9	
East coast of Central America and Mexico			5,760			5,760							2,572			2,572			8,322		8,322	2.1		
Cristobal, C.Z. 2			3,449	51		4,326	1,434	1,371	1,150	549	80	4,584							8,910		8,910	2.2		
West Indies.						7,219		1,047		9		1,086						2	5		7	8,282	2.1	
Total, North America.	136,238	13,691	9,707	611	7,135	167,382	3,102	2,847	1,462	1,504	80	8,995	17,166	8,029		547	75,742	9,061	11,820	77,061	824	98,766	300,885	75.6
EUROPE:																								
British Isles.	3,171	5,294		1		8,466	1,575	159	501	1,420		3,655	4,100	17,674	1,145	22,919							35,040	8.8
Belgium.	6,896	369	449	50	3,283	11,047	1,259	37	382	1,244		2,922											13,969	3.5
Denmark.	160					160																	160	
France.	259	12	22	11	304	141				31		172				1,018							1,494	0.4
Germany.	3,545	447	501	124	3,346	7,963	875	332	414	756	242	2,619											10,582	2.6
Holland.	835	516				1,351	220	67	50	669		1,006											2,357	0.6
Italy.	612		358			970	500			115		615											1,585	0.4
Norway.	882	11	425	682	1,106	3,106	388	14	825	256		1,433											4,589	1.2
Spain and Portugal.	494	825				1,319	195			22													1,536	0.4
Sweden.	1,931	14	40	35		2,020																	2,020	0.5
Europe 1.	186	192				378					32	32											410	0.1
Total, Europe.	18,971	7,488	1,987	903	7,735	37,084	5,153	609	2,172	4,512	274	12,721	4,100	17,674	2,163	23,937							73,742	18.5
East coast of South America.		333		2,066		8,914	12,011	96				12,107							2,284		2,284	23,305	5.9	
Asia.						81																	81	
Africa.																							83	
Grand total.	161,805	21,512	11,694	3,580	14,870	213,461	20,266	3,552	3,634	6,017	354	83,823	21,266	25,703	2,793	49,762	9,061	11,820	79,345	824	101,050	398,096	100.0	
Percent of total cargo:																								
April 1933.	40.6	5.4	2.9	0.9	3.8	53.6	5.1	0.9	0.9	1.5	0.1	8.5	5.3	6.5	0.7	12.5	2.3	3.0	19.9	0.2	25.4	100.0	.....	
April 1932.	39.6	3.8	1.7	0.1	5.3	50.5	2.6	0.5	0.4	1.2	1.5	6.2	2.8	5.0	0.6	8.4	4.0	8.1	22.1	0.7	34.9	100.0	.....	
April 1931.	44.4	3.3	2.0	2.2	4.2	56.1	7.4	0.6	0.8	1.7	0.9	11.4	2.5	3.5	0.8	6.8	2.1	3.6	18.9	1.1	25.7	100.0	.....	

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, April 1933

(Figures represent tons of 2,240 pounds)

From—	NORTH AMERICA							EUROPE												Grand total	Percent of total cargo																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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	North Atlantic ports			South Atlantic ports		Total, United States		East coast of Canada		East coast of Central America		Cristobal, C.Z. ²		West Indies		Total, North America		British Isles				Belgium		Denmark		France		Germany		Holland		Italy		Norway		Spain and Portugal		Sweden		Europe ¹		Total, Europe		East coast of South America		Asia		Africa																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

¹ General cargo not routed so as to allow segregation between definite ports.² Includes both local and transit cargo.³ Includes Sweden.

MOVEMENTS OF OCEAN VESSELS Week ending at midnight, May 20, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From —	For —	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Nuevo Panama ¹	12	14	35	14	5	55	14	17	00	14	18	14	18	14	18	14	50	226	101
Atlanta City ²	14	6	15	14	6	20	14	17	07	14	18	14	18	14	18	14	2,714	7,611	5,450
Montanan ³	14	7	30	14	7	49	14	17	51	14	18	45	18	45	18	45	2,672	6,756	4,774
Bennekou ⁴	13	17	48	14	12	30	14	20	05	14	21	29	Dutch	14	21	29	975	7,849	5,806
Hindanger ²	14	14	55	14	15	30	14	23	10	15	00	06	Norwegian	15	00	06	6,854	5,257	
Retriever ²	14	14	55	14	15	30	14	23	10	15	00	06	Norwegian	15	00	06	6,854	5,257	
Margaret Johnson ²	14	17	50	15	6	10	15	13	52	15	16	55	Swedish	15	16	55	1,977	7,048	5,337
Tonia ²	14	23	35	15	7	10	15	15	06	15	16	20	Norwegian	15	16	20	6,558	4,633	
son ²	15	8	50	15	9	00	15	16	45	15	19	39	Dutch	15	19	39	9,197	6,354	
Rotterdam ²	15	00	45	15	9	05	15	15	55	17	1	23	Norwegian	17	1	23	9,345	6,968	
Trondanger ²	15	00	45	15	9	05	15	15	55	17	1	23	Norwegian	17	1	23	9,345	6,968	
S. C. T. Dodd ²	15	11	45	15	11	50	15	19	05	15	20	00	American	15	20	00	7,481	5,095	
U. S. Grant ⁴	13	6	00	15	13	05	15	19	58	16	12	20	American	16	12	20	181		
Hoxbar ²	15	11	55	15	14	20	15	21	38	15	23	00	American	15	23	00	1,600	6,996	5,346
Pacific Commerce ²	16	1	35	16	6	10	16	15	07	16	16	25	British	16	16	25	1,600	6,996	5,346
Hummel Hummel ²	27	10	30	16	6	30	16	16	24	16	17	40	German	16	17	40	6,400	5,349	7
Herman Frasch ²	16	5	25	16	7	20	16	16	24	16	17	40	German	16	17	40	5,123	9,007	6,479
Hokkai Maru ²	16	5	30	16	8	20	16	17	16	16	18	20	Japanese	16	18	20	930	5,503	3,772
Recherche ²	15	17	10	16	8	55	16	18	59	16	20	20	French	16	20	20	6,636	7,023	5,336
Irisbank ²	16	5	35	16	9	35	16	19	53	16	21	00	British	16	21	00	2,145	6,831	4,969
Forbes Hauptman ²	16	10	55	16	11	05	16	20	39	16	21	45	American	16	21	45	2,595	7,160	4,982
Minnesota ²	16	10	57	16	12	20	16	21	35	16	22	30	American	16	22	30	3,295	5,434	3,969
Cal. ²	13	16	45	16	14	15	16	21	35	16	22	30	German	16	22	30	1,489	10,803	7,666
Democracy ²	15	23	20	16	14	25	16	22	58	17	00	01	American	17	00	01	2,056	5,684	4,070
Lochgoil ²	16	12	30	17	6	00	17	14	15	17	15	15	British	17	15	15	4,550	7,064	5,221
Willaro ²	16	18	30	17	7	05	17	15	00	17	16	00	American	17	16	00	1,104	9,576	6,618
Anten ²	16	22	45	17	8	20	17	16	29	17	17	55	Swedish	17	17	55	3,728	11,053	7,895
Silverglant ²	16	22	45	17	8	50	17	18	10	17	19	30	British	17	19	30	3,418	7,677	5,912
Sambu ²	16	22	45	17	8	50	17	18	10	17	19	30	British	17	19	30	6,655	8,252	5,969
Mamoon ²	17	11	30	17	13	10	17	22	05	17	23	00	British	17	23	00	1,598	2,615	1,844
City of Perth ²	17	11	30	17	13	10	17	22	05	17	23	00	British	17	23	00	3,087	9,306	6,873
Kurama Maru ²	17	20	15	18	7	10	18	14	38	18	15	20	Japanese	18	15	20			
Betty Maersk ²	17	23	15	18	8	35	18	17	03	18	21	00	Danish	18	21	00			
Lillian Luckenbach ²	18	3	25	18	9	25	18	19	15	18	21	26	American	18	21	26			

Endurance ⁶	18	8 00	18	8 30	18	19 23	18	21 26	Panamanian	Esteban Garcia	60 0	14 0	5 0	Cristobal, C.Z.	Balboa, C.Z.	Cocoanuts.	24	36
President Jackson	18	14 15	19	5 55	19	13 37	19	21 20	American.	Dollar Line	517 0	72 2	26 6	New York, N.Y.	Manila, P.I.	General	2 181	15 296
Virginia	19	4 50	19	7 15	19	14 42	19	23 55	American.	Panama-Pacific Line.	586 4	80 3	26 8	New York, N.Y.	San Francisco, Cal.	General	2 791	25 284
San Jose	18	16 25	19	8 20	19	17 01	19	18 15	Japanese.	Osaka Shosen Kaisha.	430 7	56 0	21 6	Buenos Aires, Arg.	Kobe, Japan.	Cotton, general.	3 270	7 875
Franz Kaspar	18	18 10	19	8 35	19	18 09	19	20 00	Danzig.	Mitsui Bussan Kaisha.	519 0	70 4	20 3	New York, N.Y.	Talara, Peru.	Ballast.	12 629	8 124
Alfred Klaffen	19	9 25	19	9 35	19	19 35	19	20 45	Japanese.	Ballast	375 0	50 0	20 6	Manila, Japan.	Manila, Japan.	Scrap iron, cotton	5 392	5 624
Stomard	15	6 30	19	13 15	19	20 58			Norwegian.	T. Dannevig & Co.	300 8	43 7	16 0	Lobito Bay, Africa	Callao, Peru.	Ballast.	3 058	1 896
California																		
State 7	18	15 15	19	13 25	19	21 00	19	22 05	American.	U.S. Navy.	251 0	43 0	16 7	New York, N.Y.	San Francisco, Cal.	Ballast.		12
Sambo	18	16 35	19	8 50	19	17 07	19	18 15	Panamanian	Hans Elliot	51 0	13 6		Cristobal, C.Z.	Balboa, C.Z.	Ballast.		25
Lt. Col. H. C. Schumacher	20	5 35	20	6 05	20	14 54			American.	U.S. Army	98 0	22 0		Cristobal, C.Z.	Gatun, C.Z.	Ballast.		
Richmond	19	13 33	20	6 35	20	15 43	20	22 35	American.	U.S. Navy	550 0	55 0		Norfolk, Va.	Balboa, C.Z.	Ballast		
Santa Rosa	19	16 08	20	7 09	20	16 53	20	21 20	German.	Panama Mail S.S. Co.	484 3	72 0	25 1	New York, N.Y.	Seattle, Wash.	General	2 658	13 948
Schwaben	19	16 50	20	7 35	20	17 20	20	24 45	Norwegian.	North German Lloyd	491 0	64 0	20 9	Hamburg, Germany	Portland, Ore.	General	2 505	10 002
Fergelen	19	16 10	20	7 55	20	19 27	20	20 45	Norwegian.	Fern Line	385 0	54 8	25 3	Galveston, Texas	Yokohama, Japan	Scrap iron, gen.	6 884	6 859
Coptic	19	19 10	20	8 15	20	20 17	20	21 20	British.	Shaw, Savill & Albion.	482 6	64 0	21 11	London, England.	Amaru, N.Z.	Ballast	11 819	8 366
Romey	19	21 50	20	9 15	20	21 06	21	12 36	British.	Canadian American Co.	420 0	57 0	15 6	New York, N.Y.	Wellington, B.C.	Ballast.	6 983	5 140
Ganonesa	20	5 45	20	9 30	20	22 00	21	2 50	British.	Shaw, Savill & Albion	450 0	58 3	17 0	London, England	Vancouver, N.Z.	Ballast.	8 956	6 562
Fiona	20	6 00	20	11 00	20	20 31	21	20 00	British.	Colonial Sugar Ref. Co.	288 3	44 0	21 0	Dundee, Scotland.	Sydney, Australia.	General	2 566	
Steel Inventor.	20	6 10	20	11 00	20	20 31	21	20 34	American.	Isthmian S.S. Lines	424 2	56 2	15 6	New Orleans, La	Honolulu, T.H.	Ballast.	7 611	5 450
Baron Herries.	20	10 15	20	12 25	21	8 24	21	21 40	British.	H. Hogarth & Sons	303 0	43 0	20 2	Newport, England	Acapulco, Salvador	Coal	3 305	
Alaskan.	20	11 55	20	12 25	21	8 29	21	21 40	American.	Amer.-Hawaiian Line.	415 0	53 7	19 0	Boston, Mass	Portland, Ore.	General	2 234	7 351
Real	19	22 45	20	10 00	20	19 25	20	20 10	Panamanian	Hans Elliot	62 0	17 0		Cristobal, C.Z.	Balboa, C.Z.	General	2 381	5 266
Lapwing	19	22 45	20	6 15	20	16 55			American.	U.S. Navy	180 0	35 6		Cristobal, C.Z.	Balboa, C.Z.	Ballast.		

THROUGH THE CANAL—PACIFIC TO ATLANTIC

El Alcto ¹	13	14	30	14	6	45	14	14	10	14	14	10	British	Anglo-Egypt. Oil Co.	440	0	57	6	28	0	Cabo Blanco, Ecua.	Philadelphia, Pa.	Crude oil.	10,381	7,555	5,049
John Jay	14	00	30	14	7	37	14	15	25	15	00	30	American	American Tankers Corp.	439	6	60	2	27	0	Seattle, Wash.	New York, N.Y.	Lumber, pulp	10,800	8,963	6,491
Parthenia	14	3	00	14	8	20	14	15	50	14	22	00	British	Danish Line	399	0	51	9	26	0	Vancouver, B.C.	Glasgow, Scotland	General	6,317	5,851	4,941
Kyphissia	14	3	30	14	9	06	14	16	45	14	22	10	German	Hamburg-American Line	337	7	48	2	13	4	San Jose, Guat.	Hamburg, Germany	Ballast	4,112	2,931	
Neptunia	14	5	55	14	10	04	14	18	00	14	14	10	American	Amer.-Hawaiian Line	460	0	57	8	23	0	Portland, Oreg.	Boston, Mass.	General	7,400	6,829	4,024
NorthernSun ¹	14	10	00	14	10	47	14	19	20	14	19	20	American	Sun Oil Co.	480	6	66	0	29	0	Los Angeles, Calif.	Perth Amboy, N.J.	Gasoline	13,470	9,664	6,552
Nelson	14	10	00	14	12	08	14	20	30	14	20	30	American	Nelson S.S. Co.	380	0	53	0	24	0	Seattle, Wash.	New York, N.Y.	Lumber, general	6,456	5,637	4,133
Traveler	14	14	30	14	15	17	14	22	35	15	12	00	American	Dollar Line	516	5	72	0	29	0	Manila, P.I.	New York, N.Y.	General	5,750	15,286	10,580
President Mc-	14	22	00	15	6	17	15	15	05	15	15	05	American	Calmor S.S. Corp.	410	3	54	2	26	0	Seattle, Wash.	Baltimore, Md.	Lumber	7,440	6,604	4,655
Kinley	15	4	40	15	7	16	15	16	30	15	16	30	American	Stand. Vac. Transp. Co.	468	3	62	7	27	0	Los Angeles, Calif.	New York, N.Y.	Gasoline	11,194	9,841	6,946
Floamar	15	10	00	16	6	28	16	14	40	16	15	15	American	Panama-Pacific Line	586	0	80	3	29	0	San Francisco, Cal.	New York, N.Y.	General	7,851	25,262	18,192
Levant Arrow	15	19	30	16	7	32	16	15	40	16	15	40	American	Luckenbach Line	446	5	56	1	30	0	Seattle, Wash.	Boston, Mass.	Lumber, general	7,345	8,720	6,495
Walter A.	15	19	45	16	8	26	16	16	50	17	23	00	Swedish	Scand.-S. Pacific Line	392	1	54	2	25	0	Talcahuano, Chile	Rotterdam, Holland	General	7,195	7,011	5,039
Luckenbach	15	23	30	16	8	45	16	18	15	16	22	12	American	Isthmian S.S. Lines	424	2	56	2	26	0	Seattle, Wash.	Avonmouth, Eng.	Wheat, lumber	7,882	7,611	5,450
Tuscaloosa	16	1	8	05	16	9	22	16	19	16	19	10	American	Sun Oil Co.	440	0	58	2	28	0	San Francisco, Cal.	Marcus Hook, Pa.	Gasoline	9,446	9,093	5,938
K. R. Kings-	16	1	8	05	16	9	22	16	19	16	19	10	American	Sun Oil Co.	440	0	58	2	28	0	San Francisco, Cal.	Marcus Hook, Pa.	Gasoline	9,446	9,093	5,938
bury ¹	16	1	8	05	16	9	22	16	19	16	19	10	American	Sun Oil Co.	440	0	58	2	28	0	San Francisco, Cal.	Marcus Hook, Pa.	Gasoline	9,446	9,093	5,938
City	16	1	8	05	16	9	22	16	19	16	19	10	American	Sun Oil Co.	440	0	58	2	28	0	San Francisco, Cal.	Marcus Hook, Pa.	Gasoline	9,446	9,093	5,938
Tanker	16	1	8	05	16	9	22	16	19	16	19	10	American	Sun Oil Co.	440	0	58	2	28	0	San Francisco, Cal.	Marcus Hook, Pa.	Gasoline	9,446	9,093	5,938

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo	Panama Canal tonnage		
	Day	Hour	Day	Hour	Day	Hour	Day	Hour									Nature	Tons	Gross	Net
Danwood	16	12 35	16	13 19	16	21 35	16	21 35	Norwegian	Anglo-Canadian S.S. Co.	386.6	60.2	26.0	Vancouver, B.C.	Avonmouth, Eng.	Grain, lumber...	8,950	6,913	4,894
Sambo	16	13 00	16	13 42	16	22 45	17	9 50	Panamanian	Hans Eliot	55.0	16.0	5.0	Darien, R.P.	Cristobal, C.Z.	Bananas...	27	25	12
Kirishima Maru	16	17 00	17	6 14	17	13 35	17	19 05	Japanese	Kokusai Kisen Kaisha.	443.1	60.0	24.0	Manila, P.I.	New York, N.Y.	General	6,923	8,912	6,504
Export	16	21 45	17	7 00	17	14 30	17	14 30	British	Furness Withy & Co.	435.9	60.2	28.0	Vancouver, B.C.	Glasgow, Scotland.	General	9,495	9,633	6,998
Point Chico	17	3 45	17	8 20	17	15 45	17	15 45	American	Swayne & Hoyt.	386.9	52.2	25.0	Portland, Ore.	Mobile, Ala.	Lumber, general	6,707		
Lena Lucken- bach	17	7 15	17	9 06	17	16 15	17	16 15	American	Luckenbach Line.	425.0	53.8	22.0	San Francisco, Cal.	Boston, Mass.	Sugar, general	4,106		
Columbian	17	10 50	17	11 25	17	19 10	17	19 10	American	Amer-Hawaiian Line.	404.6	53.9	28.4	Seattle, Wash.	Boston, Mass.	General	6,930	6,747	4,376
Matara	17	9 35	17	13 16	17	20 55	18	6 10	British	Shaw, Savill & Albion.	500.4	63.2	27.0	Auckland, N.Z.	London, England	Frozen, general	4,917	13,590	9,233
Atlantic City	17	14 00	17	14 44	17	22 32	17	22 32	British	Messers Exploiteb.	411.7	54.5	28.0	Vladivostok, U.S.S.R.	Hamburg, Germany	Soy beans	8,500	6,555	4,659
Norfolk Maru.	17	17 00	17	17 53	18	10 45	18	10 45	Japanese	Kawasaki Kisen Kaisha	405.0	53.0	19.0	Kobe, Japan	New York, N.Y.	Silk, general	1,830	7,033	5,087
Bonneville	17	17 15	18	6 21	18	14 00	18	14 00	Norwegian	Fern Line	386.3	54.2	27.0	Bat Negros, P.I.	East coast, U.S.	Sugar	8,000	6,680	3,036
Eastern Sun	17	19 15	18	7 09	18	15 15	18	15 15	American	San Oil Co.	480.6	66.0	29.0	Los Angeles, Calif.	Chester, Pa.	Sugar	13,332	9,607	6,548
Sambu			18	7 13	18	16 35	19	8 50	Panamanian	Hans Eliot	51.0	18.5		Panama, R.P.	Cristobal, C.Z.	Gasoline	23	25	12
Barge			18	7 13	18	16 35			Panamanian	Hans Eliot				Panama, R.P.	Cristobal, C.Z.	Ballast	6	6	6
San Marcos	18	8 00	18	9 08	18	16 35	18	16 35	American	Quaker Line	410.5	54.2	26.0	Portland, Ore.	Philadelphia, Pa.	Lumber, general	8,010	6,755	4,895
San Francisco	18	10 30	18	11 30	18	18 55	19	1 10	German	Hamburg-AmericanLine	432.3	59.1	26.0	Vancouver, B.C.	Hamburg, Germany	General	8,098	8,454	6,344
City of El- wood	18	3 00	18	12 17	18	20 10	19	00 40	American	Roosevelt S.S. Co.	395.5	55.0	27.0	Bayang, P.I.	Baltimore, Md.	General	7,340	7,344	5,283
Tobananes																			
Maersk	18	13 15	18	13 59	18	21 50	18	22 25	Danish	Isbrandtsen Moller Co.	280.8	40.2	19.0	Topolobampo, Mex.	Liverpool, England	Sugar	2,759		
Brilliant	18	13 35	18	14 27	18	22 45	18	22 45	American	Stand. Vac. Transp. Co.	480.5	66.0	28.0	San Francisco, Calif.	New York, N.Y.	Gasoline	12,891	9,822	6,749
Santa Teresa	18	7 45	19	6 12	19	13 30	20	1 00	American	Panama Mail S.S. Co.	360.2	51.6	23.0	Los Angeles, Calif.	New York, N.Y.	General	2,779	5,726	4,086
Santa Cecilia	18	19 30	19	7 08	19	14 50	19	14 50	American	Argonaut S.S. Line.	404.6	53.9	26.0	Seattle, Wash.	New York, N.Y.	Lumber, general	5,270	7,745	4,562
Felix Taussig.	18	21 23	19	7 56	19	16 00	19	16 00	American	McComick S.S. Co.	395.0	55.1	26.4	Seattle, Wash.	Philadelphia, Pa.	Lumber, general	7,137	7,056	4,964
Los Angeles	19	3 40	19	8 50	19	17 05	19	17 05	American	Union Oil Co.	446.0	60.5	28.0	Los Angeles, Calif.	Baltimore, Md.	Gas oil	9,500	7,193	4,903
Tokai Maru	19	4 40	19	9 04	19	19 05	20	7 20	Japanese	Osaka Shosen Kaisha	446.0	60.5	27.0	Iloilo, P.I.	Savannah, Ga.	General	7,193	8,982	6,274
Real	19	19	19	10 34	19	22 20	20	10 00	Panamanian	Hans Eliot	62.2	17.1	6.0	Panama, R.P.	Cristobal, C.Z.	General	27	46	22
Cape Comorin.	19	11 25	19	12 05	19	20 10	20	10 00	Panamanian	Chilean Nit. Sales Corp.	400.0	53.5	27.0	Quique, Chile	Charleston, S.C.	Nitrate	8,255	6,246	4,499
Brand	19	14 15	19	15 10	19	22 10	20	19 20	Dutch	Royal Neth. S.S. Co.	400.6	54.3	25.0	Manila, P.I.	New York, N.Y.	General	6,592	7,819	6,101
Brand	19	15 45	19	16 35	20	11 50	20	11 50	Norwegian	Mitsui Bussan Kaisha.	380.5	54.7	24.0	Manila, P.I.	New York, N.Y.	Sugar, general	7,895	6,804	5,131
Chamont	19	12 45	20	6 15	20	14 30	20	23 58	American	U.S. Navy.	448.0	58.2	24.0	San Francisco, Cal.	Norfolk, Va.	Navy supplies	277		
Sollund	19	19 15	20	7 15	20	15 50	22	7 10	Norwegian	Panama Mail S.S. Co.	221.0	32.2	14.0	Corinto, Nicaragua	Cristobal, C.Z.	Coffee, skins	905	1,015	579
Acajutla	19	20 30	20	7 25	20	16 50	20	16 55	British	Pacific Steam Nav. Co.	398.0	54.7	27.0	Champer, Guat.	Cristobal, C.Z.	General	624	1,273	706
Villager	19	22 15	20	8 05	20	16 55	20	16 55	Norwegian	Interocean S.S. Corp.	215.7	33.6	15.2	Vancouver, B.C.	Rotterdam, Holl'd.	General	7,518	8,569	5,131
Endurance	20	6 00	20	8 12	20	17 25	20	17 25	Panamanian	E. Garcia.	60.0	14.6	6.0	Colon, R.P.	Colon, R.P.	General	8	36	24
Roland	20	5 00	20	8 40	20	17 25	21	2 55	German	North German Lloyd	377.8	60.0	22.0	Corral, Chile	Hamburg, Germany	General	4,273	4,800	3,399
Golden Moun- tain	20	7 32	20	9 15	20	18 00	20	18 00	American	Amer-Hawaiian Line.	401.4	53.2	19.0	San Francisco, Cal.	Boston, Mass.	General	3,515		

Manizales.....	20	4	24	20	12	37	20	20	10	21	11	45	German.....	Grace Line.....	216.5	32.9	10.5	Buenaventura, Col.	Cristobal, C.Z.....	666	1,321	741
PanScandia.....	20	12	40	20	13	21	20	22	30	20	22	30	Norwegian.....	Standard Shipping Co.....	491.3	67.0	28.0	Talara, Peru.....	Southampton, Eng.	14,387	10,424	7,214
Durazzo.....	20	11	00	20	14	35	20	23	20	.....	.....	.....	German.....	Hamburg-American Line	227.5	34.4	15.0	Guayaquil, Ecuador	Cristobal, C.Z.....	1,040	1,632	1,041
Nuevo.....	20	8	50	20	14	09	20	22	30	21	14	40	Panamanian	Hans Elliot.....	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C.Z.....	212	226	101

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For —
May 14	Maja	Anglo-Saxon Petroleum Co.	Curacao, D.W.I.	May 14	Metapan	United Fruit Co.	New York via wayports
May 14	Pellern de la Touche	French Line	Havre via wayports	May 14	Metapan	Panama R.R.S.S. Line	New York, N.Y.
May 14	Juan S. Eleano	Spanish S.S. Line	Barcelona via wayports	May 14	Pastorena	Colombian Line	New York via wayports
May 14	No. 9685 ¹⁵	Pan American Airways	San Salvador via wayports	May 15	No. 600-M ¹⁵	Pan American Airways	Barraquilla, Colombia
May 14	No. 19-V ¹⁵	Pan American-Graee Airways	Talara via wayports	May 15	Pellern de la Touche	French Line	Havre via wayports
May 15	Peten	United Fruit Co.	Port Limon, Costa Rica	May 15	Costa Rica	Royal Netherlands S.S. Co.	Port Limon, Costa Rica
May 15	No. 145-M ¹⁵	Uraba, Medellin & Cent. Airways	Medellin, Colombia	May 15	Peten	United Fruit Co.	New York via wayports
May 15	No. 600-M ¹⁵	Pan American Airways	Barraquilla, Colombia	May 16	No. 22-V ¹⁵	Pan American-Graee Airways	Talara via wayports
May 15	No. 9688 ¹⁵	Pan American Airways	Guatemala via wayports	May 16	No. 9685 ¹⁵	Pan American Airways	San Salvador via wayports
May 16	Cefalu	Standard Fruit & S.S. Co.	New Orleans via Habana	May 16	Juan S. Eleano	Anglo-Saxon Petroleum Co.	Curacao, D.W.I.
May 16	Inapachuca ¹⁶	A. Tagaropolos	Colon, R.P.	May 16	Maja	A. Tagaropolos	Colon, R.P.
May 16	Anchuena ¹⁶	A. Tagaropolos	Colon, R.P.	May 16	Anachuena ¹⁶	A. Tagaropolos	Colon, R.P.
May 16	Annetta I. ¹⁶	P. W. Hamilton	Colon, R.P.	May 17	Cefalu	Standard Fruit & S.S. Co.	New Orleans via wayports
May 17	Ancon	Panama R.R.S.S. Line	New York via Haiti	May 17	El Panquaco	J. D. Obaldia	Colon, R.P.
May 17	El Panquaco	Pan American Airways	San Salvador via wayports	May 18	No. 600-M ¹⁵	Pan American Airways	Miami via wayports
May 17	No. 9658 ¹⁵	Pan American-Graee Airways	Talara via wayports	May 18	No. 145-M ¹⁵	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 18	No. 18-V ¹⁵	L. C. Borden	Grand Cayman	May 18	No. 9658 ¹⁵	Pan American Airways	Guatemala
May 18	R. L. Hustler ¹⁷	M. P. Martinez	Colon, R.P.	May 18	Lizzie D. Peabody ¹⁸	M. P. Martinez	Colon, R.P.
May 18	Canden	United Fruit Co.	Curacao, D.W.I.	May 19	No. 19-V ¹⁵	Pan American-Graee Airways	Chelaxo via wayports
May 18	No. 670-M ¹⁵	Pan American Airways	Miami via wayports	May 19	Canden	United Fruit Co.	Curacao via Port Limon
May 19	Turribala	United Fruit Co.	New Orleans via wayports	May 19	Turribala	United Fruit Co.	New Orleans via wayports
May 19	No. 145-M ¹⁵	Uraba, Medellin & Cent. Airways	Medellin, Colombia	May 19	Wanderer	T. & J. Harrison	Sabine Bar, Texas
May 19	No. 145-M ¹⁵	Uraba, Medellin & Cent. Airways	Liverpool via wayports	May 19	Kiel	Hamburg-American Line	Tampico via wayports
May 19	Wanderer	T. & J. Harrison	Hamburg via wayports	May 19	Annetta I. ¹⁶	P. W. Hamilton	Colon, R.P.
May 20	Costa Rica	Royal Netherlands S.S. Co.	Port Limon, Costa Rica	May 20	Veraqua	United Fruit Co.	Port Limon, Costa Rica
May 20	Colombia	Colombian Line	New York via wayports	May 20	No. 9688 ¹⁵	Pan American Airways	San Salvador via wayports
May 20	El Panquaco	J. D. Obaldia	Colon, R.P.	May 20	No. 145-M ¹⁵	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 20	Santa Marta	United Fruit Co.	New York via Kingstons	May 20	Carare	Elders & Fyffes, Ltd.	Avonmouth via wayports
May 20	Carare	Elders & Fyffes, Ltd.	Avonmouth via wayports				

16 Motor boat.

s Air mail carrier.

4 Towing barge.

13 For orders.

Motor schooner,

11 Motor ship.

1. Tanker.

(Continued on page 584, column 2.)

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Two Weeks Ending May 20, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Cristobal	Panama R.R.S.S. Line		May 7		641
Haiti	Colombian S.S. Line		May 7		607
Sixaola	United Fruit Co.		May 7		49
Quirigua	United Fruit Co.	May 8	May 8	49	213
Cerigo	Hamburg-American Line		May 8		310
Real	Hans Elliot		May 8		59
Santa Elena	Panama Mail S.S. Co.	May 8	May 9	470	69
Seattle	Hamburg-American Line	May 8	May 9	163	153
Manizales	Grace Line	May 8	May 9	1,133	77
Damsterdijk	Holland-America Line	May 8	May 9	28	113
Salvador	Pacific Steam Navigation Co.	May 8	May 13	646	350
Pearl Marie	R. Feuillebois	May 9	May 9	(¹)	12
Somerville	Isbrandtsen Moller Co.	May 9	May 9	36	(²)
Elizabeth Kellogg	Kellogg S.S. Co.	May 9	May 10	5,191	(²)
Contessa	Standard Fruit & S.S. Co.	May 9	May 10	343	764
Santa Barbara	Grace Line	May 10	May 11	442	576
Sesostri	Hamburg-American Line	May 10	May 11	86	348
Knute Nelson	Fred Olsen Line	May 10	May 11	(¹)	350
California	Nav. Libera-Triestina	May 11	May 11	40	(²)
Santa Ana	Panama Mail S.S. Co.	May 11	May 12	188	168
Santa Maria	Grace Line	May 11	May 12	171	660
Tulsagas	Associated Oil Co.	May 11	May 13	1,790	(²)
Buenaventura	Panama R.R.S.S. Line	May 11		1,251	
Peten	United Fruit Co.	May 12	May 12	369	33
President Harrison	Dollar Line	May 12	May 12	1	(²)
Point Lobos	Gulf-Pacific Line	May 12	May 13	548	(²)
San Clemente	Quaker S.S. Line	May 12	May 13	202	(²)
Nuevo Panama	Hans Elliot	May 12		240	
Pastores	United Fruit Co.	May 13		154	
Metapan	United Fruit Co.	May 13		362	
Costa Rica	Royal Netherlands S.S. Co.	May 13		144	
Cali	Hamburg-American Line	May 13		1,218	
Toba Maru	Nippon Yusen Kaisha	May 13		109	
Carrillo	United Fruit Co.	May 12	May 13	712	183
Buenaventura	Panama R.R.S.S. Line		May 14		379
Nuevo Panama	Hans Elliot		May 14		70
Pastores	Colombian S.S. Line		May 14		9
Metapan	United Fruit Co.		May 14		979
Lizzie D. Peabody	M. P. Martinez		May 14		40
Bennekom	Royal Netherlands S.S. Co.		May 14		379
President McKinley	Dollar Line	May 14	May 15	600	(²)
Margaret Johnson	Johnson S.S. Line	May 14	May 15	117	(²)
Pellerin de la Touche	French Line	May 14	May 15	92	372
Juan S. Elcano	Spanish S.S. Line	May 14	May 16	111	389
Maja	Anglo-Saxon Petroleum Co.	May 14	May 16	12,666	(²)
Kyphissia	Hamburg-American Line	May 14	May 16	(¹)	726½
Costa Rica	Royal Netherlands S.S. Co.		May 15		7
Peten	United Fruit Co.	May 15	May 15	15½	11½
Democracy	Nelson S.S. Line	May 15	May 16	589	(²)
Cali	North German Lloyd		May 16		558
Lochgoll	Royal Mail Lines, Ltd.	May 16	May 17	230	15½
Cefalu	Standard Fruit & S.S. Co.	May 16	May 17	174	693
Sveadrott	Scandinavian-South Pacific Line	May 16	May 17	147½	(²)
Ancon	Panama R.R.S.S. Line	May 16		1,327	
Kirishima Maru	Kokusai Kisen Kaisha	May 17	May 17	99	(²)
Lizzie D. Peabody	M. P. Martinez	May 18	May 18	(¹)	43
San Francisco	Hamburg-American Line	May 18	May 19	50	98
R. L. Hustler	L. C. Bodden	May 18		1	
Camden	United Fruit Co.	May 18	May 19	6,579	(²)
City of Elwood	Roosevelt S.S. Line	May 18	May 19	239	(²)
Virginia	Panama-Pacific Line	May 19	May 19	(¹)	9
Veragua	United Fruit Co.	May 19	May 19	376	8
Turrialba	United Fruit Co.	May 19	May 19	530	229½
Santa Rosa	Panama Mail S.S. Co.	May 19	May 20	329	94
Santa Teresa	Panama Mail S.S. Co.	May 19	May 20	372	23
Tokai Maru	Osaka Shosen Kaisha	May 19	May 20	189	(²)
Schwaben	Hamburg-American Line	May 19	May 20	296	224
Kiel	Hamburg-American Line	May 19	May 20	60	9
Wanderer	T. & J. Harrison	May 19	May 20	182	(²)
Baarn	Royal Netherlands S.S. Co.	May 19	May 20	441	3
Real	Hans Elliot	May 19	May 20	9	(²)
Santa Marta	United Fruit Co.	May 20		443	
Colombia	Colombian S.S. Line	May 20		344	
Nuevo Panama	Hans Elliot	May 20		237	
Manizales	Grace Line	May 20		666	
Durazzo	Hamburg-American Line	May 20		1,183	
Roland	North German Lloyd	May 20		135	
Winnipeg	French Line	May 20		140	
Sollund	Panama Mail S.S. Co.	May 20		924	
Costa Rica	Royal Netherlands S.S. Co.	May 20		28	
Acajutla	Pacific Steam Navigation Co.	May 20		624	

* No cargo discharged.

* No cargo laded.

Correction

In issue of THE PANAMA CANAL RECORD of May 17, 1933, page 561, in table "Commercial Traffic Through the Panama Canal in April 1933, by Trade Routes," the figures for United States intercoastal (Atlantic to Pacific) should be changed to read as follows: 51; 285,840; 202,153; 333,397; 201,844; \$235,340.77; 124,570. In the trade route United States to South America, page 562, the figures opposite United States should be changed to read 2; 14,086; 8,869; 17,563; 8,869; \$11,086.25; 4,343; and the figures opposite the total should be changed to read 4; 23,204; 16,377; 29,732; 16,361; \$17,651.21; 4,343.

Prices of Miscellaneous Supplies at Panama Canal Storehouses

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective May 22, 1933:

Commodities	Unit	Price
Brass, bar, average	Lb.	\$0.14
Brass, sheet, average	Lb.	.25
Bronze, Tobin, average	Lb.	.20
Gasoline, motor grade	Gal.	.10
Metal, yellow	Lb.	.19
Oakum, Navy, spun	Lb.	.15
Oakum, Navy, unspun	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge	Bbl. of 42 gals.	1.00
Oil, gun and ice machine	Gal.	.25
Oil, burning, Colza	Gal.	1.06
Oil, engine, gas, medium, in drums, No. 2135	Gal.	.25
Oil, engine, gas, extra heavy, in cases, No. 2250	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250	Gal.	.24
Oil, kerosene, in drums	Gal.	.08
Oil, marine engine	Gal.	.31
Paint, lead, white, dry	Lb.	.14
Paint, lead, white, in oil	Lb.	.08
Paint, zinc oxide, dry	Lb.	.08
Paint, zinc oxide, in oil	Lb.	.08
Grease, gear, chain and wire rope, lubricating	Lb.	.05
Grease, yellow, cup, No. 3, medium	Lb.	.08
Grease, yellow, cup, No. 3, hard	Lb.	.08
Soda, ash	Lb.	.03
Waste, cotton, colored	Lb.	.07
Waste, cotton, white	Lb.	.09

Provisions Required by Ships

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Facilities for Shipping

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, can bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from ample stocks at both ends of the Canal. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits, and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective in the course of handling large traffic through the Canal in over 17 years of operation.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa only, \$1.50 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 80 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.45 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Tolls Charges for Transit of The Panama Canal

1. Merchant vessels carrying passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement. \$1.20
2. Vessels in ballast, without passengers or cargo, per net vessel ton (each 100 cubic feet) of actual earning capacity as determined by the Panama Canal Rules of Measurement.72
3. Naval vessels, other than transports, colliers, hospital ships, and supply ships, per displacement ton.50
4. Army and navy transports, colliers, hospital ships, and supply ships, the vessels to be measured by the same rules as are employed in determining the net tonnage of merchant vessels, per net ton. 1.20
5. Tolls may not exceed the equivalent of \$1.25 per net registered ton as determined by United States rules of measurement, nor be less than the equivalent of \$0.75 per net registered ton so determined.
6. Vessels returning from Gatun Lake to original point of entry into the Canal, without passing through the locks at the other end, are charged tolls for one passage only.
7. Vessels transiting the Panama Canal from Cristobal to Balboa and return for the sole purpose of having repairs made at the Balboa dry dock and shops will be exempt from payment of tolls, but a charge will be made for pilotage and for handling lines as provided for in current tariff or supplements thereto.

Hours of Departure of Passenger Trains

Following are the hours of departure of the regular passenger trains of the Panama Railroad running between the Atlantic and the Pacific sides:

From Colon: Daily except Sundays and holidays, 9.25 a. m., 12.30 p. m., 4.40 p. m.; Sundays and holidays, 9.25 a. m., 4.00 p. m.

From Panama: Daily except Sundays and holidays, 7.05 a. m., 12.35 p. m., 4.45 p. m.; Sundays and holidays, 7.05 a. m., 6.05 p. m.

The time required for passage from one terminal to the other is 1 hour and 35 minutes.

MOVEMENTS OF OCEAN VESSELS—Continued from page 581

PORT OF BALBOA

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 14	Antigua	United Mail S.S. Co.	San Francisco, Calif.	May 14	Antigua	United Mail S.S. Co.	San Francisco, Calif.
May 14	Manizales	Grace Line	Buenaventura, Colombia	May 15	Manizales	Grace Line	Buenaventura, Colombia
May 16	Real ¹⁸	Hans Elliot	Darien, R.P.	May 15	Taibun Maru ¹⁹	Japanese Navy	Manzanillo, Mexico
May 18	Chicken of the Sea ²⁰	H. E. Morgan	Los Angeles, Calif.	May 15	All America	All America Cables, Inc.	Buenaventura, Colombia
May 18	Rajo ²⁰	John Radok	San Diego, Calif.	May 16	Real ¹⁸	Hans Elliot	Panama Bay, R.P.
May 19	Point Gorda	McCormick S.S. Co.	San Francisco, Calif.	May 19	Chicken of the Sea ²⁰	H. E. Morgan	Los Angeles, Calif.
May 20	All America	All America Cables, Inc.	Buenaventura, Colombia	May 19	Rajo ²⁰	John Radok	San Diego, Calif.
				May 19	Iwate	Japanese Navy	Manzanillo, Mexico
				May 19	Yakumo	Japanese Navy	Manzanillo, Mexico
				May 20	Point Gorda	McCormick S.S. Co.	Buenaventura, Colombia
				May 20	All America	All America Cables, Inc.	High seas

* Other than ships passing through the Canal.

²⁰ Motor ship.

¹⁹ Collier.

¹⁸ Motor schooner.

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Volume XXVI.

Balboa Heights, C. Z., May 31, 1933.

No. 44.

Comparison of Canal Traffic in April 1933 with April Traffic in Previous Years

Commercial traffic through the Canal during the month of April 1933, showed a decrease of 24,095 net tons (Panama Canal measurement), or 1.3 percent, in comparison with April 1932, while the amount of cargo carried gained 84,247 tons, or 5.8 percent. The number of transits, 370, was the same as in April 1932. In comparison with April 1931, the number of transits for April 1933 fell off 83, or 18.3 percent; net tonnage, 453,208, or 19.8 percent; and cargo, 483,139 tons, or 24.0 percent.

The peak month of April since the opening of the Canal occurred in 1929 when 540 commercial transits, aggregating 2,488,176 net tons (Panama Canal measurement), and carrying 2,719,668 tons of cargo, made Canal transit. In comparison with these high figures last month's traffic shows a loss of 31.5 percent in transits, 26.1 percent in net tonnage (Panama Canal measurement), and 43.8 percent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried through the Canal during the month of April each year from 1915 to 1933, inclusive, and for comparison the monthly averages for the corresponding fiscal year ending June 30 following:

Calendar year	Month of April			Fiscal year	Average per month for fiscal year		
	Commercial transits	Panama Canal net tonnage	Tons of cargo		Commercial transits	Panama Canal net tonnage	Tons of cargo
1915.....	121	404,561	521,169	1915.....	102	361,197	465,567
1916.....	75	233,990	366,784	1916.....	63	199,687	257,843
1917.....	150	524,091	628,169	1917.....	150	483,213	588,213
1918.....	173	542,145	627,358	1918.....	172	547,839	627,669
1919.....	161	480,867	506,929	1919.....	169	510,416	576,385
1920.....	220	822,471	867,521	1920.....	206	712,170	781,208
1921.....	227	955,503	907,613	1921.....	241	951,323	966,601
1922.....	230	974,833	1,046,047	1922.....	228	951,455	907,075
1923.....	404	2,007,690	2,187,145	1923.....	331	1,550,482	1,630,656
1924.....	403	2,053,171	2,158,721	1924.....	436	2,179,073	2,249,559
1925.....	382	1,840,692	1,950,902	1925.....	389	1,904,506	1,996,570
1926.....	425	2,048,247	2,237,567	1926.....	433	2,064,549	2,169,787
1927.....	464	2,224,500	2,429,807	1927.....	456	2,185,651	2,312,351
1928.....	531	2,384,491	2,473,884	1928.....	538	2,454,886	2,469,226
1929.....	540	2,488,176	2,719,668	1929.....	534	2,468,483	2,555,250
1930.....	489	2,479,096	2,456,782	1930.....	515	2,498,385	2,502,519
1931.....	453	2,292,805	2,011,117	1931.....	461	2,316,012	2,090,233
1932.....	370	1,863,692	1,443,731	1932.....	376	1,968,785	1,650,667
1933.....	370	1,839,597	1,527,978	1933 ³	376	1,903,751	1,485,650

¹ Canal opened August 15, 1914.

² Average for 10½ months.

³ Average for 10 months of fiscal year.

Publication of Notices and Circulars of Interest to Shipping

All of the Panama Canal notices to mariners, notices to steamship lines, and general circulars of interest to shipping in its relation to the Canal are published in THE PANAMA CANAL RECORD. For this reason it is considered unnecessary to make a separate general distribution away from the Isthmus of such notices and circulars to those receiving THE PANAMA CANAL RECORD. Shipping interests are advised to look for them in this paper, which is supplied to them without charge.

CANAL WORK IN APRIL 1933

The following is the report of the Governor to the Secretary of War, of Canal work in the month of April 1933.

BALBOA HEIGHTS, C.Z., May 20, 1933.

*The Honorable, the Secretary of War,
Washington, D.C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of April 1933:

TRANSITS AND TOLLS

During the month, 370 commercial vessels and 9 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 65 vessels belonging to the United States Army and Navy on which no tolls were collected, making a total of 444 transits for the month, or a daily average on all traffic of 14.80.

Tolls on the 370 commercial vessels amounted to \$1,554,250.14, and on the launches to \$129.45, a total of \$1,554,379.59, or a daily average on all traffic of \$51,812.65. In comparison with the previous month (March 1933), commercial traffic showed a loss of 29 transits, or 7.3 percent, and \$164,658.27 in tolls, or 9.6 percent. Changes in the daily averages for this period showed losses of 4.2 percent in transits and 6.6 percent in tolls. In comparison with April 1932, transits in April 1933, were unchanged, while tolls declined \$54,384.53, or 3.4 percent.

In comparison with the first 10 months of the fiscal year 1932, commercial traffic this year shows a decrease of 1.4 percent in transits, 4.5 percent in net tonnage (Panama Canal measurement), 11.2 percent in cargo tonnage, and 6.2 percent in tolls collection. In comparison with the first 10 months of the fiscal year 1931, there was a decline of 20.1 percent in transits, 19.2 percent in net tonnage (Panama Canal measurement), 30.6 percent in cargo tonnage, and 21.7 percent in tolls collected.

The total number of craft of all kinds transiting the Canal during the month of April in the two preceding years and in 1933 are shown in the following tabulation:

	April 1931	April 1932	April 1933
Commercial vessels.....	453	370	370
Launches (under 20 tons measurement).....	17	7	9
Noncommercial vessels:			
United States Government.....	32	27	65
For repairs.....	1		
Total.....	503	404	444

In addition to the vessels listed above, Panama Canal equipment consisting of barges, tugs, dredges, etc., was passed through the locks during April 1933, as follows:

	North-bound	South-bound	Total
Gatun.....	16	15	31
Pedro Miguel.....	37	28	65
Miraflores.....	30	20	50
Total.....	83	63	146

COMMERCIAL TRAFFIC

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected from the commercial traffic transiting the Canal each month from the beginning of the fiscal year 1933 to the end of April 1933, as compared with the same months in the previous year:

Month	No. of vessels		Panama Canal net tonnage		Tons of cargo		Tolls	
	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September...	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October.....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November...	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December...	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
January.....	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
February....	358	368	1,878,177	1,832,658	1,645,393	1,434,862	1,647,797.06	1,575,708.35
March.....	363	399	1,864,896	1,989,044	1,643,952	1,738,227	1,645,366.81	1,718,908.41
April.....	370	370	1,863,692	1,839,597	1,443,731	1,527,978	1,608,634.67	1,554,250.14
Total...	3,813	3,758	19,925,311	19,037,510	16,726,650	14,856,499	17,455,182.60	16,373,103.60

* Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for April in the years 1931, 1932, and 1933, and comparison with the monthly averages for the calendar year 1932:

	April 1931	April 1932	April 1933	Average per month for calendar year 1932
Number of vessels.....	453	370	370	364
Panama Canal net tonnage.....	2,292,805	1,863,692	1,839,597	1,886,345
United States net tonnage.....	1,686,523	1,344,902	1,282,311	1,367,686
Registered gross tonnage.....	2,814,348	2,280,170	2,159,191	2,277,608
Registered net tonnage.....	1,711,593	1,364,088	1,304,541	1,381,155
Tolls.....	\$2,014,349.13	\$1,608,634.67	\$1,554,250.14	\$1,640,472.65
Tons of cargo carried.....	2,011,117	1,443,731	1,527,978	1,508,328

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and tons of cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day			Average per day for calendar year 1932
	April 1931	April 1932	April 1933	
Number of transits.....	15.10	12.33	12.33	11.93
Panama Canal net tonnage.....	76,427	62,123	61,320	61,847
Tolls.....	\$67,144.97	\$53,621.16	\$51,808.34	\$53,785.99
Tons of cargo.....	67,037	48,124	50,933	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of April in 1931, 1932, and 1933, and the average for the calendar year 1932, are shown in the following tabulation:

	Average per vessel			Average per vessel for calendar year 1932
	April 1931	April 1932	April 1933	
Panama Canal net tonnage.....	5,073	5,051	4,985	5,195
United States net tonnage.....	3,731	3,645	3,475	3,767
Registered gross tonnage.....	6,226	6,179	5,851	6,273
Registered net tonnage.....	3,787	3,697	3,535	3,804
Tolls.....	\$4,446.67	\$4,347.66	\$4,200.63	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,449	3,913	4,141	4,154
Tons of cargo (laden vessels only).....	5,406	4,734	4,851	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS

Sixteen nationalities were represented in the commercial traffic through the Canal in April 1933, in comparison with the same number in the previous month, and also in April 1932. Vessels of United States registry, with 137, led in the number of transits, while those flying the British flag, with 77, were second. Vessels of these two nationalities made up 57.8 percent of the total transits for the month. Vessels of Norwegian and Panamanian registry, with 33 transits each, and German with 28, were next in numerical importance. With respect to net tonnage (Panama Canal measurement), vessels of the United States, with 804,002 tons, made up 44.7 percent of the aggregate; British, with 449,067 tons, made up 24.4 per cent; Norwegian, with 153,116 tons, 8.3 percent; Japanese, with 83,236 tons, 4.5 percent; and German, with 82,289 tons, 4.5 percent.

CARGO AND PRINCIPAL COMMODITIES

The total cargo through the Canal during the month of April 1933, was 1,527,978 tons, an increase of 84,247 tons, or 5.8 percent, in comparison with April 1932. Cargo from the Atlantic to the Pacific aggregated 398,096 tons, compared with 393,927 tons in the previous month, and 378,606 tons in April 1932. From the Pacific to the Atlantic cargo amounted to 1,129,882 tons, as compared with 1,344,300 tons in the previous month, and 1,065,125 tons in April 1932. The combined cargo movement in April 1933 was 210,249 tons, or 12.1 percent, less than the tonnage passing through in the previous month.

From the Atlantic to the Pacific, manufactures of iron and steel comprised the leading commodity, with shipments totaling 46,313 tons, followed by mineral oils with 45,049 tons, scrap metal with 39,488 tons, paper with 19,358 tons, sulphur with 16,724 tons, and raw cotton with 13,186 tons. Substantial increases occurred in shipments of scrap metal, mineral oils, and sulphur; paper made a small increase, but the remaining two items mentioned above declined in comparison with April 1932.

From the Pacific to the Atlantic, mineral oils, totaling 258,165 tons, formed the leading commodity, followed by wheat with 221,812 tons, sugar with 175,124 tons, lumber with 122,622 tons, and canned goods with 58,210 tons. Large increases occurred in shipments of sugar, wheat, and mineral oils. Canned goods made a small increase, but lumber shipments declined by approximately 20 percent, compared with April 1932.

Traffic in both directions contributed to the increase in cargo tonnage carried through in April 1933, compared with April 1932. The gain in the Atlantic to Pacific movement was 19,490 tons, or 5.1 percent, and from the Pacific to Atlantic, 64,757 tons, or 6.1 percent.

TOLLS

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels averaged \$0.858 per net ton (Panama Canal measurement) and tolls on vessels in ballast averaged \$0.722 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of April 1933, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality	Tolls actually collected under present dual system	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage	Difference		Pro rata of tolls actually collected per Panama Canal net ton	
			Increase	Decrease	Laden	Ballast
Belgian.....	\$5,708.75	\$7,044.00	\$1,335.25	.....	\$0.810	.....
British.....	* 373,353.83	* 419,486.00	46,102.17	.....	.848	\$0.726
Chilean.....	2,494.80	2,079.00	.....	\$415.80	.....	.720
Danish.....	40,722.57	47,817.60	7,095.03	.....	.806	.720
Danzig.....	44,963.37	42,089.60	.....	2,873.77	1.051	.720
Dutch.....	31,117.50	37,017.00	5,899.50	.....	.841	.....
French.....	37,376.25	48,387.00	11,010.75	.....	.772	.....
German.....	66,551.25	82,289.00	15,437.75	.....	.812	.....
Italian.....	22,180.00	30,757.00	8,577.00	.....	.721	.....
Japanese.....	84,510.00	83,236.00	.....	1,274.00	1.015	.....
Norwegian.....	116,840.32	145,789.60	28,949.28	.....	.770	.710
Panamanian.....	10,527.29	14,421.60	3,894.31	.....	.723	.755
Swedish.....	15,633.75	20,973.00	5,339.25	.....	.745	.....
United States.....	694,418.96	775,116.00	80,697.04	.....	.878	.720
Venezuelan.....	3,421.50	2,920.00	.....	501.50	1.155	.720
Yugo-Slavian.....	4,100.00	5,208.00	1,108.00	.....	.787	.....
Total.....	1,554,250.15	1,764,630.40	215,445.33	5,065.07	.858	.722
Net increase for all traffic.....	.....	.....	210,380.26	.....	.....	.....

* Includes \$2,565 collected on naval vessel at \$0.50 per ton displacement.

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$65,651.83
United States foreign trade.....	13,208.21
United States-Canal Zone trade.....	1,837.00
Total.....	80,697.04

RATIO OF CARGO TONNAGE TO NET TONNAGE

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in April 1933, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality	Atlantic to Pacific	Pacific to Atlantic	Total
Belgian.....		1.48	1.48
British.....	.43	1.14	.82
Danish.....	.43	1.55	.97
Danzig.....	1.90	1.94	1.93
Dutch.....	.30	1.14	.81
French.....	.15	1.08	.64
German.....	.39	1.16	.80
Italian.....	.18	.81	.49
Japanese.....	1.09	1.17	1.13
Norwegian.....	.83	1.45	1.19
Panamanian.....	.24	1.72	.31
Swedish.....	.99	1.45	1.22
United States.....	.52	1.22	.91
Venezuelan.....	1.70		1.70
Yugoslavian.....		1.81	1.81
Average, April 1933.....	.54	1.24	.93
Average, April 1932.....	.53	1.21	.91
Average, April 1931.....	.66	1.33	1.04

CLASSIFICATION OF VESSELS

A further classification of vessels passing through the Canal during the month of April 1933, is as follows:

Class	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Panama Canal net tonnage	Tolls	No. of ships	Panama Canal net tonnage	Tolls
Cargo-carrying ships:						
Tank ships—						
Ballast.....	17	106,784	\$76,884.48	2	1,825	\$1,314.00
Laden.....	6	23,062	24,488.75	23	136,506	141,948.75
All others—						
Ballast.....	24	85,110	61,570.51	2	48	36.00
Laden.....	139	714,211	598,096.50	153	771,962	647,268.60
Noncargo-carrying ships:						
Yachts.....	2	69	63.15	1	20	14.40
Naval.....				1		2,565.00
Total.....	188	929,236	761,103.39	182	910,361	793,146.75
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	104	533,957	\$452,715.33	108	565,646	\$493,401.50
Motor.....	71	394,871	308,016.42	61	344,356	296,761.05
Motor schooner.....	11	339	308.49	11	339	404.80
Other craft (yachts, naval, etc.):						
Miscellaneous.....	2	69	63.15	2	20	2,579.40
Total.....	188	929,236	761,103.39	182	910,361	793,146.75

Of the 212 steam driven vessels, 154 were oil burning, 56 coal burning, and 2 burned either oil or coal.

NONCOMMERCIAL VESSELS

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of April 1933. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Tonnage	Tolls	No. of ships	Tonnage	Tolls
U.S. Naval vessels:						
Aircraft tenders.....	1	² 4,450	\$3,204.00	1	² 4,450	\$3,204.00
Ammunition ships.....				1	² 4,405	5,506.25
Cruisers.....				3	² 27,050	13,525.00
Destroyers.....	1	² 1,215	607.50	7	² 8,367	4,183.50
House boats.....				1	² 10	7.50
Launches.....	1	² 10	7.50	7	² 70	52.50
Mine sweepers.....	3	² 2,850	1,425.00	5	² 4,750	2,375.00
Patrol vessels.....	1	² 500	250.00			
Submarines.....	4	² 3,621	1,810.50	9	² 8,001	4,000.50
Submarine chasers.....	2	² 154	77.00	3	² 231	115.50
Supply ships.....	1	² 4,355	5,443.75			
Survey ships.....				1	² 1,265	632.50
Tankers.....	1	² 5,363	3,861.36	1	² 5,063	6,328.75
Transports.....	1	² 5,327	6,658.75			
Tugs.....	1	² 500	250.00			
Whale boats.....	1	² 10	7.50			
U.S. Army vessels:						
Launches.....	1	² 10	7.50			
Mine planters.....				1	² 1,208	604.00
Transports.....	1	² 3,908	4,885.00	3	² 26,268	32,835.00
Tugs.....	2	² 184	230.00			
Total.....	22		28,725.36	43		73,370.00

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage.

The foregoing noncommercial vessels transiting the Canal during the month of April 1933, carried cargo as follows: Atlantic to Pacific, 4,153 tons; Pacific to Atlantic, 2,661 tons; total, 6,814 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of April 1933. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	No. of transits	Panama Canal net tonnage	Tolls	Tons of cargo
Atlantic to Pacific.....	5	57	\$81.60	44
Pacific to Atlantic.....	4	41	47.85	19
Total.....	9	98	129.45	63

STATEMENT OF TERMINAL OPERATIONS

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of April 1933, are shown in the following tabulation:

	Cristobal	Balboa	Total
Local cargo arriving..... tons..	44,059	27,229	71,288
Local cargo shipped..... tons..	4,344	510	4,854
Cargo received for transshipment..... tons..	29,821	1,720	31,541
Cargo transhipped..... tons..	30,542	1,786	32,328
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	103	32	135
Number of releases issued.....	879	297	1,176
Tons received.....	520	224	744
Tons withdrawn.....	550	203	753
Packages received.....	7,734	2,391	10,125
Packages withdrawn.....	10,822	2,487	13,309

	Cristobal	Balboa	Total
Vessels supplied with bunker coal:			
Commercial, other than Panama Railroad Company.....	20	1	21
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons..	3,118	93	3,211
Coal issued, miscellaneous:			
Panama Canal departments..... tons..	106	5	111
U.S. Army, including vessels..... tons..	49		49
Panama Railroad Company..... tons..		11	11
Individuals and companies..... tons..	39		39
Transferred to Navy..... tons..	109		109
Total sales and issues..... tons..	3,421	109	3,530
Coal on hand, April 1, 1933..... tons..	13,587		13,587
Coal on hand, May 1, 1933..... tons..	19,421		19,421
Coal received during month..... tons..	9,255		9,255
Coal received from Navy..... tons..		109	109
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls..	3,900.78	12,890.62	16,791.40
Panama Railroad Company..... bbls..	15,676.66	523.00	16,199.66
U.S. Army and Navy..... bbls..		119.84	119.84
Total sales and issues..... bbls..	19,577.44	13,533.46	33,110.90
Fuel oil on hand, May 1, 1933..... bbls..	24,967.03	42,844.95	67,811.98
Diesel oil sold during April 1933..... bbls..	236.40	1,474.44	1,710.84
Diesel oil on hand, May 1, 1933..... bbls..	41.65	4,099.67	4,141.32
Miscellaneous transfers..... bbls..	417.19	1,025.04	1,442.23
Gasoline and kerosene pumped for The Panama Canal..... bbls..	2,763.71	6,180.24	8,943.95
Gasoline pumped for individuals and companies..... bbls..	1,137.01	56,277.09	57,414.10
Oil pumped for individuals and companies:			
Receipts..... bbls..	126,914.72	2,588.00	129,502.72
Issues..... bbls..	139,220.13	38,232.13	177,452.26
Oil pumped for U.S. Navy..... bbls..	8,521.80	72,128.00	80,649.80
Total fuel oil, gasoline, and kerosene handled..... bbls..	298,788.40	191,438.40	490,226.80
Admeasurement of vessels:			
U.S. equivalent certificates issued.....	15	2	17
Measured for Panama Canal net tonnage.....	5	1	6
Remeasured for Panama Canal net tonnage.....	16	9	25
Panama Canal net tonnage corrected.....	7	8	15
U.S. equivalent tonnage corrected.....	16	17	33
Services of harbor equipment:			
Tugs, total operating hours.....	225	146½	371½
Launches, total operating hours.....	878½	1,014½	1,893
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$7,875.00	\$4,042.50	\$11,917.50
Pilotage.....	14,846.00	6,382.00	21,228.00
Seamen.....	8,164.00	7,944.00	16,108.00
Launch service.....	1,305.50	1,929.50	3,235.00
Wharfage.....	12,830.06	4,345.30	17,175.36
Ships measured.....	90.00	50.00	140.00
Miscellaneous.....	460.40	139.03	599.43
Clearances issued.....	227	191	418
Bills of health issued.....	241	197	438

ALL VESSELS ENTERING AND CLEARING PORT

	Port of Cristobal			Port of Balboa		
	No. of ships	Registered gross tonnage	Registered net tonnage	No. of ships	Registered gross tonnage	Registered net tonnage
<i>Ships entering.</i>						
All vessels, including those transiting Canal.....	420	2,665,799	1,629,307	398	2,397,338	1,488,807
Vessels entering port but not transiting Canal.....	57	365,865	210,518	15	56,473	30,060
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	112	820,323	497,977	99	757,017	457,249
<i>Ships clearing.</i>						
All vessels, including those transiting Canal.....	419	2,657,982	1,624,784	400	2,385,290	1,479,335
Vessels clearing port but not transiting Canal.....	59	372,831	214,607	12	55,945	29,726
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	110	801,165	486,658	99	757,017	457,249

MOVEMENT OF PASSENGERS

	At Cristobal			At Balboa			Total		
	First-class	Others	Total	First-class	Others	Total	First-class	Others	Total
Disembarking:									
From Atlantic ports.....	529	615	1,144	180	436	616	709	1,051	1,760
From Pacific ports.....	87	202	289	225	159	384	312	361	673
Total disembarking.....	616	817	1,433	405	595	1,000	1,021	1,412	2,433
Embarking:									
For Atlantic ports.....	1,027	765	1,792	118	412	530	1,145	1,177	2,322
For Pacific ports.....	63	79	142	164	184	348	227	263	490
Total embarking.....	1,090	844	1,934	282	596	878	1,372	1,440	2,812
Remaining on board:									
From Atlantic to Pacific ports.....	873	1,319	2,192	1,162	1,594	2,756	2,035	2,913	4,948
From Pacific to Atlantic ports.....	2,016	2,457	4,473	1,899	2,144	4,043	3,915	4,601	8,516
From Atlantic to Atlantic ports.....	922	431	1,353				922	431	1,353
From Pacific to Pacific ports.....				9	106	115	9	106	115
Total remaining on board.....	3,811	4,207	8,018	3,070	3,844	6,914	6,881	8,051	14,932
Total arriving on Canal Zone.....	4,427	5,024	9,451	3,475	4,439	7,914	7,902	9,463	17,365
Total departing from Canal Zone.....	4,901	5,051	9,952	3,352	4,440	7,792	8,253	9,491	17,744

NOTE.—In passengers "remaining on board," those from the Atlantic to the Pacific and Pacific to the Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL

	Total commercial vessels	Passenger-carrying vessels	Percent of total transits	Number of passengers carried
Atlantic to Pacific.....	188	71	37.8	2,950
Pacific to Atlantic.....	182	72	39.6	4,948
Total.....	370	143	38.6	7,898

In addition to the aforesaid, 50 passenger-carrying vessels called at the port of Cristobal and 6 at the port of Balboa without transiting the Canal, making a total of 199 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING

During the month of April 1933, 45 commercial airplanes entered and cleared at Cristobal, and 3 entered and cleared at Balboa. A total of 63 passengers (33 from the north and 30 from the south) disembarked from the planes landing at Cristobal, and 59 passengers (40 for the north and 19 for the south) embarked. Seven passengers (from the south) disembarked from the planes landing at Balboa.

COMMISSARY SALES TO VESSELS

The following is a statement of commissary sales to vessels during the month of April 1933, together with the total sales in the corresponding month in 1932 and 1931:

	Ice	Groceries	Cold storage	Laundry	Miscellaneous	Total
Sales at Cristobal to:						
Commercial vessels.....	\$469.25	\$3,058.43	\$7,793.21	\$122.02	\$2,162.79	\$13,605.70
Government vessels.....	227.18	3,313.52	6,913.73	43.76	367.92	10,866.11
Panama Railroad vessels.....		212.11	12.49	325.25	1.19	551.04
Total sales, April 1933.....	696.43	6,584.06	14,719.43	491.03	2,531.90	25,022.85
Total sales, April 1932.....	875.03	7,497.08	11,824.00	533.56	3,420.69	24,150.36
Total sales, April 1931.....	1,219.05	10,832.76	26,479.85	667.81	7,172.66	46,372.13
Sales at Balboa to:						
Commercial vessels.....	177.37	1,743.74	3,135.22	289.12	1,638.27	6,983.72
Government vessels.....	463.74	2,776.21	15,761.39	742.07	1,220.89	20,964.30
Total sales, April 1933.....	641.11	4,519.95	18,896.61	1,031.19	2,859.16	27,948.02
Total sales, April 1932.....	790.65	3,887.43	14,323.44	634.56	3,820.70	23,456.78
Total sales, April 1931.....	631.49	14,689.47	16,583.95	721.78	8,076.15	40,702.84

The aggregate sales to commercial vessels during the month were \$20,589.42; to Government vessels, \$31,830.41; and to Panama Railroad vessels, \$551.04, making the total sales to all vessels, \$52,970.87. The figures are subject to minor changes on final audit.

LOCK OPERATIONS

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of April 1933, as compared with the corresponding month in 1932 and 1931:

Locks	Number of lockages						Comparative grand totals		
	Commercial			Noncommercial ¹			April 1931	April 1932	April 1933
	North	South	Total	North	South	Total			
Gatun.....	168	172	340	24	8	32	445	371	372
Pedro Miguel.....	165	171	336	32	15	47	468	386	383
Miraflores.....	166	168	334	27	8	35	463	397	369
Number of vessels put through locks.									
Gatun.....	182	188	370	71	44	115	535	447	485
Pedro Miguel.....	182	191	373	90	48	138	546	443	511
Miraflores.....	182	191	373	83	40	123	540	455	496

¹ Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS

	Gatun	Pedro Miguel	Miraflores
Army and Navy vessels.....	77	66	67
Panama Canal equipment.....	31	65	50
Launches under 20 tons measurement.....	7	7	6

The total consumption of water for lockages, loss in leakage, and maintenance, was as follows in April 1933, as compared with the preceding month and the corresponding month in 1932:

	Gatun	Pedro Miguel	Miraflores
Lockages.....	<i>Cubic feet.</i> 1,392,770,000	<i>Cubic feet.</i> 1,069,970,000	<i>Cubic feet.</i> 1,184,390,000
Leakage.....	30,000,000	152,000,000	20,000,000
Maintenance.....	2,020,000		26,590,000
Total, April 1933.....	1,424,790,000	1,221,970,000	1,230,980,000
Total, March 1933.....	1,573,200,000	1,295,890,000	1,349,520,000
Total, April 1932.....	1,476,720,000	1,222,210,000	1,243,380,000

HYDROGRAPHY

The hydrographic conditions in the Canal Zone and vicinity during the month of April 1933, are shown in comparative form in the following tabulation:

	April		April—Years of record		
	1933	1932	Maximum	Minimum	Mean
Discharge of Chagres River at Alhajuela.....	<i>C.f.s.</i> 562	<i>C.f.s.</i> 1,628	<i>C.f.s.</i> 3,117	<i>C.f.s.</i> 281	<i>C.f.s.</i> 993
Maximum momentary discharge for the month.....	984	17,480	² 46,100		
Gatun Lake watershed, total yield.....	474	2,529	6,263	305	1,810
Gatun Lake watershed, net yield.....	428	1,793	5,400	706	960
Draft on Gatun Lake for lockages and power.....	³ 2,692	2,562			² 2,255

¹ April 25, 1889. ² 10-year mean 1921–1930, inclusive. ³ One unit of Miraflores power plant in operation 6 days; two units of Miraflores power plant in operation 3 days.

The monthly mean discharge of the Chagres River at Alhajuela for April 1933, was 562 c.f.s., which is 43 percent below the 32-year mean of 993 c.f.s. The maximum monthly discharge on record for April is 3,117 c.f.s. in 1910 and the minimum is 281 c.f.s. in 1926. The maximum momentary discharge for the month was 984 c.f.s.

at elevation 92.46 feet on the 2d and the minimum was 438 c.f.s. at elevation 91.67 feet on the 30th. The maximum momentary discharge on record for April is 46,100 c.f.s. at elevation 106.83 feet on April 25, 1889, and the minimum is 240 c.f.s. at elevation 90.20 feet on April 30, 1920. No rises of five feet or more occurred during the month.

Gatun Lake varied in elevation during April from a maximum of 83.60 feet on the 1st to a minimum of 81.72 feet on the 30th. The net yield of the Gatun Lake watershed amounted to a minus quantity of 428 c.f.s., or 1,108 million cubic feet. The decrease of 1.83 feet in lake elevation during April is the maximum on record for drop in elevation in any month.

Miraflores Lake varied between elevations 53.89 feet on the 6th and 52.86 feet on the 30th, averaged 53.47 feet and ended the month at elevation 53.10 feet.

SEISMOLOGY

Two seismic disturbances were recorded on the 27th of the month, one of local and one of distant origin.

ELECTRICAL DIVISION

The gross generator output of the Gatun hydroelectric station for the month was 5,959,800 kilowatt hours, and the computed water consumption was 4,511,974,603 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross output of 794,000 kilowatt hours, and the fuel oil consumption was 1,679.75 barrels. This station carried a 1-engine load from the beginning of the month until April 6, and a 2-engine load from April 27 until the end of the month. In addition, one Diesel unit was on the bus eleven separate times for peak-load conditions, two of which were for drydock pump operation.

In connection with the laying of armored cable from existing telephone station at Salamanca to the new stations on the Boqueron and Pequeni rivers to provide telephone service and circuits for river level recording equipment, 9,500 feet of 8-conductor cable were trenched, spliced and backfilled during the month. This completes the installation from Salamanca station to Paluca station.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 25 vessels during the month. There were 349 work orders issued during the month, as compared with 267 during the previous month.

MECHANICAL DIVISION

Marine work at the Cristobal and Balboa shops during the month of April 1933, is summarized as follows:

	Ships repaired (including those in drydock)		
	Remaining from previous month	Entered during month	Completed during month
At Cristobal:			
Commercial.....		19	19
United States Army and Navy.....		18	18
Other departments, United States Government.....		1	1
Panama Canal equipment.....		2	2
Total.....		30	30
At Balboa:			
Commercial.....	1	4	4
United States Army and Navy.....	5	7	8
Panama Canal equipment.....	2	4	2
Total.....	8	15	14
Vessels in drydock			
At Cristobal:			
None (drydock under repairs).....			
At Balboa:			
Commercial.....		1	1
United States Army and Navy.....	2	3	5
Panama Canal equipment.....	1	4	1
Total.....	3	8	7

Annual overhaul of the United States Navy's submarine *S-16* was completed, and general overhaul on *S-17* was commenced. Repairs on the U.S.S. *Memphis* and U.S.S. *Sturtevant* were carried forward.

MUNICIPAL ENGINEERING DIVISION

At the Cristobal drydock, which is being reconstructed, there were excavated 7,000 cubic yards of rock and 1,800 cubic yards of earth during the month, making the total excavation to date 30,043 cubic yards. Forms were constructed and steel reinforcing placed in dock walls and floor; a total of 2,154 cubic yards of concrete was placed in this project, which is 50 percent completed.

Work on a number of other improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 798,688,750 gallons.

DREDGING DIVISION

The movement of West Culebra slide on the 450-foot west base line showed an average of 6.5 feet toward the Canal between stations 1776 + 00 and 1794 + 00 W. The reference points on this slide showed no movement during the month. Dredging equipment worked 17 days in this slide between stations 1781 + 25 and 1798 + 00 W., removing a total of 58,700 cubic yards, of which 35,200 cubic yards were rock and 23,500 cubic yards earth. The total excavation to date from West Culebra slide is 10,700,300 cubic yards.

No movement was observed on any of the reference points on East Culebra slide during the month. Dredging equipment worked 10½ days in this slide, removing a total of 30,150 cubic yards of which 16,350 cubic yards were rock and 13,800 cubic yards earth. The total excavation to date from East Culebra slide, excluding East Culebra slide extension is 20,543,350 cubic yards.

East Culebra slide extension showed no movement during the month. Drag surveys were made periodically. There was no dredging in this area during the month.

There was no movement shown on any of the other slides during the month. There was no interference with shipping on account of slides during the month.

The total excavation during April 1933, was 479,750 cubic yards, as follows:

	Wet excavation		
	Earth	Rock	Total
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Canal prism, Gaillard Cut—			
West Culebra slide.....	23,500	35,200	58,700
East Culebra slide.....	13,800	16,350	30,150
Maintenance.....	6,650	3,800	10,450
Project No. 9.....		4,750	4,750
Canal Prism, Pacific entrance—			
Project No. 1.....		17,800	17,800
Project No. 1-B.....	7,600		7,600
Maintenance.....	314,700	35,600	350,300
Total.....	366,250	113,500	479,750

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 30 days during the month. A total of 1,662 single trips were made, and 1,054 Panama Canal, 614 United States Army, and 17,001 other vehicles, a total of 18,669, were ferried across the Canal.

MADDEN DAM DIVISION

The average working force for April 1933, including both the Government and the contractor was 341 gold and 1,541 silver employees.

In the work on the power plant and appurtenant works, final excavations were made in blocks 5, 6, 7, 11-D-R, 11-E-R, all spillway apron sections of blocks 9 and 10, 8-B-L, 8-C-L, 8-D-L, 8-E-L, 8-D-R, 8-E-R, 7-D-L, 7-E-L, and downstream cutoff trench through blocks 7 to 11. Excavation was nearly completed for block 4 and the balance of the spillway apron blocks. The excavation status at the end of the month was 98.6 percent complete for common, and 76.1 percent complete for rock excavation.

Concrete placing was actively carried forward during the month, over 50,000 cubic yards being placed, which is probably at or near the maximum that will be poured in similar future periods. Twenty spillway apron blocks were completed.

Work on the left ridge dam was carried on throughout the month and the necessary work for this season was completed. The earth embankment is now at ele-

vation 268.5, except a small area under the head tower; the rock fill is completed except a short section at the north end, where 1,500 cubic yards are needed. During the month, 26,807 cubic yards of earth embankment and 10,279 cubic yards of rock fill were placed. Stripping and rock excavation are completed, earth embankment and rock fill are 97 percent completed, and concrete 26 percent completed.

On saddle dam No. 5 rock fill was placed as material was available and this dam is now practically completed. On saddle dam No. 8 the rock fill is practically completed and the gravel blanket and riprap have been completed, except a narrow strip along the top that cannot be put on until the parapet wall is poured.

OCCUPANTS OF QUARTERS

The number of persons, including men, women, and children, occupying Panama Canal quarters on April 30, 1933, was 24,289, composed of 8,183 Americans, 2,845 of whom were men, 2,622 women, and 2,716 children; 180 Europeans, 74 of whom were men, 29 women, and 77 children; and 15,926 West Indians, 4,294 of whom were men, 2,849 women, and 8,783 children. The total number of persons in quarters on April 30, 1932, was 24,348.

WORKING FORCE

The following tabulation shows the number of gold and silver employees as of April 19, 1933, with a comparison of the working force for the preceding month and for April 1932:

	Total employees		As of April 19, 1933		
	April 1932	March 1933	Gold	Silver	Total
Operation and Maintenance:					
Office	92	113	55	59	114
Electrical	406	408	146	254	400
Municipal Engineering	928	1,309	108	1,075	1,183
Lock Operation	919	1,782	269	1,189	1,458
Dredging	1,029	982	163	841	1,004
Madden Dam	256	195	61	151	212
Mechanical	1,066	1,102	404	737	1,141
Marine	661	622	176	442	618
Fortifications	97	123	12	83	95
Total	5,454	6,636	1,394	4,831	6,225
Supply Department:					
Quartermaster	1,712	1,651	183	1,461	1,644
Commissary	1,492	1,457	222	1,228	1,450
Cattle Industry—Plantations	103	100	2	93	95
Hotel Tivoli	103	100	7	91	98
Hotel Washington	91	89	7	79	86
Transportation	304	302	80	222	302
Total	3,805	3,699	501	3,174	3,675
Accounting Department	199	194	188	5	193
Health Department	1,100	1,113	278	835	1,113
Executive Department	924	923	563	361	924
Total	2,223	2,230	1,029	1,201	2,230
Panama Railroad Company:					
General Manager	105	83	23	71	94
Transportation	351	318	72	246	318
Receiving and Forwarding Agency	1,041	698	82	734	816
Coaling Stations	114				
Total	1,611	1,099	177	1,051	1,228
Grand total, April 1932	13,093				
Grand total, March 1933		13,664			
Grand total, April 1933			3,101	10,257	13,358

Additions to the gold force on the Isthmus in April, 1933, were as follows: Employed in the United States, 1; employed on the Isthmus, 4; reemployed on the Isthmus, 1; total, 6. Separations from the gold force totaled 34, as follows: Resigned, 8; discharged, 23; retired, 2; died, 1. At the end of the month there were on file 920 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 309 and separations from service, 598; the number seeking employment was estimated at approximately 2,300.

VITAL STATISTICS

A total of 171 deaths occurred during the month of April, 1933, among the population of the Canal Zone (42,070) and the cities of Panama (79,000) and Colon (30,000), total population of 151,070, which is equivalent to an annual death rate of 13.58 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 28; pneumonia (broncho and lobar), 16; diarrhea and enteritis, 12; organic diseases of the heart, 9; and nephritis (acute and chronic), 8. There was one death each from typhoid, diphtheria, measles, and amebic dysentery. There were 29 deaths of nonresidents, which are not included in the above statistics.

There were 310 live births and 7 stillbirths reported during the month. Including stillbirths, this is equivalent to an annual birth rate of 25.18. Deaths among children under one year of age numbered 33, giving an infant mortality rate, based on the number of live births reported, of 106.45.

The total number of malaria cases reported from the Zone and the cities of Panama and Colon was 74, of whom 27 were employees (6 white and 21 colored), 5 were members of employee's families (1 white and 4 colored), 10 were employees of the Madden Dam contractors (3 white and 7 colored), 3 were Canal Zone agriculturists, 10 were other civilian nonemployees, and 19 were Army and Navy personnel. Of the 32 employees and members of employees' families, 29 were probably infected outside our sanitized areas, as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were no deaths from malaria among residents.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$268,670.29, of which \$252,456.31 was for the Department of Operation and Maintenance, and \$16,213.98 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$38,002.37.

FINANCIAL STATEMENT

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of March 1933, as compared with March 1932, with the figures for the first nine months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of April at the time of writing this report, since all charges, etc., involved in the accounting have not been completed.

	March 1932	March 1933	Fiscal year	
			Last year	This year
Tolls.....	\$1,645,401.34	\$1,719,007.56	\$15,845,585.38	\$14,819,179.59
Other receipts.....	267,912.12	256,056.39	2,435,528.56	2,254,420.10
Total transit revenues.....	1,913,313.46	1,975,063.95	18,281,113.94	17,073,599.69
Total transit expenses.....	1,033,418.34	1,098,719.15	9,393,954.53	8,791,484.74
Net transit revenues.....	879,895.12	876,344.80	8,887,159.41	8,282,114.95
3 % fixed capital charge.....	1,266,264.12	1,273,035.67	11,358,515.62	11,418,043.89
Surplus or (deficit).....	(386,369.00)	(396,690.87)	(2,471,356.21)	(3,135,928.94)
Business revenues.....	1,601,754.30	1,357,430.97	13,145,483.98	11,546,123.19
Business expenses.....	1,541,119.24	1,263,092.12	12,639,452.91	10,926,754.26
Net business revenues.....	60,635.06	94,338.85	506,031.07	619,368.93
3 % fixed capital charge.....	59,934.09	59,729.35	577,268.27	576,841.29
Surplus or (deficit).....	700.97	34,609.50	(71,237.20)	42,527.64
Combined revenues.....	3,515,067.76	3,332,494.92	31,426,597.92	28,619,722.88
Combined expenses.....	2,574,537.58	2,361,811.27	22,033,407.44	19,718,239.00
Net revenues.....	940,530.18	970,683.65	9,393,190.48	8,901,483.88
3 % fixed capital charge.....	1,326,198.21	1,332,765.02	11,935,783.89	11,994,885.18
Surplus or (deficit).....	(385,668.03)	(362,081.37)	(2,542,593.41)	(3,093,401.30)

() Indicates deficit.

Respectfully,

J. L. SCHLEY,
Governor.

MOVEMENTS OF OCEAN VESSELS

Week ending at midnight, May 27, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Luxington ¹	19	10 25	21	6 05	21	14 38	23	1 12	American	U. S. Army	439.0	60.0	20.4	New York, N.Y.	Manila, P.I.	Military supplies	3,355	...	...
Winipeg	20	16 08	21	7 00	21	15 52	21	17 00	French	French Line	472.0	90.0	22.6	Havre, France	Vancouver, B.C.	General, coffee	1,165	10,619	7,582
Gerude	20	17 10	21	8 10	21	16 24	21	17 30	Danish	A. P. Moller	418.9	54.7	19.0	Boston, Mass.	Cebu, P.I.	General	4,500	7,385	5,500
Maersk ²	20	23 15	21	8 40	21	17 09	21	18 15	British	Barber S.S. Line	404.6	60.0	16.6	New York, N.Y.	Shanghai, China	General	1,435	8,589	6,094
Pearlth Castle ³	20	23 30	21	9 40	21	17 56	21	18 55	American	Swayne & Hoyt	386.6	52.0	23.0	Houston, Texas	Tacoma, Wash.	General	4,369	5,708	4,172
Pont Palmas	20	23 30	21	11 45	21	19 06	21	20 05	German	Grace Line	216.5	32.9	13.1	Cristobal, C.Z.	Guayaquil, Ecuador	Ballast	1,132	741	...
Mamates	20	20 10	21	14 40	21	20 51	21	21 40	Panamanian	Hans Elliot	108.0	20.0	7.0	Cristobal, C.Z.	Buenaventura, Col.	General	90	226	101
Nuevo Panama ²	20	22 30	21	14 40	21	20 51	21	21 40	Panamanian	N.Z. Shipping Co.	526.0	61.4	22.2	London, England	Auckland, N.Z.	General	2,140	12,842	9,064
Rokura	21	16 00	22	6 05	22	13 24	22	15 25	British	Panama Mail S.S. Co.	221.6	32.2	12.7	Cristobal, C.Z.	Acapulco, Salvador	General	670	1,015	579
Sollund	20	15 50	22	7 10	22	14 46	22	16 45	Norwegian	Knutson Line	378.0	51.3	18.0	Gothenburg, Sweden	San Antonio, Chile	General	2,615	5,463	3,985
Swearl ²	21	20 45	22	8 25	22	16 37	22	22 40	Swedish	Swayne & Hoyt	324.0	46.2	19.0	Beaumont, Texas	Seattle, Wash.	Corn, coke, gen.	2,339	3,984	2,612
Pont Sur	22	8 20	22	8 30	22	16 24	22	17 30	American	Federal Steam Nav. Co.	460.0	62.0	25.0	Newport, England	Auckland, N.Z.	General	5,740	10,592	7,707
Surey	22	11 35	22	11 45	22	18 55	23	00 17	British										
Lt. Col. H. C. Schumm ⁴	22	11 30	23	6 15	23	14 40	23	16 00	American	U. S. Army	98.0	22.0	...	Cristobal, C.Z.	Gatun, C.Z.	(?)	3,072	7,151	4,756
Lobos ⁵	22	11 30	23	6 15	23	14 40	23	16 00	British	Pacific Steam Nav. Co.	405.6	54.2	19.0	Hull, England	Talcahuano, Chile	General	855	7,892	5,888
Pacific Shipper	23	9 25	23	9 30	23	17 51	23	19 05	British	Furness Withy & Co.	420.0	58.0	17.0	Glasgow, Scotland	Vancouver, B.C.	General	9,069	8,158	5,676
Atago Maru ²	23	9 40	23	10 00	23	18 37	23	19 40	Japanese	Nippon Yusen Kaisha	227.0	37.0	28.0	New York, N.Y.	Yawata, Japan	General, cotton	370	1,653	1,041
Durazo	20	23 40	23	13 00	23	19 35	23	20 40	German	Hamburg-American Line	440.0	54.0	13.7	Cristobal, C.Z.	Guayaquil, Ecuador	General	3,040	9,268	6,951
Lt. Col. H. C. Schumm ⁴	23	...	23	6 30	23	8 26	...	...	American	U. S. Army	98.0	22.0	...	Cristobal, C.Z.	Gatun, C.Z.	Ballast	4,662	6,573	4,916
Saia Simeon	23	00 50	24	6 00	24	14 14	24	15 40	American	Quaker S.S. Line	410.5	54.2	18.3	Philadelphia, Pa.	Portland, Oreg.	General, grain	3,700	2,835	1,805
Nosa Duke	23	3 05	24	6 20	24	14 17	24	15 40	American	Girdwood Shipping Co.	298.6	40.0	19.0	New Orleans, La.	Seattle, Wash.	General	2,900	9,268	6,951
Mexican	24	3 50	24	7 25	24	15 15	24	16 25	American	Amer-Hawaiian Line	472.2	57.2	18.1	Boston, Mass.	Tacoma, Wash.	General	3,040	9,268	6,951
City of Roubaix	24	6 40	24	8 20	24	16 19	24	17 30	British	Ellerman & Bucknall	456.1	58.0	22.4	Baltimore, Md.	Dairen, China	General	4,823	6,603	4,932
Edwin	24	9 35	24	9 45	24	18 19	24	19 24	American	Sudden & Christenson	410.0	54.0	20.5	Jacksonville, Fla.	Seattle, Wash.	General	11	...	...
Christenson	24	9 35	24	9 45	24	18 19	24	19 24	American	U. S. Navy	105.0	14.9	...	Cristobal, C.Z.	Balboa, C.Z.	Ballast	11	...	...
No. 353 ⁵	23	21 05	24	8 25	24	15 02	...	...	American	A. Valdez	60.0	18.0	...	Cristobal, C.Z.	Balboa, C.Z.	Bananas	28	25	12
Libertador ⁶	23	21 05	24	8 25	24	15 02	...	...	Panamanian	Hans Elliot	51.0	13.6	...	Cristobal, C.Z.	Pro. Armeilles, R.P.	General	...	...	...
Sambu ⁶	23	16 00	24	10 25	24	18 24	24	19 24	Panamanian	U. S. Navy	479.0	60.0	21.4	Norfolk, Va.	Los Angeles, Calif.	Ballast	...	182	106
Salinas ⁷	19	11 15	24	13 05	24	22 00	27	15 20	American	Hans Elliot	108.6	21.6	7.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	671	7,424	5,393
Baru ²	24	8 35	24	12 35	24	22 12	...	...	Panamanian	Donaldson Line	414.0	55.7	17.1	Glasgow, Scotland	Vancouver, B.C.	General	7,000	7,042	5,208
Cortona	25	00 15	25	6 10	25	13 45	25	15 00	British		405.5	55.5	22.0	Trinidad, B.W.I.	Vancouver, B.C.	Sugar	3,932	9,303	6,870
Bonington	25	1 50	25	7 05	25	15 03	25	16 25	British	Canadian Transp. Co.	448.9	60.2	21.0	Providence, R.I.	Seattle, Wash.	General	...	...	...
Court ²	25	2 20	25	8 20	25	18 23	25	19 28	American	Lukenbach Line	...	...	...	...	...	General	...	...	...
Dorothy Luckenbach	25	2 20	25	8 20	25	18 23	25	19 28	American	Lukenbach Line	...	...	...	...	...	General	...	...	...

Norman Star...	25	6.00	25	9.25	25	19.09	25	20.00	British	Blue Star Line	415.6	56.3	19.0	River Tyne, Eng.	Vancouver, B.C.	Ballast	7,521	5,424
Benjamin Franklin	25	6.30	25	11.45	25	20.00	26	23.25	Norwegian	Fred Olsen & Co.	452.0	59.5	21.3	Oslo, Norway	Vancouver, B.C.	Cement, general	2,997	9,062
Santa Barbara	25	5.45	25	15.00	25	21.39	26	00.42	American	Grace Line	466.0	64.0	24.8	New York, N.Y.	San Antonio, Chile	General	2,658	10,687
Fairfield City	25	15.05	25	15.00	25	22.23	26	23.31	American	Isthmian S.S. Lines	424.0	56.0	19.6	Baltimore, Md.	Honolulu, T.H.	Phosphate, gen.	2,473	7,611
Handicap	25	18.35	26	6.10	26	14.13	26	16.00	Norwegian	Richard Nathan	415.0	54.6	25.0	New Orleans, La.	Yawaka, Japan	Scrap iron	8,029	7,296
President Hayes	25	5.35	26	10.26	26	15.14	26	21.00	American	Dollar Line	502.0	62.2	26.6	New York, N.Y.	San Francisco, Calif.	General	3,218	12,023
Portland	26	8.20	26	8.25	26	16.29	26	19.30	American	U.S. Navy	592.0	64.6	17.0	Hampton Rds, Va.	Los Angeles, Calif.	Ballast	7,482	5,209
Utacarbon	25	23.00	26	9.30	26	17.40	28	9.04	American	Union Oil Co.	435.0	56.0	17.0	Tiverton, R.I.	Los Angeles, Calif.	Ballast	7,482	5,209
Portian	25	17.00	26	9.30	26	17.40	28	9.04	American	Hany J. Bauer	102.0	21.9	9.0	Norfolk, Va.	San Diego, Calif.	Ballast	103	75
No. 232	26	7.40	26	10.05	26	19.20			American	U.S. Navy	310.0	30.0		Hampton Rds, Va.	Los Angeles, Calif.	Ballast		
Orville	26	8.40	26	12.30	26	21.18	26	21.30	Danzig	Baltic-Amer. Pet. Co.	520.0	70.0	21.0	Hull, England	Talara, Peru	Ballast		
Harold	26	8.40	26	12.30	26	21.18	26	21.30	American	U.S. Navy	520.0	70.0	21.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast		
Motor Sailer	26		26		26				American	U.S. Navy	520.0	70.0	21.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast		
Rowboat	20	15.50	27	5.55	27	13.53	27	15.10	British	Pacific Steam Nav. Co.	215.7	34.0	13.7	Cristobal, C.Z.	Champertico, Guat.	General	400	1,273
Acaduita	26	22.35	27	6.10	27	13.38	27	15.40	American	Roosevelt S.S. Co., S.B.	395.5	55.0	16.3	Baltimore, Md.	Dairen, China	General	1,819	7,329
O. B. Soren-	27	00.05	27	7.15	27	15.28	27	17.00	Norwegian	Anglo-Saxon Pet. Co.	462.0	59.2	26.0	Curacao, D.W.I.	Kagoshima, Japan	Kerosene	10,926	8,329
Susan Maersk	27	1.50	27	8.20	27	16.25	27	17.40	Danish	Banco Com. del Pacifico	299.8	42.4	11.6	Norfolk, Va.	Mazatlan, Mexico	Ballast	2,586	1,827
Santa Elisa	26	21.05	27	9.00	27	16.15	27	20.09	American	Panama Mail S.S. Co.	360.3	51.7	22.8	New York, N.Y.	San Francisco, Cal.	Coffee, general	1,687	5,937
Katrina Luck-	27	3.35	27	8.45	27	17.20	27	18.28	American	Luckenbach Line	446.0	56.0	26.0	Houston, Texas	Seattle, Wash.	General	6,000	8,508
enbach	27	5.05	27	9.55	27	18.53	27	20.00	Japanese	Kokusai Kisen Kaisha	385.0	51.0	26.6	Baltimore, Md.	Osaka, Japan	Cotton, spelter	7,611	6,209
Kofuku Maru	27	5.55	27	10.10	27	19.47	27	21.00	American	Isthmian S.S. Lines	424.2	56.2	21.7	Portland, Me.	Vancouver, B.C.	General	4,420	7,611
Memphis City	27	9.25	27	11.10	27	21.53	27	23.46	American	Amer-Hawaiian Line	407.7	53.7	21.0	Boston, Mass.	Portland, Oreg.	General	2,866	7,103
Pennsylvania	27																	

THROUGH THE CANAL—PACIFIC TO ATLANTIC

Kentuckian	21	1.35	21	7.21	21	14.55	21	14.55	American	Amer.-Hawaiian Line	414.5	53.7	27.4	San Francisco, Cal.	Boston, Mass.	General	7,107	7,110	4,909
Mobile City	21	6.00	21	8.19	21	16.15	21	16.15	American	Isthmian S.S. Lines	395.5	55.0	28.0	Honolulu, T.H.	Cape Hatteras	Sugar	8,544	7,330	3,241
Bendloch	21	8.50	21	9.34	21	17.30	21	17.30	British	Anglo-Canad. Ship. Co.	410.6	54.1	24.0	N. Westminster, B.C.	Leith, Scotland	General	8,140	6,221	4,227
Duchessa	21	9.15	21	10.03	21	17.50	22	16.55	Italian	Nav. Libera Triestina	447.5	57.1	27.0	Vancouver, B.C.	Genoa, Italy	General	7,629	8,734	6,144
Birmingham	21	14.25	21	15.01	21	21.55	21	21.55	American	Isthmian S.S. Lines	395.5	55.0	23.0	Kahului, T.H.	Baltimore, Md.	Pineapples, sugar	6,124	7,304	5,188
City	21		21	8.07	21	18.10			American	Joseph Norbury	402.6	53.2	29.0	Balboa, C.Z.	Cristobal, C.Z.	Ballast	9,277	3	
Kokono	22	2.20	22	6.17	22	14.00	22	14.00	American	Shepard S.S. Co.	402.6	53.2	29.0	San Francisco, Cal.	Philadelphia, Pa.	Lumber, general	9,277		
Harpoon	22																		
Canadian	22	8.00	22	8.55	22	16.00	23	4.35	British	Can. Nat. Steamships	400.3	52.4	18.0	Auckland, N.Z.	Montreal, Canada	Wool, hides	2,152	5,891	4,114
Leader	22	9.55	22	10.52	22	18.00	23	18.00	Japanese	Kokusai Kisen Kaisha	385.0	51.0	27.0	Manila, P.I.	Atlantic coast U.S.	Sugar	7,796	6,219	4,611
Belgium Maru	22	13.15	22	14.04	22	21.25	22	21.25	Norwegian	Com. Adm. del Guano	295.7	43.6	20.0	Guayaquil, Peru	Guano	3,900	2,826	1,846	
Gard	22	10.35	22	15.28	22	22.50	23	15.10	American	Grace Line	484.0	72.2	25.5	Seattle, Wash.	New York, N.Y.	General	5,459	13,948	9,217
Santa Lucia	22	10.35	22	15.28	22	22.50	23	15.10	British	Reardon Smith Line	400.0	54.2	25.5	Vancouver, B.C.	Cardiff, Wales	General	8,280	6,947	5,558
Tacoma City	22	15.00	22	16.29	22	23.10	23	14.35	British	International Pet. Co.	565.7	75.6	37.0	Lobitos, Peru	Halifax, Canada	Crude oil	21,531	16,780	9,885
C.O.Silliman	22	23.30	23	6.45	23	15.30	23	15.30	American	Associated Oil Co.	431.0	59.2	27.0	San Francisco, Cal.	Tiverton, R.I.	Kerosene	9,500	7,863	5,104
Betterton	22	21.40	23	7.40	23	15.00	23	18.40	British	Luckenbach Line	471.1	59.2	25.0	Seattle, Wash.	Boston, Mass.	General	7,447	9,027	6,539
Paul Lucken-	23	4.00	23	8.29	23	16.20	23	16.20	American	Luckenbach Line	471.1	59.2	25.0	Seattle, Wash.	Boston, Mass.	General	7,447	9,027	6,539
bach	23																		

** For orders.

** Launch.

** Destroyer.

** Yacht.

** Cruiser.

** Towing barge.

** Motor schooner.

** Sub chaser.

** Tug.

** Transport.

** Motor ship.

** Tanker.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons		Gross	Net
Uganda.....	23	8.00	23	9.08	23	17.10	23	17.10	British.....	Inter. Freightng Co....	402.5	52.2	24.0	Iquique, Chile....	Wilmington, N.C....	Nitrates.....	8,000	5,593	4,069
Edgar F.....	23	11.40	23	12.30	23	19.40	23	19.40	American.....	Luckenbach Gulf Co....	425.0	57.3	28.0	Portland, Oreg....	Mobile, Ala.....	General.....	9,182	8,568	6,048
Libertador ¹³	23	9.00	23	12.31	23	21.05	24	8.25	Panamanian.....	A. Valdez.....	60.0			Chepo, R.P.....	Cristobal, C.Z....	Bananas.....	60		
Cape York ¹³	23	12.15	23	13.02	23	21.05	24	1.20	British.....	Lytle Shipping Co.....	410.6	54.0	28.0	Vancouver, B.C....	Belfast, Ireland...	General.....	8,535	6,927	4,802
Baru ¹³	23	18.30	23	19.17	24	8.35	24	12.35	Panamanian.....	Hans Elliot.....	108.6	21.6	7.0	Darien, R.P.....	Cristobal, C.Z....	Bananas.....	84	182	106
Sambu ¹⁴	23	18.30	23	19.17	24	10.25	24	10.25	Panamanian.....	Hans Elliot.....	55.0	16.0	5.0	Darien, R.P.....	Cristobal, C.Z....	Bananas.....	4	25	12
Iowan.....	24	4.20	24	7.01	24	14.25	24	14.25	American.....	Amer.-Hawaiian Line..	407.7	53.7	25.0	Seattle, Wash....	Boston, Mass.....	General.....	5,690	7,079	5,018
Lapwing ¹⁵	24	16.55	24	7.02	24	14.26			American.....	U.S. Navy.....	187.0	37.0		Balboa, C.Z.....	Cristobal, C.Z....	General.....	1,978	12,941	9,329
Virgilio.....	24	7.25	24	8.11	24	15.30	25	23.50	Italian.....	Soc. Italia-FlotteRiunite	482.8	61.8	25.0	Valparaiso, Chile..	Genoa, Italy.....	General.....	5,833	11,680	7,456
Santa Clara.....	25	3.18	25	6.21	25	13.25	25	23.50	American.....	Grace Line.....	483.3	63.9	26.0	San Antonio, Chile.	New York, N.Y....	General.....	1,110	6,192	4,415
Highlander.....	25	3.30	25	7.17	25	14.40	25	23.00	British.....	Can. Nat. Steamships..	400.0	52.4	15.0	Brisbane, Australia	Montreal, Canada..	General.....	9,400	7,629	3,325
David.....	25	4.00	25	8.18	25	16.00	25	16.00	American.....	Tidewater Oil Co.....	430.0	59.2	25.4	San Francisco, Cal.	New York, N.Y....	Gasoline.....	8,350	6,752	5,161
McKelvey ¹⁵	15	11.00	25	11.39	25	19.15	25	19.15	British.....	Sir W. R. Smith & Sons.	401.1	54.0	26.0	Vlad'tok, U.S.S.R..	United Kingdom...	Soy beans.....	6,067	9,997	7,063
Valley ¹⁶	25	7.30	25	12.15	25	20.26	26	4.40	Norwegian.....	Barber S.S. Lines.....	461.4	60.6	24.0	Iloilo, P.I.....	New York, N.Y....	General.....	2,612	5,504	3,681
Tai Yin ¹⁶	25	13.00	25	13.59	25	21.35	26	4.00	French.....	Cie. Messageries Mar..	350.2	52.5	20.0	Noumea, N. Calad..	Dunkerque, France	General.....	10,005	10,772	7,581
Boussole.....	25	15.20	25	16.07	26	11.15	26	16.30	British.....	Royal Mail Lines, Ltd.	485.6	62.2	30.2	Vancouver, B.C....	Rotterdam, Holland	General.....	7,805	6,779	4,962
Lochmonar ¹³	25	4.15	26	6.29	26	13.40	26	13.40	Japanese.....	Mitsui Bussan Kaisha..	413.4	55.5	25.5	Iloilo, P.I.....	New York, N.Y....	Sugar, general...	10,453	7,750	5,805
Tahiti Maru ¹⁶	26	7.35	26	8.23	26	15.25	26	15.25	American.....	Williams S.S. Corp.....	415.0	55.7	28.0	San Francisco, Cal.	Albany, N.Y.....	Lumber, general..	5,637	18,871	13,099
Willkeno.....	26	3.12	26	9.17	26	16.35	26	22.25	British.....	Pacific Steam Nav. Co.	550.3	76.3	29.0	Talcahuano, Chile..	Liverpool, England	General.....	213	226	101
Reina del.....	26	9.20	26	10.41	26	17.55	28	6.00	Panamanian.....	Hans Elliot.....	408.5	53.8	28.0	Buenaventura, Col.	Cristobal, C.Z....	Coffee, drums...	9,701	9,965	6,656
Nuevo.....	26	13.53	26	14.30	26	21.48	27	00.45	German.....	North German Lloyd...	495.5	55.2	25.0	Vancouver, B.C....	Bremen, Germany	General.....	7,500	6,840	4,979
Este.....	27	2.30	27	6.21	27	13.55	27	13.55	Norwegian.....	Fearnley & Eger.....	390.5			Manila, P.I.....	East coast U.S....	Sugar.....	7,530	5,526	4,066
Chustine.....	27	3.00	27	7.17	27	15.15	27	15.15	Danish.....	Inter. Freightng Co...	367.0	48.8	27.0	Iquique, Chile....	Charleston, S.C....	Nitrates.....	1,128	1,572	1,011
Maersk ¹³	27	4.15	27	8.23	27	15.25			German.....	Hamburg-American Line	227.2	34.4	15.0	Guayaquil, Ecuador	Cristobal, C.Z....	General.....	16,452	12,629	8,124
Cergo.....	27	13.00	27	13.53	27	21.50	27	21.50	Danzig.....	Baltic-Amer. Pet. Co...	521.4	70.4	30.3	Talara, Peru.....	Hamburg, Germany	Gasoline.....			
Klasen ¹⁷	27	13.00	27	13.53	27	21.50	27	21.50	Danzig.....	Baltic-Amer. Pet. Co...	521.4	70.4	30.3	Talara, Peru.....	Hamburg, Germany	Gasoline.....			

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 21.....	No. 414-H ¹⁶	Pan American Airways.....	San Salvador via wayports	May 21.....	Santa Marta.....	United Fruit Co.....	New York via wayports
May 21.....	No. 22-V ¹⁶	Pan American-Grace Airways.....	Talara via wayports	May 21.....	Costa Rica.....	Royal Netherlands S.S. Co.....	Amsterdam via wayports
May 21.....	Nokomis.....	U.S. Navy.....	High seas	May 21.....	Ancon.....	Panama R.R.S.S. Line.....	New York via Haiti
May 22.....	Veragua.....	Hamburg-American Line.....	Hamburg via wayports	May 21.....	Colombia.....	Colombian Line.....	New York via wayports
May 22.....	Veragua.....	United Fruit Co.....	Port Limon, Costa Rica	May 21.....	Nokomis.....	U.S. Navy.....	High seas
May 22.....	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways	Medellin, Colombia	May 22.....	No. 670-M ¹⁶	Pan American Airways.....	Barranquilla, Colombia
May 22.....	Verma Lykes.....	Lykes Brothers S.S. Co.....	Port Arthur via wayports	May 22.....	Veragua.....	United Fruit Co.....	New York via Habana
May 22.....	No. 670-M ¹⁶	Pan American Airways.....	Barranquilla, Colombia	May 22.....	Caribia.....	Hamburg-American Line.....	Livingston via wayports
May 22.....	No. 968-S ¹⁶	Pan American Airways.....	Guatemala via wayports	May 23.....	Caribia.....	Pan American-Grace Airways.....	Talara via wayports
May 23.....	Confessa.....	Standard Fruit & S.S. Co.....	New Orleans via Habana	May 23.....	Verma Lykes.....	A. Tagaropoulos.....	San Juan via wayports
May 23.....	Liebre.....	Standard Vacuum Transp. Co.....	Beaumont, Texas	May 23.....	Inapaquina ¹⁷	P. W. Hamilton.....	Colon, Rep. of Panama
May 23.....	Inapaquina ¹⁷	A. Tagaropoulos.....	Colon, Rep. of Panama	May 23.....	Annetta I. ¹⁷	Standard Fruit & S.S. Co.....	Colon, Rep. of Panama
May 23.....	Annetta I. ¹⁷	P. W. Hamilton.....	Colon, Rep. of Panama	May 23.....	Confessa.....	Standard Vacuum Transp. Co.....	New Orleans via wayports
May 24.....	Dorelian.....	Leyland S.S. Line.....	Liverpool via wayports	May 23.....	Liebre.....	Leyland S.S. Line.....	Kingston, Jamaica
May 24.....	No. 968-S ¹⁶	Pan American Airways.....	San Salvador via wayports	May 25.....	Dorelian.....	M. P. Martinez.....	Colon, Rep. of Panama
May 24.....	No. 19-V ¹⁶	Pan American-Grace Airways.....	Chidayo via wayports	May 26.....	Lizzie D. Peabody ¹⁴	United Fruit Co.....	Port Limon, Costa Rica
May 25.....	Guayaquil.....	M. P. Martinez.....	Colon, Rep. of Panama	May 26.....	Quirigua.....	United Fruit Co.....	New Orleans via wayports
May 25.....	No. 660-M ¹⁶	Pan American Airways.....	New York via wayports	May 27.....	Cuba.....	French Line.....	Port Limon, Costa Rica
May 26.....	Quirigua.....	United Fruit Co.....	Miami via wayports	.....	.....	.....	.....
May 26.....	Thomas P. Beal.....	Panama R.R.S.S. Line.....	New Orleans via Habana	.....	.....	.....	.....
May 26.....	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways	Norfolk, Va.	.....	.....	.....	.....
May 27.....	Haiti.....	French Line.....	Medellin, Colombia	.....	.....	.....	.....
May 27.....	Sixacala.....	Colombian Line.....	Hayre via wayports	.....	.....	.....	.....
May 27.....	.....	United Fruit Co.....	New York via Kingston	.....	.....	.....	.....

PORT OF BALBOA

Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 21.....	Talamanca.....	United Fruit Co.....	San Francisco, Calif.	May 21.....	Talamanca.....	United Fruit Co.....	San Francisco, Calif.
May 23.....	Hayo Maru ¹³	Nippon Yusen Kaisha.....	Valparaiso, Chile	May 23.....	Hayo Maru ¹³	Nippon Yusen Kaisha.....	Hongkong, China
May 22.....	Real ¹⁴	McCormick S.S. Co.....	Buenaventura, Colombia	May 23.....	Real ¹⁴	Hans Elliot.....	Panama, Rep. of Panama
May 25.....	Point Gorda.....	McCormick S.S. Co.....	.....	May 27.....	Point Gorda.....	McCormick S.S. Co.....	San Francisco, Calif.

¹³ Tanker, ¹² Motor ship, ¹⁴ Motor schooner, ¹⁵ Tug, ¹⁶ Air mail carrier, ¹⁷ Motor boat.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Week Ending May 27, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons.	Tons.
Aneon.....	Panama R.R.S.S. Line.....	May 21	May 21	.....	934
Santa Marta.....	United Fruit Co.....	May 21	May 21	.....	245
Colombia.....	Colombian S.S. Line.....	May 21	May 21	.....	1,035
Nuevo Panama.....	H. Elliot.....	May 21	May 21	.....	99
Roland.....	North German Lloyd.....	May 21	May 21	.....	168
Winnipeg.....	French Line.....	May 21	May 21	.....	20
Costa Rica.....	Royal Netherlands S.S. Co.....	May 21	May 21	.....	657
Sveajarl.....	Knutson S.S. Line.....	May 21	May 22	7	9
Duchess D'Aosta.....	Navigazione Libera-Triestina.....	May 21	May 22	(¹)	531
Sollund.....	Panama Mail S.S. Co.....	May 21	May 22	.....	665
Veragua.....	United Fruit Co.....	May 22	May 22	32	24
Caribia.....	Hamburg-American Line.....	May 22	May 22	184	5
Santa Lucia.....	Panama Mail S.S. Co.....	May 22	May 23	178	23
Velma Lykes.....	Lykes Brothers S.S. Co.....	May 22	May 23	222	153
Lobos.....	Pacific Steam Navigation Co.....	May 22	May 23	124	121½
Canadian Leader.....	Canadian National Steamships.....	May 22	May 23	(¹)	569
Durazzo.....	Hamburg-American Line.....	May 23	May 23	.....	392
Contessa.....	Standard Fruit & S.S. Co.....	May 23	May 24	229	694
San Simeon.....	States S.S. Line.....	May 23	May 24	289	(²)
Liebre.....	Standard-Vacuum Transport. Co.....	May 23	May 24	10,177	(²)
Sambu.....	Hans Elliot.....	May 23	May 24	4	29
Dorelian.....	Leyland S.S. Line.....	May 24	May 25	199	12
Virgilio.....	Italian S.S. Line.....	May 24	May 25	87	1,164
Santa Barbara.....	Grace Line.....	May 25	May 25	112	721
Guayaquil.....	Panama R.R.S.S. Line.....	May 25	.....	1,725	.....
Santa Clara.....	Grace Line.....	May 25	May 25	842	359
Lizzie D. Peabody.....	M. P. Martinez.....	May 25	May 25	(¹)	70
Tai Yin.....	Barber S.S. Line.....	May 25	May 26	653	(²)
Benjamin Franklin.....	Fred Olsen & Co.....	May 25	May 25	330	(²)
Canadian Highlander.....	Canadian National Steamships.....	May 25	May 25	16	334
President Hayes.....	Dollar Line.....	May 26	May 26	1	(²)
Quirigua.....	United Fruit Co.....	May 26	May 26	402	24
Tivives.....	United Fruit Co.....	May 26	May 27	952	830
Reina del Pacifico.....	Pacific Steam Navigation Co.....	May 26	May 26	228	2
Lochmonar.....	Pacific Steam Navigation Co.....	May 26	May 26	(²)	76
Nuevo Panama.....	Hans Elliot.....	May 26	.....	238	.....
Santa Elisa.....	Panama Mail S.S. Co.....	May 26	May 27	246	108
Este.....	North German Lloyd.....	May 26	May 27	36	35
Cuba.....	French Line.....	May 27	May 27	64	(²)
Acajutla.....	Pacific Steam Navigation Co.....	May 27	May 27	.....	455
Haiti.....	Colombian S.S. Line.....	May 27	.....	147	.....
Sixaola.....	United Fruit Co.....	May 27	.....	530	.....
Cerigo.....	Hamburg-American Line.....	May 27	.....	1,248	.....
Portland.....	Hamburg-American Line.....	May 27	.....	84	.....

¹ No cargo discharged.² No cargo laded.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C.Z., for Two Weeks Ending May 27, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons.	Tons.
Manizales.....	Grace Line.....	May 14	May 15	1,210	.....
Antigua.....	United Fruit Co.....	May 14	May 14	118	170
Pennsylvania.....	Panama-Pacific Line.....	May 15	May 15	3	.....
U.S. Grant.....	U.S. Government.....	May 15	May 16	26	49
Santa Teresa.....	Panama Mail S.S. Co.....	May 18	May 19	68	824
City of Elwood.....	Roosevelt S.S. Co.....	May 18	May 18	230	.....
Point Gorda.....	McCormick S.S. Co.....	May 19	May 20	2,554	.....
Durazzo.....	Hamburg-American Line.....	May 20	May 20	155	.....
Manizales.....	Grace Line.....	May 20	May 20	79	93
Schwaben.....	North German Lloyd.....	May 20	May 20	.....	116
Santa Rosa.....	Panama Mail S.S. Co.....	May 20	May 20	273	155
Talamanca.....	United Fruit Co.....	May 21	May 21	715	197
Ludington.....	U.S. Government.....	May 21	May 22	657	4
Santa Lucia.....	Panama Mail S.S. Co.....	May 22	May 22	47	13
Salinas.....	U.S. Government.....	May 24	May 27	1	8
Benjamin Franklin.....	Fred Olsen Line.....	May 25	May 26	1,264	.....
Tai Yin.....	Barber Line.....	May 25	May 25	220	.....
Point Gorda.....	McCormick S.S. Co.....	May 25	May 27	2,696	.....
Santa Barbara.....	Grace Line.....	May 25	May 26	175	36
Santa Elisa.....	Panama Mail S.S. Co.....	May 27	May 27	42	2

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., May 29, 1933.

No. 69.

Panama Canal, Gaillard Cut, aids to navigation.—Gas buoy No. 96, marking the western bank of the Canal at the entrance to Gaillard Cut, at Gamboa, which was temporarily discontinued due to dredging operations, was reestablished, May 27, 1933. (See Notice to Mariners No. 68, dated May 27, 1933.)

J. L. SCHLEY,
Governor.

Sailings of Panama Railroad Steamship Line

Following are proposed sailings for 1933 of passenger vessels in the New York-Cristobal service of the Panama Railroad Steamship Line, in which the steamers *Ancon* and *Cristobal* are engaged, sailing alternately:

Steamer.	From New York to Cristobal.			From Cristobal to New York.		
	Leave New York 4 P. M. ¹	Arrive Port-au-Prince A. M. Leave P. M.	Arrive Cristobal A. M.	Leave Cristobal 9 P. M.	Arrive Port-au-Prince A. M. Leave P. M.	Arrive New York A. M.
<i>Cristobal</i> ²	May 23.....	May 28.....	May 31.....	June 4.....	June 7.....	June 12.
<i>Ancon</i> ²	June 6.....	June 11.....	June 14.....	June 18.....	June 21.....	June 26.
<i>Cristobal</i> ²	June 20.....	June 25.....	June 28.....	July 2.....	July 5.....	July 10.
<i>Ancon</i> ²	July 5.....	July 10.....	July 13.....	July 16.....	July 19.....	July 24.
<i>Cristobal</i> ²	July 18.....	July 23.....	July 26.....	July 30.....	August 2.....	August 7.
<i>Ancon</i> ²	August 1.....	August 6.....	August 9.....	August 13.....	August 16.....	August 21.
<i>Cristobal</i> ²	August 15.....	August 20.....	August 23.....	August 28.....	August 31.....	September 5.
<i>Ancon</i> ²	August 29.....	September 3.....	September 6.....	September 10.....	September 13.....	September 18.
<i>Cristobal</i> ²	September 12.....	September 17.....	September 20.....	September 24.....	September 27.....	October 2.
<i>Ancon</i> ²	September 26.....	October 1.....	October 4.....	October 8.....	October 11.....	October 16.
<i>Cristobal</i>	October 10.....	October 15.....	October 18.....	October 22.....	October 25.....	October 30.
<i>Ancon</i>	October 24.....	October 29.....	November 1.....	November 5.....	November 8.....	November 13.
<i>Cristobal</i>	November 8.....	November 13.....	November 16.....	November 19.....	November 22.....	November 27.
<i>Ancon</i>	November 21.....	November 26.....	November 29.....	December 3.....	December 6.....	December 11.
<i>Cristobal</i>	December 5.....	December 10.....	December 13.....	December 18.....	December 21.....	December 26.
<i>Ancon</i>	December 19.....	December 24.....	December 27.....	December 31.....	January 3.....	January 8.

¹ Steamers sail at 4 p. m. from Pier 65, North River, foot of West 25th St., New York. Sailings are at 4 p. m., Eastern standard time, except in the period from May 1 to September 30, inclusive, when they are at 4 p. m., daylight saving time.

² Sailing from New York at 4 p. m., daylight saving time.

Port-au-Prince, Haiti, is approximately 5 days from New York and 60 hours from Cristobal. Vessels are in port sufficient time to allow passengers to visit points of interest.

Provisions Required by Ships

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Density of Water in Balboa and Cristobal Harbors

Place.	Weight of sea water in ounces per cubic ft.			Rainy season. Average temperature. Degrees F.
	Average.	Maximum.	Minimum.	
Cristobal (between docks 8 and 9).....	1018	1020	1013	84.0
Balboa (dock 13).....	1011	1021	1005	83.0

(NOTE.—The above is based on two months' observations at Cristobal and Balboa. Average taken at 12-foot depth. Minimum occurred after heavy rain at 3-foot depth at Cristobal and 12-foot depth at Balboa. The weight of a cubic foot of fresh water at 85° F. is 995 ounces.

Merchandise Shipped to Canal Zone for Orders

The Panama Railroad Company, a New York corporation, of which the stock is now owned by the United States Government, will warehouse "for orders" at its piers and warehouses at Balboa and Cristobal, Canal Zone, nonperishable and nondangerous merchandise, excepting alcoholic liquors.

The rates are as follows:

(a) For handling cargo from ship's side to storage place, \$1 per ton of 2,000 pounds or 40 cubic feet on general merchandise, and one-half of the transfer rates provided by Item 34, Panama Canal Tariff No. 10, on other commodities.

(b) For handling cargo from storage place to ship's side, *i. e.*, for delivering or reforwarding it, the same rates as for receiving and storing, as per (a), above. The minimum charge for handling any shipment taken out of storage is \$1.

(c) For storage: First 35 days free; thereafter, 3 cents per day or fraction thereof per ton of 2,000 pounds or 1½ cents per day or fraction thereof per ton of 40 cubic feet.

Special rates on special commodities in large quantities may be obtained on request.

Various lines operating out of Cristobal and Balboa to the west coast of Central and South America will accept their proportion of the through rate for the haul beyond the Isthmus, as explained in the following paragraph:

By virtue of the Canal Zone for Orders arrangement shippers are enabled to consign cargo to the Isthmus and subsequently to reconsign it to any port beyond the Isthmus to which there is a through rate from port of origin without sacrificing their right to the through freight rate. This means that when a shipment moves from, say, New York to the Canal Zone, usual local rates will be charged to Cristobal or Balboa, as the case may be; but should the owner wish to reforward to any other port to which there is a through rate from port of origin, he may do so upon payment of the receiving carrier's proportion of the through rate from port of origin to port of ultimate destination, and upon evidence that the shipment, or any part of it, has moved beyond the Isthmus, the initial carrier will refund the difference between its proportion of the through rate applicable and the local rate.

In addition to reconsigning beyond the Isthmus, cargo billed Cristobal for Orders may be reconsigned to Panama City or line points on the Panama Railroad on the basis of through rates from port of origin to Panama City. In this case the Panama Railroad Company's charges will be the difference between the rate charged to Cristobal by the ocean carrier and the through rate from port of origin to Panama City, and the necessary adjustments with the ocean carrier will be made by the Panama Railroad Company without inconvenience to shippers or consignees. The handling charge from storage place to cars is the same as from storage place to ship's side.

Cargo deposited in Hold for Orders Warehouse, Cristobal, which consignees desire transferred to Hold for Orders Warehouse, Balboa, will be assessed a charge of \$1 per ton on general cargo and one-half the transfer rates on other commodities for handling from the warehouse into cars at Cristobal, and a second charge of the same kind for handling from cars into warehouse at Balboa. The same charge will again apply when the cargo is reforwarded from, or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on Hold for Orders cargo discharged from vessels at Balboa.

Cargo consigned to Hold for Orders, Balboa, arriving at Cristobal piers, and/or cargo consigned to Hold for Orders, Cristobal, on which by previous arrangement the destination has been changed to Hold for Orders, Balboa, prior to arrival of the vessel, will be assessed one handling charge of \$1 per ton on general cargo or one-half of the transfer rates on other commodities for handling from shipside across piers and into cars at Cristobal and from cars into the Hold for Orders Warehouse, Balboa. The same charge will apply when the cargo is reforwarded from or delivered locally at Balboa. The same handling charges will apply, *vice versa*, on cargo moving in the opposite direction.

There are no special forms for use in shipping except the warehouseman's order to release the cargo for shipment ("Authority to Deliver Cargo from Storage on Piers"). Shipper takes out his bill of lading and consular invoice and the cargo moves as regular outward local.

Samples of the forms used, "Negotiable Warehouse Receipt," and "Authority to Deliver Cargo from Storage on Piers," will be supplied on request to the Panama Railroad Co., Balboa Heights, C. Z., or 24 State Street, New York City.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., June 7, 1933.

No 45.

Canal Traffic During May 1933

During the month of May 1933, 372 commercial vessels and 15 small nonseagoing launches under 20 tons measurement transited the Canal. Tolls on the commercial vessels aggregated \$1,617,943.65, and on the launches, \$159.75, or a total tolls collection of \$1,618,103.40.

The daily average of commercial vessels was 12.00, and the daily average tolls collection was \$52,191.73, as compared with an average of 12.33 transits and \$51,808.34 in tolls for the previous month, and an average of 11.52 transits and \$55,400.04 in tolls for the month of May 1932. The average amount of tolls paid by each of the commercial transits was \$4,349.31, as compared with \$4,810.65 for the month of May 1932.

In comparison with the previous month (April 1933), the past month's traffic made an increase of 2 transits and \$63,693.51 in tolls, gains of 0.54 of 1 percent in transits and 4.1 percent in tolls, respectively. The daily average of transits for the past month was slightly lower than in April 1933 (2.7 percent) while the daily average tolls collection was slightly higher (0.74 of 1 percent).

In comparison with May 1932, the past month's traffic made an increase of 15 transits, or 4.2 percent, while tolls collection decreased \$99,457.61, or 5.8 percent.

In the following tabulation the number of commercial transits and the amount of tolls collected are shown for the first 11 months of the current fiscal year, with the daily averages of transits and tolls and the totals for the first 11 months of the fiscal years 1932 and 1931:

Month	Total for month		Daily averages	
	Transits	Tolls	Transits	Tolls
July	326	\$1,468,728.36	10.52	\$47,378.33
August	314	1,440,848.87	10.13	46,479.00
September	353	1,598,265.98	11.77	53,275.53
October	394	1,714,779.06	12.71	55,315.45
November	388	1,756,865.84	12.93	58,562.19
December	431	1,781,940.03	13.90	57,481.94
January	415	1,762,808.56	13.39	56,864.79
February	368	1,575,708.35	13.14	56,275.30
March	399	1,718,908.41	12.87	55,448.66
April	370	1,554,250.14	12.33	51,808.34
May	372	1,617,943.65	12.00	52,191.73
Total, first 11 months of fiscal year 1933	4,130	17,991,047.25	12.33	53,704.62
Total, first 11 months of fiscal year 1932	4,170	19,172,583.86	12.41	57,061.26
Total, first 11 months of fiscal year 1931	5,129	22,824,047.84	15.31	68,131.49

In comparison with the first 11 months of the fiscal year 1932, the corresponding period this year has had 40 fewer transits and \$1,181,536.61 less tolls, decreases of 0.96 of 1 percent and 6.2 percent, respectively. In comparison with the first 11 months of the fiscal year 1931, the corresponding period this year showed a loss of 999 transits and \$4,833,000.59 in tolls, decreases of 19.5 percent and 21.2 percent, respectively.

MOVEMENTS OF OCEAN VESSELS

Week ending at midnight, June 3, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)		Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour									Nature	Tons	Gross	Net
Nuevo Panama ²	26	17.55	28	6.00	28	12.28	28	22.00	Panamanian	Hans Elliot	108.0	20.0	8.0	Cristobal, C.Z.	General	30	226	101
Arizona	28	8.55	28	9.00	28	15.38	28	17.45	American	Williams S.S. Line	434.3	57.7	18.0	Baltimore, Md	General	2,541	7,983	5,983
Portland ²	27	21.25	28	11.30	28	17.47	28	18.50	German	Hamburg-American Line	462.2	61.2	18.0	Hamburg, Germany	General	2,790	9,139	6,666
Feltr ²	28	16.25	29	7.15	29	14.23	29	15.30	Italian	Nav. Libera-Triestina	430.0	55.0	18.1	Trieste, Italy	General	689	7,823	6,029
Canadian																		
Farmer	29	9.05	29	10.00	29	16.53	29	21.10	British	Great Lake Intercoastal	251.0	43.0	13.0	Quebec, Canada	General	630	2,553	1,618
Barnesfeld	29	9.45	29	14.15	29	21.59	29	22.10	Dutch	Royal Neth. S.S. Co.	401.0	58.0	18.0	Hamburg, Germany	General	990	7,890	5,990
Corizo	27	15.40	30	6.00	30	15.57	30	17.11	German	Hamburg-American Line	227.0	34.4	13.1	Cristobal, C.Z.	General	300	1,572	1,011
West Cape	30	5.40	30	6.15	30	18.03	30	17.11	American	McCormick S.S. Co.	409.5	54.0	17.6	Tacoma, Wash.	General	3,423	6,561	4,960
Frieda	30	10.25	30	13.30	30	18.04	30	19.30	American	Union Sulphur Co.	348.7	45.1	23.0	Freeport, Tex.	Sulphur	5,006	3,884	1,994
Hagan	30	13.05	30	13.15	30	20.00	30	21.00	American	Shell Oil Co.	416.9	56.2	20.0	Baltimore, Md	Ballast		6,728	4,737
Langtebrook	30	13.40	30	13.45	30	20.17	30	22.45	British	F. Carrick & Co.	410.0	54.8	15.1	Havana, Cuba	Ballast		5,851	4,247
Dakota	30	14.40	30	15.00	30	22.10	30	23.00	American	Amer-Havarian Line	407.7	53.7	17.0	Boston, Mass.	General	1,669	7,158	5,066
Porta	30	5.25	31	6.10	31	14.07	31	15.30	German	North German Lloyd	360.0	50.8	19.1	Bremen, Germany	General	2,100	4,818	3,347
Sambu ³	30	16.35	31	7.10	31	15.15	31	16.10	Panamanian	Hans Elliot	51.0	13.6		Valparaiso, Chile	Ballast		25	12
Chester Sun ²	31	12.25	31	12.35	31	19.15	31	20.30	American	Sun Oil Co.	480.6	66.0	20.6	Chesler, Pa.	Ballast		9,607	6,548
San Gil	31	11.55	31	13.30	31	20.28	31	21.35	Panamanian	United Fruit Co.	325.0	46.5	18.2	Los Angeles, Calif	Ballast		3,799	1,990
Brimanger ¹	31	14.05	31	14.50	31	22.03	31	23.00	Norwegian	Intercoast S.S. Corp.	398.0	54.9	15.2	Rotterdam, Holland	Ballast, psgrs		6,857	5,246
Gisla ²	31	16.20	31	18.30	31	10.43	31	11.55	Norwegian	Westfal, Larsen & Co.	360.0	51.0	13.5	Göteborg, Sweden	Ballast		5,101	3,735
Real ²	30	16.35	31	11.20	31	19.16	31	20.30	Panamanian	Hans Elliot	62.0	17.0		Los Angeles, Calif	General	9	46	22
J-26 ²	31	13.50	1	6.10	1	31	9.02	1	American	U.S. Army				Catun, C.Z.	Ballast			
Orduna	31	13.50	1	6.10	1	13.45	1	15.00	British	Pacific Steam Nav. Co.	550.3	67.0	27.3	Cristobal, C.Z.	General		1,403	17,146
West Ivis	31	15.00	1	8.20	1	15.46	1	17.20	American	McCormick S.S. Co.	410.5	54.2	19.0	Liverpool, England	General		2,812	6,754
Edward Luck- bach	1	4.10	1	8.40	1	16.34	1	17.30	American	Lockenbach Line	436.0	57.0	23.0	Buenos Aires, Arg	General		8,543	6,427
Northern Sun ²	1	4.50	1	9.45	1	17.09	1	18.15	American	Sun Oil Co.	480.6	66.0	22.0	Baltimore, Md	Ballast		9,684	6,552
Tulsgas ¹	1	8.55	1	9.50	1	18.09	1	23.40	American	Tide-water Oil Co.	431.0	59.2	22.0	New York, N.Y.	Ballast		7,817	5,112
K. R. Kings- bury ¹	1	9.20	1	11.00	1	18.54	1	20.04	American	Sun Oil Co.	440.0	58.2	21.0	Marcus Hook, Pa.	Ballast		9,033	5,938
Phoenix ¹	30	23.55	1	12.30	1	19.53	1	21.01	American	Harlot Products Corp.	400.8	54.0	21.8	Los Angeles, Calif	Ballast		6,336	4,389
Santa Inez ²	1	13.10	1	13.25	1	20.46	1	23.40	American	Grace Line	370.0	53.2	17.11	San Francisco, Cal.	Mail		6,255	4,016
President Mc- Kinley	1	15.45	2	6.05	2	13.32	2	21.23	American	American Mail Line	516.5	72.2	26.8	San Francisco, Cal.	General, beer		1,905	15,286
Pennsylvania ²	2	4.55	2	7.15	2	14.52	3	00.10	American	Panama-Pacific Line	586.4	80.3	27.3	New York, N.Y.	General		3,259	25,262
Acacia	2	7.40	2	8.20	2	16.13	3	3.20	British	Shaw, Savill & Albion	550.7	67.4	28.3	London, England	General		3,300	16,447
Pacific Enter- prise ²	1	20.30	2	8.50	2	17.35	2	18.55	British	Furness, Withy & Co.	435.9	60.0	18.6	Manchester, Eng.	General		590	9,641
Cape Town Maru	2	1.10	2	9.40	2	18.56	2	20.13	Japan	Kokusai Line	385.0	51.0	27.4	Montreal, Canada	General		7,859	6,209
															()		6,209	4,658

Mabriton.....	2	11.05	2	11.10	2	19.47	3	1.45	British.....	R. Chapman & Son.....	412.6	55.5	18.0	N. Shields, Eng.....	Vancouver, B.C.....	Ballast.....	6,823	4,797
San Felipe.....	2	6.55	2	12.50	2	20.44	2	21.55	American.....	Quaker S.S. Line.....	410.0	54.2	16.1	New York, N.Y.....	Tacoma, Wash.....	Steel, iron, gen.....	2,353	6,821
Kind Maru.....	2	6.05	2	13.35	2	20.46	2	22.47	Japanese.....	Osaka Shosen Kaisha.....	446.0	60.0	25.1	Boston, Mass.....	Kobe, Japan.....	Scrap steel, gen.....	6,762	8,982
Endurance.....	2	10.45	2	10.45	2	19.56	2	21.13	Panamanian.....	Esteban Garcia.....	60.0	14.0		Colon, R.P.....	Panama, R.P.....	Coconuts.....	24	36
Danvers.....	3	6.05	3	6.15	3	13.14	3	13.14	British.....	British Government.....	445.0	46.0		Bermuda, B.W.I.....	Buenaventura, Col.....	Ballast.....		
Point Galea.....	3	00.35	3	7.10	3	19.05	3	20.20	American.....	Gulf-Pacific Line.....	381.0	52.2	21.0	Houston, Tex.....	Seattle, Wash.....	Pipe, rice, gen.....	4,717	5,708
Santa Elena.....	2	16.50	3	8.15	3	15.52	3	22.00	American.....	Panama Mail S.S. Co.....	484.0	72.0	26.6	New York, N.Y.....	Seattle, Wash.....	General, coffee.....	3,645	13,948
Turakina.....	3	4.15	3	8.20	3	21.20	4	1.20	British.....	N.Z. Shipping Co.....	460.0	62.0	20.6	London, England.....	Bluff, N.Z.....	General.....	2,024	10,618
Yorkmar.....	3	4.40	3	9.40	3	21.54	3	23.00	American.....	Calmar S.S. Line.....	409.8	54.2	23.5	Baltimore, Md.....	Seattle, Wash.....	Steel, general.....	6,700	6,761
District of Columbia.....	3	6.05	3	9.50	3	23.03	4	00.08	American.....	The Texas Co.....	431.0	59.0	19.6	Providence, R.I.....	Los Angeles, Calif.....	Ballast.....	8,097	5,431

THROUGH THE CANAL—PACIFIC TO ATLANTIC

Washington.....	28	1.15	28	6.18	28	13.45	28	21.03	French	French Line.....	493.0	61.2	27.3	Vancouver, B.C.....	Le Havre, France.....	Wheat, general.....	9,451	10,334
President Grant.....	28	3.36	28	7.24	28	15.05	28	21.40	American	Dollar Line.....	517.0	72.2	26.0	San Francisco, Cal.....	New York, N.Y.....	General.....	4,986	15,234
Southern Sun.....	28	4.50	28	8.23	28	16.10	28	16.10	American	Sun Oil Co.....	480.6	66.0	30.0	Richmond, Calif.....	Chester, Pa.....	Gasoline.....	13,814	9,716
Herman F.....	28	5.10	28	8.53	28	17.05	28	17.05	American	Dutton Lumber Corp.....	410.0	54.2	25.3	Portland, Ore.....	New York, N.Y.....	Lumber.....	7,300	6,551
Whiton.....	28	13.30	28	14.08	28	22.10	28	22.10	Danish	W.L. Conyn.....	380.0	53.9	25.3	Willapa Har., Wash.....	Rotterdam, Holl'd.....	General.....	6,864	6,219
Stjerneborg.....	28	16.20	28	17.05	28	11.00	29	11.00	American	McCormick S.S. Co.....	409.6	54.1	27.7	Tacoma, Wash.....	Philadelphia, Pa.....	Lumber, general.....	8,023	6,627
Abasaka.....	28	20.45	29	6.07	29	14.00	29	14.30	American	Arrow Line.....	410.5	54.3	22.8	Seattle, Wash.....	Baltimore, Md.....	Lumber, general.....	6,815	6,572
Eleanor Christenson.....	28	4.30	29	7.24	29	15.00	31	1.30	German	Hamburg-American Line.....	376.1	51.7	24.0	Corral, Chile.....	Hamburg, Germany.....	General.....	6,153	5,788
Osiris.....	29	7.05	29	8.07	29	16.15	29	16.15	Norwegian	Canadian Transp. Co.....	381.2	54.7	27.0	Victoria, B.C.....	Gaston, England.....	General.....	8,488	6,083
Chr. Knudsen.....	29	10.30	29	11.17	29	18.45	29	18.45	American	Amer-Hawaiian Line.....	445.1	59.8		Portland, Ore.....	Boston, Mass.....	General.....	8,851	8,541
Californian.....	29	14.20	29	15.07	29	22.25	29	22.25	American	Isthmian S.S. Lines.....	424.2	56.2	26.0	Honolulu, T.H.....	East coast, U.S.A.....	Sugar.....	8,432	7,611
Steel Mariner.....	29	9.30	30	6.20	30	13.45	30	14.30	American	Panama-Pacific Line.....	574.4	80.3	28.4	San Francisco, Cal.....	New York, N.Y.....	General.....	6,396	24,506
California.....	29	9.30	30	6.20	30	13.45	30	14.30	American	Panama-Pacific Line.....	574.4	80.3	28.4	San Francisco, Cal.....	New York, N.Y.....	General.....	6,396	24,506
Harry Luckenbach.....	30	2.21	30	7.09	30	14.55	30	14.55	American	Luckenbach Line.....	448.9	60.2	28.5	Seattle, Wash.....	Boston, Mass.....	General, lumber.....	7,086	9,262
Real.....	30	5.45	30	7.46	30	16.25	31	11.20	Panamanian	Hans Elliot.....	512.0	17.1	5.2	Darien, R.P.....	Cristobal, C.Z.....	Bananas.....	23	45
Sambu.....	30	6.00	30	7.47	30	16.25	31	11.20	Panamanian	Hans Elliot.....	512.0	17.1	5.2	Darien, R.P.....	Cristobal, C.Z.....	Bananas.....	23	45
Ethan Allen.....	30	5.05	30	8.10	30	16.25	31	11.20	American	Lykes Bros., Ripley Co.....	439.6	60.2	29.0	Kobe, Japan.....	New Orleans, La.....	General.....	9,992	8,976
Mercury Sun.....	30	6.45	30	9.15	30	17.45	30	17.45	American	Shell Oil Co.....	480.5	66.0	29.0	Los Angeles, Calif.....	Port Amboy, N.J.....	Gasoline.....	13,511	
Sysia.....	30	8.05	30	9.41	30	18.55	30	18.55	Norwegian	Amorog Trading Corp.....	408.3	55.3	27.0	Los Angeles, Calif.....	Graugemouth Scot.....	Gasoline.....	9,266	6,449
Jeanne d'Arc.....	29	18.30	30	10.23	30	20.10	31	10.40	French	French Navy.....	475.0	56.0		Los Angeles, Calif.....	French W.I.....	Displ.....		
Abraham Lincoln.....	30	15.50	30	16.22	31	11.20	31	12.07	Norwegian	Fred Olsen & Co.....	435.9	56.2	28.0	Vancouver, B.C.....	Oslo, Norway.....	General.....	8,137	7,985
Adna.....	30	18.55	31	6.17	31	10.05	31	22.07	Norwegian	Anglo-Saxon Pet. Co.....	400.5	52.3	15.0	San Francisco, Cal.....	Curacao, D.W.I.....	Ballast.....	6,102	4,365
Heranger.....	31	2.20	31	7.02	31	14.35	31	14.35	Norwegian	Intercoast S.S. Corp.....	386.1	54.0	27.0	Vancouver, B.C.....	Rotterdam, Holl'd.....	General.....	7,042	6,864
S. A. Perkins.....	31	2.45	31	8.08	31	16.10	31	16.10	American	Guif Pacific Line.....	380.5	53.1	24.0	Seattle, Wash.....	Tampa, Fla.....	General, lumber.....	5,716	5,659
Rangeta.....	31	2.45	31	8.08	31	16.10	31	16.10	American	Guif Pacific Line.....	380.5	53.1	24.0	Seattle, Wash.....	Tampa, Fla.....	General, lumber.....	5,716	5,659
San Vincente.....	31	2.45	31	8.08	31	16.10	31	16.10	American	Guif Pacific Line.....	380.5	53.1	24.0	Seattle, Wash.....	Tampa, Fla.....	General, lumber.....	5,716	5,659
San Vincente.....	31	2.45	31	8.08	31	16.10	31	16.10	American	Guif Pacific Line.....	380.5	53.1	24.0	Seattle, Wash.....	Tampa, Fla.....	General, lumber.....	5,716	5,659
Mayrta.....	31	10.10	31	11.16	31	18.35	31	18.35	British	N.Z. Shipping Co.....	531.0	70.0	28.0	Lyttleton, N.Z.....	Trenton, N.J.....	General.....	7,735	5,572
Nebraska.....	31	10.10	31	11.26	31	19.45	31	19.45	British	Donaldson Line.....	335.6	51.6	28.0	Vancouver, B.C.....	London, England.....	General.....	6,196	18,206
Nebraska.....	31	23.55	1	6.05	1	14.05	1	14.05	American	Amer-Hawaiian Line.....	471.1	59.1	26.0	Seattle, Wash.....	Glasgow, Scotland.....	General.....	5,896	6,576
R. J. Hanna.....	1	5.05	1	7.13	1	15.25	1	15.25	American	The Texas Co.....	435.0	56.2	29.0	Seattle, Wash.....	Boston, Mass.....	General.....	8,183	9,037
Manizales.....	1	7.30	1	8.09	1	16.20	1	16.20	American	Grace Line.....	216.5	32.9	26.0	Pt. San Luis, Calif.....	Boston, Mass.....	Fuel oil.....	10,903	7,639
New Orleans.....	1	15.30	2	6.32	2	13.45	2	13.45	American	Roosevelt S.S. Co.....	411.9	55.0	28.0	Guayaquil, Ecuador.....	Cristobal, C.Z.....	General.....	1,074	1,132
Thradentes.....	1	17.15	2	7.21	2	15.10	2	15.10	Norwegian	Chilean Nitro Sales Corp.....	401.2	54.2	27.0	Iloilo, P.I.....	Boston, Mass.....	Sugar, general.....	7,492	7,209
														Antofagasta, Chile.....	Jacksonville, Fla.....	Nitrate.....	8,051	6,894

* Scrap steel and aluminum.

* Cruiser.

* Launch.

* Motor schooner.

* Motor ship.

* Tanker.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Santa Cecilia...	2	3 45	2	12 30	2	19 45	3	11 40	American...	Grace Line	360.0	51.0	25.0	San Francisco, Cal.	New York, N.Y.	Coffee, general.	2,928	5,797	4,188
Calif.	2	13 30	2	14 15	2	21 45	3	11 27	German	North German Lloyd	216.5	32.9	15.5	Guayaquil Ecuador	Cristobal, C.Z.	General	1,112	1,105	698
Fater Maersk ?	2	17 35	3	6 27	3	13 30	3	14 45	Danish	Isbrandtsen, Moller Co.	440.0	57.0	25.6	Baltimore, Md.	Baltimore, Md.	General	7,553	7,723	5,954
Salvador	2	19 10	3	7 01	3	14 35	3	14 35	British	Pacific Steam Nav. Co.	215.0	33.5	13.11	Champerico, Guat.	Cristobal, C.Z.	General	378	1,270	735
Hedron	2	21 25	3	8 00	3	16 00	3	16 00	American	Hedron S.S. Co.	440.0	56.0	28.6	Everett, Wash.	Philadelphia, Pa.	Lumber	9,600	8,312	6,097
W.S. Miller ?	3	2 45	3	8 49	3	17 40	3	17 40	American	Shell Oil Co.	435.0	56.2	26.5	Los Angeles, Calif.	Fall River, Mass.	Gasoline, kerosene	9,483	7,470	5,144
Orville Har-																			
den ?	3	8 55	3	9 53	3	19 00	3	19 00	Danzig	Baltic Amer. Pet. Co.	621.7	70.3	30.3	Talara, Peru	Stettin, Germany	Gas oil, benzene	16,422		
Carica Milica	3	9 35	3	10 40	3	20 45	3	20 45	Yugoslav	Chilean Nire Sales Corp.	425.0	56.1	25.1	Iquique, Chile	Norfolk, Va.	Nitrate	9,465	7,079	5,105
San Gil ?	3	10 05	3	11 48	3	21 40	4	9 55	Panamanian	United Fruit Co.	325.0	46.3	19.0	Pro-Armonelles, R.P.	Philadelphia, Pa.	Bananas	2,320	1,990	1,961
Nuevo Panama ?	3	2 30	3	11 52	3	20 35	5	5 55	Panamanian	Hans Elliot	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C.Z.	Coffee	215	226	101
Kwanai Maru ?	2	22 45	3	12 57	3	23 00	4	2 45	Japanese	Osaka Shosen Kaisha	461.7	61.5	25.3	Iloilo, P.I.	New York, N.Y.	General	7,645	9,414	6,790
Panaman	3	14 30	3	15 09	4	8 30	4	8 30	American	Amer-Hawaiian Line	407.7	53.7	22.0	Portland, Oreg.	Boston, Mass.	General	5,138	7,112	5,060

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

Date	Vessel	* ARRIVALS		* DEPARTURES	
		Line	Vessel	Line	For—
May 27	Guardian	All America Cables	Miami via waypoints	Panama R.R.S.S. Line	New York via waypoints
May 28	No. 9688	Pan American Airways	San Salvador via waypoints	United Fruit Co.	Houston, Tex.
May 28	No. 18-V	Pan American-Grace Airways	Talara via waypoints	Panama R.R.S.S. Line	Grand Cayman, B.W.I.
May 29	Caribia	Hamburg-American Line	Livingston via waypoints	L. C. Boddin	New York via waypoints
May 29	Cuba	French Line	Port Limon, Costa Rica	Colombian Line	Barranquilla, Colombia
May 29	Quirigua	United Fruit Co.	Port Limon, Costa Rica	Pan American Airways	Havre via waypoints
May 29	No. 145-M	Uraba, Medellin & Cent. Airways	Medellin, Colombia	French Line	Hamburg via waypoints
May 29	No. 660-M	Pan American Airways	Barranquilla, Colombia	Hamburg-American Line	Bluefields, Nicaragua
May 29	No. 9658	Pan American Airways	Guatemala via waypoints	G. I. Bryan	Talara via waypoints
May 29	C. Shaw	Samuel C. May	Colon, Rep. of Panama	United Fruit Co.	Talara via waypoints
May 29	Pearl Marie		New Orleans via Habana	Pan American-Grace Airways	Colon, Rep. of Panama
May 30	Santoro	Standard Fruit & S.S. Co.	Colon, Rep. of Panama	No. 19-V	Colon, Rep. of Panama
May 30	Simon Bolivar	Panama R.R.S.S. Line	Norfolk, Va.	A. Tagaropolos	New Orleans via waypoints
May 30	Lizzie D. Peabody	Royal Netherlands S.S. Co.	Amsterdam via waypoints	Standard Fruit & S.S. Co.	Port Limon, Costa Rica
May 30	Inapaquina	M. P. Martinez	Colon, Rep. of Panama	Standard Fruit & S.S. Co.	Colon, Rep. of Panama
May 30	Anachucma	A. Tagaropolos	Colon, Rep. of Panama	P. W. Hamilton	Colon, Rep. of Panama
May 31	Cristobal	Panama R.R.S.S. Line	New York via Haiti	Pan American Airways	Miami via waypoints

PORT OF CRISTOBAL—Continued

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
May 31.....	Annetta I. ¹²	P. W. Hamilton	Colon, Rep. of Panama	June 1.....	No. 145-M ⁹	Uraba, Medellin & Cent. Airways	Medellin, Colombia
May 31.....	No. 22-V ⁹	Pan American-Grace Airways	Chiclayo via waypoints	June 1.....	No. 9658 ⁹	Pan American Airways	Guatemala via waypoints
May 31.....	No. 414-H ⁹	Pan American Airways	San Salvador via waypoints	June 2.....	Santore	Panama R.R.S.S. Line	Dainuri, Cuba
June 1.....	No. 670-M ⁹	Pan American Airways	Miami via waypoints	June 2.....	Peten	United Fruit Co.	Port Limon, Costa Rica
June 2.....	Zacapa	United Fruit Co.	New Orleans via waypoints	June 3.....	No. 414-H ⁹	Pan American Airways	San Salvador via waypoints
June 2.....	Nekomis	U.S. Navy	High seas	June 3.....	No. 145-M ⁹	Uraba, Medellin & Cent. Airways	Medellin, Colombia
June 2.....	Peten	United Fruit Co.	New York via waypoints	June 3.....	Zacapa	United Fruit Co.	New Orleans via waypoints
June 2.....	No. 145-M ⁹	Uraba, Medellin & Cent. Airways	Medellin, Colombia	June 3.....	Cavina	Elders & Fyffes, Ltd.	Avonmouth via waypoints
June 3.....	Simon Bolivar	Royal Netherlands S.S. Co.	Port Limon, Costa Rica				
June 3.....	Metapan	United Fruit Co.	New York via waypoints				
June 3.....	Pastores	Colombian Line	New York via waypoints				
June 3.....	Cavina	Elders & Fyffes, Ltd.	Avonmouth via waypoints				

PORT OF BALBOA

June 28.....	Chiriqui.....	United Fruit Co.	San Francisco, Calif.	May 28.....	Chiriqui.....	United Fruit Co.	San Francisco, Calif.
June 1.....	All America.....	All America Cables	La Libertad, Ecuador	June 3.....	Point Reyes.....	McCormick S.S. Co.	Buenaventura, Colombia
June 2.....	Point Reyes.....	McCormick S.S. Co.	San Francisco, Calif.				

¹ Tanker. ² Motor ship. ³ Cable ship. ⁴ Air mail carrier. ⁵ Yawl. ⁶ Motor schooner. ⁷ Motor boat. ⁸ Schooner. ⁹ Other than ships passing through the Canal.

Rule 149, Harbor and Transit Regulations

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., May 29, 1933.

To all steamship agents:

1. It has come to the attention of this office that members of crews of vessels arriving at Canal Zone ports have brought into Balboa and Cristobal merchandise not properly covered by cargo manifests, parcel manifests or store lists.

2. Please bring to the attention of your principals the provisions of Rule 149 of the Panama Canal Harbor and Transit Regulations, which is quoted below:

If any vessel arriving at the Canal Zone from a foreign port is found to have on board merchandise not manifested, the master of such vessel shall be liable to a penalty equal in amount to the value of the merchandise not manifested, and all such merchandise belonging to or consigned to or for the officers or crew of the vessel, shall be forfeited, provided, however, that such penalty shall not be imposed if it is made to appear to the customs officer, or to the court in which the trial is held, that no part of the cargo has been unloaded, except as accounted for in the master's report, and that the errors and omissions in the manifest were made without fraud or collusion; and in such cases the master may be allowed to correct his manifest by means of a post-entry. A permit shall not be granted to unload any such merchandise, so omitted from the manifest, before post-entry, or addition to report or manifest has been made.

3. The sale of merchandise by officers and members of ships' crews in the Canal Zone is prohibited, and post-entry on parcels or cargo manifest covering such sales will not be permitted.

4. Your cooperation in this matter will be appreciated.

By direction of the Governor:

C. A. MCILVAINE,
Executive Secretary.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 3, 1933.

No. 72.

Colombia, Buenaventura Bay.—The following cable was received today, by the Port Captain of Balboa from the Port Captain of Buenaventura:

Buenaventura Bay free of mines, vessels can enter or depart any hour desired.

J. L. SCHLEY,
Governor.

Prices of Miscellaneous Supplies at Panama Canal Storehouses

The following are prices, including the 25 per cent surcharge, to individuals and companies, effective June 6, 1933.

Commodities	Unit	Price
Brass, bar, average.....	Lb.	\$0.14
Brass, sheet, average.....	Lb.	.25
Bronze, Tobin, average.....	Lb.	.20
Gasoline, motor grade.....	Gal.	.10
Metal, yellow.....	Lb.	.19
Oakum, Navy, spun.....	Lb.	.15
Oakum, Navy, unspun.....	Lb.	.16
Oil, fuel, at Balboa and Cristobal, in bulk, no surcharge.....	Bbl. of 42 gals.	1.00
Oil, gun and ice machine.....	Gal.	.25
Oil, burning, Colza.....	Gal.	1.00
Oil, engine, gas, medium, in drums, No. 2135.....	Gal.	.24
Oil, engine, gas, extra heavy, in cases, No. 2250.....	Gal.	.30
Oil, engine, gas, extra heavy, in drums, No. 2250.....	Gal.	.24
Oil, kerosene, in drums.....	Gal.	.08
Oil, marine engine.....	Gal.	.31
Paint, lead, white, dry.....	Lb.	.14
Paint, lead, white, in oil.....	Lb.	.08
Paint, zinc oxide, dry.....	Lb.	.08
Paint, zinc oxide, in oil.....	Lb.	.08
Grease, gear, chain and wire rope, lubricating.....	Lb.	.05
Grease, yellow, cup, No. 3, medium.....	Lb.	.08
Grease, yellow, cup, No. 5, hard.....	Lb.	.08
Soda, ash.....	Lb.	.03
Waste, cotton, colored.....	Lb.	.07
Waste, cotton, white.....	Lb.	.09

Provisions Required by Ships

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices, hindquarters selling at 14½ cents per pound, and forequarters at 12 cents per pound.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery, or for delivery at the other terminal after transit.

Coal

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$6.25 for run-of-mine and \$5.25 for nut and slack at Cristobal, in any proportion desired, and \$9.25 at Balboa for run-of-mine only, per ton of 2,240 pounds.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Lubricating Oils

The following is a list of the different kinds of lubricating oil carried in stock at Panama Canal storehouses, and a brief description of each of the oils with a statement of the purpose for which it is generally used.

Requisitions and orders for oils placed with the storekeepers should state the name (including number, if any) of the oil desired exactly as given on the following list:

STATEMENT OF STANDARD LUBRICATING OILS AND THEIR USES.

OILS, FORCE FEED AND MOTOR CYLINDER.

Medium, No. 2135.—A medium oil for the lubrication of main turbines not driving through reduction gears, dynamos, and small internal combustion engines. Not to be used for steam cylinder lubrication.

Heavy, No. 2190.—A heavy oil that will separate quickly from water. For the lubrication of turbines with reduction gears, medium size internal combustion engines, and forced feed on main engines. A heavy bodied oil for use on auxiliary equipment.

Extra heavy, No. 2250.—An extra heavy oil for the lubrication of medium size internal combustion engines, power cylinders, air compressors, and bearings of Diesel engines.

Ultra heavy, No. 2310.—An ultra heavy oil for the lubrication of power cylinders, air compressors, and bearings of large Diesel engines.

Tractor, heavy, No. 3100.—A very heavy body oil for aircraft engines, high speed gasoline engines, motor trucks, motor boats, motorcycles, and diesel engines S. A. E.-50.

Diesel engine lubricating.—For Diesel engines.

OILS, MISCELLANEOUS.

Ammonia cylinder (gun and ice machine grade No. 125).—A refined petroleum oil without the admixture of fatty oils, resins, soap, or other compounds not derived from petroleum. For the lubrication of the cylinders of ice machines, pneumatic tools, and hydraulic systems.

Car and locomotive.—A lubricant on journals of all cars, passenger coaches, steam and electric locomotives.

Castor.—Grade "A." Used for lubricating purposes of the highest grade.

Cutrite, soluble cutting.—A mixture of soluble alkali soap in mineral and fixed saponifiable oils. For use in turret lathes and bolt machines.

Fish.—Used as a rust preventive and for tempering.

Lard.—For use on pipe cutting and threading machines.

Insulating.—Switch (Electrical Division).

Insulating.—Transformer (Electrical Division).

Lubricant (gear, chain and wire rope).—For lubrication and protection of chains, wire rope, and gears of cranes, dredges, steam shovels, etc.

Machine, odorless.—For use on typewriters.

Marine engine, No. 4065, compounded.—A compound of mineral with vegetable oil for the lubrication of reciprocating engines and auxiliaries where oiling is done by hand or through wick feed or drop oilers, also for thrust bearings. Must not be used for circulating of forced feed systems.

Mineral steam cylinder, No. 5150.—For use on reciprocating steam engines using dry saturated steam. For noncondensing steam engine cylinder lubrication (valve oil).

Mineral steam cylinder, superheated.—For use on reciprocating steam engines using superheated steam.

Neatsfoot.—For softening and preserving leather.

Solvent.—Rust-preventing lubricant, for general use.

Sperm.—Used principally by U. S. Navy.

Official Publications of Interest to Shipping

Masters may obtain from the office of the Captain of the Port, at either Cristobal or Balboa, without charge, the "Rules and Regulations Governing Navigation of The Panama Canal and Adjacent Waters," and the current Tariff of charges at the Canal for supplies and services.

Requests for Canal publications sent by mail should be addressed to: The Panama Canal, Balboa Heights, C. Z.; or, when more convenient, to The Panama Canal, Washington, D. C.

The Hydrographic Office at Cristobal maintains at all times a complete stock of navigational charts and books, including charts of all parts of the world, sailing directions of the world, nautical tables, light lists, tide tables, nautical almanacs, etc.

At the office of the Port Captain in Balboa, a limited stock of navigational charts, books, etc., is also carried, and this office is in a position to fill practically any order in this connection that a ship might place.

Copies of current issues of Pilot Charts, Notices to Mariners, and Hydrographic Bulletins may be obtained in return for marine information.

Observations of weather, ocean currents, and other marine data collected, and blanks, instructions, barometer comparisons, etc., furnished.

Correct time is maintained and chronometers rated.

Location of Patients and Visiting Hours, at Gorgas Hospital

The following table shows the distribution of patients in the Gorgas hospital buildings and the visiting hours for the various wards and sections:

Section and Ward.	Visiting Hours.
Section "A:"	
Ward 2, Semi-private, white male.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 3, American male, eye, ear, nose and throat patients.....	Tuesdays, Thursdays and Saturdays, 2.30 to 4.30 p. m., 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 4, Private rooms.....	Daily, same as Ward 2 (above).
Section "B:"	
Ward 5, Male, private rooms, American boys.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.30 p. m.; 6.30 to 8.00 p. m.
Ward 6, Foreign, male and female, private rooms, American girls.....	
Ward 7, White females, private rooms.....	
Ward 8, Obstetrical department, white females.....	
Nursery.....	No visitors permitted in nursery.
Section "C:"	
Ward 9, Colored, male.....	Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 10, White foreign, male.....	
Ward 11, Colored, male (surgical).....	
Ward 12, Colored, male (medical).....	
Ward 13, Colored, male, G. U.....	Tuesdays, Thursdays, Saturdays, Sundays, and holidays, 2.30 to 4.30 p. m.
Ward 14, White, male, G. U.....	
Section "D:"	
Ward 15, American, male (surgical).....	Tuesdays, Thursdays, Saturdays, Sundays and holidays, 2.30 to 4.30 p. m.; 6.30 to 7.30 p. m. Sundays and holidays, 9.30 to 11.00 a. m.
Ward 16, American, male (medical).....	
Ward 17, Colored children.....	Wednesdays, Fridays, Sundays, and holidays, 1.30 to 3.00 p. m.
Ward 18, White children.....	Daily, 9.30 to 11.00 a. m.; 2.00 to 4.00 p. m.
Ward 19, Colored, female (medical).....	Wednesdays, Fridays, Sundays and holidays, 1.30 to 3.00 p. m.
Ward 20, Colored, female, surgical, obstetrical.....	
Isolation section.....	No visitors permitted except to visit tuberculosis patients Thursdays, Sundays and holidays, 1.30 to 3.00 p. m.

Permission to visit outside of visiting hours may be granted upon application to the Superintendent's Office.

Immediate relatives of seriously ill patients will be admitted at any time by and in the discretion of the attending physician, section nurse, and in her absence, the nurse in charge.

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Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., June 14, 1933.

No. 46.

Traffic by Nationality for May 1933

The following tabulation shows the commercial traffic through the Canal during the month of May 1933, classified according to nationality of vessels by direction of transit, and the combined traffic in both directions, together with the corresponding totals for May 1932 and 1931:

ATLANTIC TO PACIFIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Belgian.....	1	6,292	5,421	7,816	5,758	\$4,530.24	.....
British.....	38	217,351	158,565	262,410	159,239	180,077.70	73,126
Chilean.....	1	3,063	2,600	3,579	2,257	2,205.36	.....
Danish.....	4	13,237	9,032	14,927	9,188	9,856.71	6,098
Danzig.....	2	16,697	14,283	24,846	14,176	12,021.84	.....
Dutch.....	3	18,170	11,941	20,311	11,655	12,987.73	2,196
French.....	2	11,364	7,722	13,490	8,101	9,652.50	2,145
German.....	13	40,521	26,645	46,363	27,377	33,066.02	16,407
Italian.....	2	15,829	11,591	19,052	11,798	14,488.75	968
Japanese.....	13	67,188	54,339	84,811	53,660	66,935.29	77,675
Norwegian.....	18	82,482	53,241	89,880	53,350	61,280.31	45,820
Panamanian.....	16	9,731	6,390	11,517	6,165	6,858.51	1,636
Swedish.....	3	14,543	8,239	14,302	10,208	10,298.75	9,193
United States.....	70	415,667	291,569	485,071	290,666	343,487.82	174,677
Total, May 1933.....	186	932,135	661,578	1,098,375	663,598	767,747.53	409,941
Total, May 1932.....	180	996,560	724,201	1,216,831	728,095	836,420.63	457,027
Total, May 1931.....	219	1,081,366	786,051	1,313,605	793,616	910,131.46	519,844

PACIFIC TO ATLANTIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
British.....	33	191,269	138,767	237,092	144,055	\$173,441.75	235,048
Danish.....	5	20,160	14,084	24,092	14,881	17,605.00	29,790
Danzig.....	1	8,124	6,935	12,425	7,090	8,668.75	16,482
Dutch.....	2	14,452	9,356	15,701	9,682	11,695.00	16,684
French.....	4	15,795	10,121	18,842	10,465	16,465.25	18,348
German.....	13	48,294	31,315	61,506	34,575	39,075.32	44,044
Italian.....	2	15,473	9,817	19,590	11,703	12,271.25	9,607
Japanese.....	11	61,340	46,261	72,850	45,609	57,826.25	73,896
Norwegian.....	21	105,643	70,034	117,529	70,470	86,756.55	159,384
Panamanian.....	14	786	770	1,472	824	933.50	1,244
Peruvian.....	3	.....	.....	.....	.....	2,055.50	.....
Swedish.....	1	5,039	2,751	4,896	3,548	3,438.75	7,195
United States.....	76	464,739	336,194	550,609	333,338	419,963.25	608,319
Total, May 1933.....	186	951,114	676,405	1,136,604	686,240	850,196.12	1,220,041
Total, May 1932.....	177	960,398	705,501	1,195,378	715,786	880,980.63	1,219,763
Total, May 1931.....	209	1,103,593	812,683	1,386,380	833,572	1,013,320.72	1,405,608

* Includes naval vessel of 7,628 tons displacement (tolls \$3,814) in transits and tolls, but not in tonnage.

* Naval vessels of 4,111 tons displacement.

COMBINED TRAFFIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Belgian.....	1	6,292	5,421	7,816	5,758	\$4,530.24	.....
British.....	71	408,620	297,332	499,502	303,294	353,519.45	308,174
Chilean.....	1	3,063	2,600	3,579	2,257	2,205.36	.....
Danish.....	9	33,397	23,116	39,019	24,069	27,461.71	35,888
Danzig.....	3	24,821	21,218	37,271	21,266	20,690.59	16,482
Dutch.....	5	32,622	21,297	36,012	21,337	24,682.73	18,880
French.....	¹ 6	27,159	17,843	32,332	18,566	26,117.75	20,493
German.....	26	88,815	57,960	107,869	61,952	72,141.34	60,451
Italian.....	4	31,302	21,408	38,642	23,501	26,760.00	10,575
Japanese.....	24	128,528	100,600	157,661	99,269	124,761.54	151,571
Norwegian.....	39	188,125	123,275	207,409	123,820	148,036.86	205,204
Panamanian.....	30	10,517	7,160	12,989	6,989	7,792.01	2,880
Peruvian.....	² 3	.....	.....	.....	.....	2,055.50	.....
Swedish.....	4	19,582	10,990	19,198	13,756	13,737.50	16,388
United States.....	146	880,406	627,763	1,035,680	624,004	763,451.07	752,996
Total, May 1933.....	372	1,883,249	1,337,983	2,234,979	1,349,838	1,617,943.65	1,629,982
Total, May 1932.....	357	1,956,958	1,429,702	2,412,209	1,443,881	1,717,401.26	1,676,790
Total, May 1931.....	428	2,184,959	1,598,734	2,699,985	1,627,188	1,923,452.18	1,925,452

¹ Includes naval vessel of 7,628 tons displacement (tolls \$3,814) in transits and tolls, but not in tonnage.

² Naval vessels of 4,111 tons displacement.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 6, 1933.

No. 73.

Panama, Panama Bay, floating signal rafts established.—The following dispatch was received from the commanding officer of the U.S.S. *Hannibal*:

The U.S.S. *Hannibal* has moored 11 floating signals on rafts about 4 miles apart on a north and south line, between San Carlos and Iguana Island. The eastern limit of the line is longitude 79°54' W.

These signals will be in position until completion of sounding operations in this area which are expected to last about 12 days.

J. L. SCHLEY,
Governor.

Tanker Traffic Through the Panama Canal in May 1933

During the month of May 1933, 52 tank ships transited the Canal with an aggregate net tonnage (Panama Canal measurement) of 316,978, on which tolls of \$292,176.62 were paid. Cargo amounted to 356,318 tons, comprised of 352,834 tons of mineral oils, 918 tons of cottonseed oil, and 2,566 tons of general cargo.

In point of net tonnage, tanker traffic decreased 19,268 tons, or 5.7 percent, while cargo tonnage decreased 17,463 tons, or 4.7 percent, compared with the corresponding month in 1932.

Tank ships comprised 14.0 percent of the total commercial transits through the Canal during May 1933; made up 16.8 percent of the total Panama Canal net tonnage; were the source of 18.1 percent of the total tolls collected; and carried 21.9 percent of the total cargo through the Canal.

The number, aggregate net tonnage, tolls, and cargo of tank ships transiting the Canal during the month of May 1933, segregated by direction of transits and nationality of vessels, are shown in the following tabulation, with comparative totals for the two preceding months and for May 1932:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>Atlantic to Pacific</i>				
British.....	5	29,655	\$22,071.54	¹ 2,566
Danzig.....	2	16,697	12,021.84	
Dutch.....	1	6,384	4,596.48	
Norwegian.....	4	20,371	16,513.13	10,926
United States.....	12	68,952	53,821.33	² 9,206
Total, May 1933.....	24	142,059	109,024.32	22,698
Total, April 1933.....	23	129,846	101,373.23	30,244
Total, March 1933.....	27	163,484	126,085.35	44,496
Total, May 1932.....	28	165,233	127,098.97	42,090
<i>Pacific to Atlantic</i>				
British.....	5	34,057	37,431.25	70,079
Danzig.....	1	8,124	8,668.75	16,482
Norwegian.....	5	26,727	26,809.05	44,995
United States.....	17	106,011	110,243.25	202,064
Total, May 1933.....	28	174,919	183,152.30	333,620
Total, April 1933.....	25	138,331	143,262.75	263,594
Total, March 1933.....	24	137,794	141,886.25	264,306
Total, May 1932.....	27	171,013	180,032.05	331,699

¹ General cargo.² Includes 918 tons cottonseed oil.

The following tabulation shows the tanker traffic through the Canal during May 1933, classified according to trade route:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>Atlantic to Pacific</i>				
United States intercoastal.....	12	68,952	\$53,821.33	³ 9,206
United States to South America.....	3	22,148	15,946.56	
West Indies to Far East.....	1	5,542	5,836.25	10,926
Europe to United States.....	2	12,216	8,795.52	
Europe to South America.....	4	29,357	21,137.04	
Europe to Australasia.....	1	1,948	2,122.50	⁴ 2,566
Africa to South America.....	1	1,896	1,365.12	
<i>Pacific to Atlantic</i>				
United States intercoastal.....	15	89,457	91,938.75	⁵ 170,784
United States to Europe.....	6	36,614	39,267.50	⁶ 69,903
South America to United States.....	1	5,049	5,493.75	10,381
South America to Canada.....	2	17,820	20,430.75	37,831
South America to Europe.....	3	21,614	22,878.75	44,721
Balboa to West Indies.....	1	4,365	3,142.80	

³ Includes 918 tons cottonseed oil.⁴ General cargo.⁵ Includes 8,000 tons discharged at West Indies.⁶ Includes 1,736 tons discharged at Cristobal.

Of the tanker traffic through the Canal in May 1933, the following is a summary of the vessels giving Los Angeles as their port of origin and destination, together with the totals for the two preceding months and for May 1932:

	No. of ships	Panama Canal net tonnage	Tolls	Tons of cargo
<i>To Los Angeles</i>				
May 1933.....	11	67,103	\$51,295.47	8,288
April 1933.....	11	71,697	51,621.84	
March 1933.....	11	68,785	50,942.92	7,147
May 1932.....	13	77,053	58,134.85	10,129
<i>From Los Angeles</i>				
May 1933.....	14	87,857	91,622.50	170,773
April 1933.....	14	80,103	82,252.50	152,219
March 1933.....	13	74,878	76,745.00	144,544
May 1932.....	16	97,318	100,862.50	188,278

MOVEMENTS OF OCEAN VESSELS Week ending at midnight, June 10, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	
Zenon	3	14 40	4	7 20	4	14 28	4	16 05	French	French Line	425 0	55 0	17 6	Havre, France	Coronel, Chile	General, oil	694	4,834
Tai Ping	3	16 45	4	8 20	4	15 55	4	16 45	Norwegian	Barber S.S. Line	401 9	60 6	19 5	New York, N.Y.	Manila, P.I.	General	1,500	9,894
Daga	3	18 20	4	8 25	4	17 02	4	18 35	British	Comith & Dom. Line	350 5	50 0	22 8	New York, N.Y.	Brisbane, Aus. Ia.	General	3,835	3,142
Santa Benito	3	5 10	4	9 00	4	16 59	4	17 59	Panamanian	United Fruit Co.	325 0	46 0	18 6	Boston, Mass.	Pro. Armutelles, R.P.	Ballast	3,921	2,218
Missourian	3	20 10	4	9 30	4	17 41	4	18 45	American	Amer.-Hawaiian Line	445 0	59 8	20 0	Chester, Pa.	Seattle, Wash.	General	3,929	6,541
Sunol	4	1 10	4	10 00	4	18 26	4	19 22	American	Sun Oil Co.	450 6	65 9	20 0	Chester, Pa.	Los Angeles, Calif.	Ballast	9,619	6,456
Eastern Sun	4	5 05	4	10 30	4	19 20	4	20 24	American	Sun Oil Co.	450 6	66 3	21 0	Chester, Pa.	Los Angeles, Calif.	Ballast	9,619	6,456
Point Montara	4	10 40	4	11 35	4	20 11	4	21 15	American	Gulf Pacific Line	324 0	46 3	19 0	New Orleans, La.	Seattle, Wash.	Corn	1,500	9,807
Amerika	4	6 20	4	14 00	5	11 53	5	11 53	Danish	East Asiatic Co.	405 0	62 0	18 0	Copenhagen, Den.	Vancouver, B.C.	General	1,014	11,060
Nuevo Panama	3	20 35	5	5 55	5	13 54	5	15 50	Panamanian	Hans Elliot	108 0	20 6	7 1	Cristobal, C.Z.	Buenaventura, Col.	General	85	226
Brilliant	5	3 30	5	6 10	5	13 47	5	15 20	American	Stand. Vac. Transp. Co.	480 5	66 0	21 1	New York, N.Y.	Los Angeles, Calif.	Ballast	9,822	6,749
Charles H. Cramp	5	5 35	5	7 10	5	14 49	5	16 00	American	Argonaut S.S. Line	404 6	53 9	19 0	New York, N.Y.	Tacoma, Wash.	General, steel	2,873	6,755
Cal	2	21 25	5	11 27	5	18 55	5	20 08	German	North German Lloyd	216 5	32 9	14 7	Cristobal, C.Z.	Buenaventura, Col.	General	200	1,103
Katsuragi Maru	5	14 00	5	14 05	5	21 15	5	22 35	Japanese	Kokusai Kisen Kaisha	440 0	60 0	26 4	New York, N.Y.	Moji, Japan	(s)	6,300	8,820
Mary Ann	5	17 10	6	6 20	6	13 36	6	14 45	American	U. S. Navy	405 0	53 0	24 3	Cristobal, C.Z.	Gatun, C.Z.	Ballast	5,500	7,033
Norfolk Maru	1	16 25	6	11 05	6	17 55	6	19 00	German	Hawasaki Kisen Kaisha	216 0	32 0	12 8	Tampa, Fla.	Japan	Phosphate rock	53	1,132
Manizales	7	3 35	7	6 20	7	13 39	7	22 45	Japanese	Osaka Shosen Kaisha	401 2	62 0	25 0	Cristobal, C.Z.	Buenaventura, Col.	General	4,600	10,447
Rio de Janeiro Maru	7	4 45	7	7 10	7	15 59	7	17 10	Japanese	Nippon Yusen Kaisha	440 4	57 0	28 5	Montevideo, Uruguay	Kobe, Japan	General	8,799	8,139
Asuka Maru	7	6 25	7	8 20	7	10 58	7	18 20	American	Istulman S.S. Lines	395 5	55 0	19 6	Baltimore, Md.	Kobe, Japan	General, cotton	3,901	7,330
Steel Age	6	20 10	7	9 40	7	17 46	7	18 54	American	McCormick S.S. Co.	410 5	54 3	18 2	Buenos Aires, Arg.	Seattle, Wash.	General	2,261	6,753
West Ira	6	16 10	7	6 10	7	13 45	7	19 49	Panamanian	Hans Elliot	62 0	17 0		Cristobal, C.Z.	Vancouver, B.C.	General	46	22
Real	6	16 10	7	6 10	7	13 45	7	19 49	Panamanian	Hans Elliot	51 0	13 6		Cristobal, C.Z.	Balboa, C.Z.	Ballast	25	12
Sanbu	8	6 20	8	6 25	8	13 45	8	19 49	British	Federal Steam Nav. Co.	524 0	65 0	20 0	London, England	Balboa, C.Z.	Ballast	12,482	8,863
Cambridge	8	2 20	8	7 10	8	15 58	8	17 00	American	Luckenbach Line	499 0	60 0	20 0	Boston, Mass.	Wellington, N.Z.	General	6,303	9,306
J. L. Luckenbach	8	10 55	8	11 00	8	17 46	8	18 35	Danzig	W. Tankerschiff Rhederei	521 0	70 0	20 0	Boston, Mass.	Seattle, Wash.	General	12,535	8,824
Heinrich V.	8	14 52	8	14 55	8	21 42	8	22 48	American	Amer.-Hawaiian Line	433 0	64 0	19 8	Southampton, Eng.	Talara, Peru	Ballast	2,230	7,953
Riedemant	8	5 55	8	15 05	8	22 43	8	23 10	American	Grace Line	480 0	64 0	20 0	Boston, Mass.	San Francisco, Cal.	General	2,719	11,680
Golden Hind	8	11 30	8	15 45	8	23 31	8	24 30	German	Hamburg-American Line	399 0	54 0	18 1	New York, N.Y.	San Antonio, Chile	General	1,809	6,791
Dragon	5	8 47	9	6 00	9	13 51	9	15 20	British	British Navy	445 0	46 6	17 9	Hamburg, Germany	Valparaiso, Chile	General	6,943	9,283
Siamese Prince	8	16 40	9	7 10	9	14 20	9	15 20	British	Prince Line, Ltd.	442 0	60 0	25 8	Bermuda, B.W.I.	San Diego, Calif.	Ballast	1,498	10,334
Oregon	8	18 40	9	8 25	9	15 31	9	16 30	French	French Line	470 0	62 0	19 6	New York, N.Y.	Manila, P.I.	General	3,119	7,680
Canadian Constructor	8	23 30	9	8 40	9	16 22	9	17 45	British	Can. Nat. Steamships	430 0	56 0	24 0	Havre, France	Vancouver, B.C.	General	5,568	

[illegible]

THROUGH THE CANAL—PACIFIC TO ATLANTIC

W. S. Rheem & Co.	4	4.00	4	6.15	4	14.25	4	14.25	4	14.25	American...	Sun Oil Co.	500 0	68.2	29.3	Los Angeles, Calif.	Philadelphia, Pa.	Gasoline.....	13,969	11,224	7,895
Quarrington Court.	4	4.00	4	7.22	4	15.40	4	15.40	British.....	United British S.S. Co.	Chile Intercean Co.	345 0	56.6	27.0	Vancouver, B.C.	London, England	Grain, lumber.	9,829	6,907	4,955	
Atlantic	3	23.55	4	8.11	4	17.00	4	18.30	Swedish.....	Chile Intercean Co.	340 0	49.0	21.0	Pisco, Peru	London, England	Guano	4,500	6,560	4,919		
Annie Johnson & Co.	4	10.45	4	11.12	4	18.55	5	17.45	Swedish.....	Johnson Line	392.2	52.5	25.2	Vancouver, B.C.	Plymouth, Eng.	Grain, general	6,081	8,811	4,810		
Koranton	5	4.30	5	6.15	5	14.55	5	17.45	British.....	R. Chapman & Sons	412.6	55.5	28.0	Vancouver, B.C.	Hull, England	Grain, general	9,537	7,811	5,816		
Dalhem	5	11.45	5	12.40	5	19.45	5	21.40	Swedish.....	John Marsten	341.9	45.9	21.0	Valparaiso, Chile	New York, N.Y.	Mineral ore	5,345	4,435	3,946		
Onarville	5	12.45	5	13.38	5	22.55	5	25.55	British.....	Imperial Oil Co.	470.0	63.2	29.4	Talara, Peru	Montreal, Canada	Petroleum	11,584	9,191	5,278		
Santa Paula	3	8.45	5	14.14	5	21.39	6	14.00	American.....	Grace Line	508.0	72.0	25.0	Seattle, Wash.	New York, N.Y.	General	4,878	13,948	9,217		
Julia Luckenbach	5	15.45	5	17.07	6	10.53	6	10.53	American.....	Luckenbach Line	436.6	57.2	30.0	San Francisco, Cal.	Mobile, Ala.	General	9,056	8,543	6,402		
Bodegraven	5	13.36	5	18.00	6	11.13	6	19.40	Dutch.....	Royal Neth. S.S. Co.	400 9	58.2	21.3	Valparaiso, Chile	Hamburg, Germany	General	5,032	7,834	6,018		
Susan V. Luckenbach	6	3.42	6	7.25	6	14.20	6	14.20	American.....	Luckenbach Line	434.3	57.7	26.5	Seattle, Wash.	Boston, Mass	(?)	7,173	7,947	5,670		
Endurance	5	6	6	7.35	6	16.00	6	16.00	Panamanian.....	E. Garcia	61.0	15.5	6.0	Panama, R.P.	Colon, R.P.	Bananas	10	36	24		
Sambu	6	6	6	8.37	6	16.00	7	6.10	Panamanian.....	Hans Elliot	51.0	15.6	5.0	Panama, R.P.	Cristobal, C.Z.	Bananas	13	25	12		
Real	6	6	6	8.37	6	16.00	7	6.10	Panamanian.....	Hans Elliot	62.2	17.1	5.0	Darien, R.P.	Cristobal, C.Z.	Bananas	35	48	22		
Hanley	6	11.30	6	12.37	6	20.25	6	20.25	American.....	Amer-Hawaiian Line	440.9	56.0	26.0	Bellingham, Wash	Boston, Mass	Lumber, general	7,940	8,310	6,005		
Gothic Star	6	1.00	6	13.37	6	21.35	6	21.35	British.....	Blue Star Line	420.3	54.7	25.0	N. Westmer, B.C.	Boston, Mass	Lumber, general	5,752	5,852	5,274		
Kota Radja	6	16.00	7	9.20	7	14.15	7	14.15	American.....	Sun Oil Co.	480.6	66.0	26.0	Los Angeles, Calif	Newcastle, Eng.	General	13,648	9,620	6,476		
Santa Maria	7	8.30	7	9.20	7	16.27	7	16.27	Dutch.....	Pac. Java Bengal Line	448.0	68.0	26.0	Bombay, India	Chester, Pa.	Gasoline	6,500	6,500	6,500		
Kota Radja	7	10.09	7	11.13	7	18.05	8	00.45	American.....	Grace Line	466.0	64.0	25.3	Durban, S. Africa	Durban, S. Africa	General	4,787	10,626	6,666		
Santa Maria	8	00.40	8	0.02	8	13.20	8	22.40	German.....	Hamburg-American Line	433.3	59.1	27.0	San Antonio, Chile	New York, N.Y.	General	7,865	8,510	6,387		
Oakland	7	19.20	8	7.26	8	14.32	8	14.32	Norwegian.....	Canadian Transp. Co.	351.3	51.4	25.0	Vancouver, B.C.	Hamburg, Germany	General	6,854	8,946	3,518		
Bryne	7	23.47	8	8.26	8	15.45	8	15.45	American.....	Isthmian S.S. Co.	395.5	55.0	25.0	Honolulu, T.H.	Hull, England	Lumber, general	6,596	7,321	5,237		
Chickasaw City	8	7.00	8	9.02	8	16.33	8	16.33	British.....	N. A. Grain Corp.	399.8	52.9	26.0	Vancouver, B.C.	Baltimore, Md.	General	9,350	5,958	4,246		
Eastmoor	8	7.00	8	9.02	8	1															

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port	Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam water draft	From—	For—	Cargo		Panama Canal tonnage
		Day	Hour	Day	Hour							Nature	Tons	
Sollund	7	5	45	8	19	10	7 10 Norwegian.	221.5	32.2	12.3	Corinto, Nicaragua	General	374	1,015
Texas	8	8	00	8	20	18	8 20 18 American.	471.0	57.2	28.0	Seattle, Wash.	Lumber, general.	9,425	6,174
Agnete Maersk	9	00	20	9	14	50	9 14 50 Danish.	285.0	43.0	19.0	Topolobampo, Mex.	Sugar	3,193	2,646
Spencer Kellogg	9	4	00	9	16	05	9 16 05 American.	392.0	51.3	26.0	Shanghai, China.	General	6,800	5,601
Jacob Luckenbach	9	10	35	9	18	30	9 18 30 American.	434.3	57.7	21.0	Portland, Ore.	General, lumber	4,007	7,982
Barillon	9	13	15	9	21	40	9 21 40 Norwegian.	475.6	64.2	29.0	Tolara, Peru.	Southampton, Eng.	13,279	10,075
Silveray	9	13	20	9	23	02	9 23 02 American.	386.0	57.2	25.1	Hull, England.	Grude oil	7,555	7,650
Betty Maersk	9	14	20	9	15	20	9 15 20 Danish.	299.8	42.4	20.0	Jacksonville, Fla.	General	7,555	7,650
Charles R. McCormick	9	19	00	10	6	13	10 6 13 American.	401.4	53.2	25.0	Seattle, Wash.	Guano	3,500	2,614
Cape of Good Hope	10	1	30	10	14	25	10 14 25 British.	405.0	52.0	26.2	Baltimore, Md.	Lumber, general.	8,105	7,082
Nurtureton	10	2	30	10	15	45	10 15 45 British.	423.0	58.4	27.0	Liverpool, England	General	7,979	5,851
Quebec City	10	10	45	10	19	00	10 19 00 British.	400.5	54.3	25.2	Avonmouth, Eng.	Grain	9,300	6,854
Point Ancha	8	8	20	10	12	17	10 12 17 American.	379.9	53.1	22.0	Cardiff, Wales	General	7,900	7,003
Durazzo	10	15	25	10	22	40	10 22 40 German.	227.5	34.4	15.0	Lake Charles, La.	General	3,809	5,666
											Cristobal, C.Z.	General	1,199	1,632
											Guayaquil, Ecuador			1,041

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS						* DEPARTURES					
Date	Vessel	Line		From—	Date	Vessel	Line	For—			
		Day	Hour								
June 4	No. 19-V			Talara via waypoints	June 4	Metapan	United Fruit Co.	New York via waypoints			
June 5	Peten			Port Limon, Costa Rica	June 4	Simon Bolivar	Royal Netherlands S.S. Co.	Amsterdam via waypoints			
June 5	No. 145-M			Medellin, Colombia	June 4	Guardian	All America Cables	Miami, Fla.			
June 5	No. 9685			San Salvador via waypoints	June 4	Cristobal	Panama R.R.S.S. Line	New York via Haiti			
June 5	No. 414-H			Guatemala via waypoints	June 4	Pastores	Colombian Line	New York via waypoints			
June 5	No. 670-M			Barraquilla, Colombia	June 4	No. 670-M	Panama Airways	Barraquilla, Colombia			
June 6	Contessa			New Orleans via Habana	June 4	Nokomis	U. S. Navy	High seas			
June 6	Tillie Lykes			Houston via waypoints	June 4	Peten	United Fruit Co.	New York via waypoints			
June 6	Anachucua			Colon, Rep. of Panama	June 5	No. 9685	Pan American Airways	San Salvador via waypoints			
June 6	Anachucua			Colon, Rep. of Panama	June 6	No. 22-V	Pan American-Grace Airways	Talara via waypoints			
June 6	Anachucua			Colon, Rep. of Panama	June 6	Anachucua	A. Tagaropolos	Colon, Rep. of Panama			
June 6	Anachucua			Colon, Rep. of Panama	June 6	Inapaquina	A. Tagaropolos	Colon, Rep. of Panama			
June 7	Buenaventura			New York and waypoints	June 6	Inapaquina	A. Tagaropolos	Colon, Rep. of Panama			
June 7	Darian			Leyland S.S. Line	June 7	Tillie Lykes	Lykes Brothers S.S. Co.	Houston via waypoints			

PORT OF CRISTOBAL—Continued

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
June 7.....	No. 9688 ⁹	Pan American Airways.....	San Salvador via waypoints	June 7.....	Contessa.....	Standard Fruit & S.S. Co.....	New Orleans via waypoints
June 7.....	No. 18-V ⁹	Pan American-Grace Airways.....	Talara via waypoints	June 8.....	No. 670-M ⁹	Pan American Airways.....	Miami via waypoints
June 8.....	No. 660-M ⁹	Pan American Airways.....	Miami via waypoints	June 8.....	No. 145-M ⁹	Uraba, Medellin & Cent. Airways	Medellin via waypoints
June 9.....	Veragua.....	United Fruit Co.....	New York via waypoints	June 8.....	No. 414-H ⁹	Pan American Airways.....	Guatemala
June 9.....	Carrillo.....	United Fruit Co.....	New Orleans via waypoints	June 8.....	Darian.....	Leyland S.S. Line.....	Guantanamo, Cuba
June 9.....	No. 145-M ⁹	Uraba, Medellin & Cent. Airways	Medellin, Colombia	June 9.....	No. 19-V ⁹	Pan American-Grace Airways.....	Buenaventura, Colombia
June 10.....	Colombia.....	Colombian Line.....	New York via waypoints	June 9.....	Veragua.....	United Fruit Co.....	Port Limon, Costa Rica
June 10.....	Santa Marta.....	United Fruit Co.....	New York via waypoints	June 10.....	Carmania.....	Jay Lung.....	Colon, Rep. of Panama
June 10.....				June 10.....	Carrillo.....	United Fruit Co.....	New Orleans via waypoints
PORT OF BALBOA							
June 4.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.	June 4.....	Antigua.....	United Fruit Co.....	San Francisco, Calif.
June 4.....	El Libertador ⁸	Pinel Brothers.....	Darien, Rep. of Panama	June 5.....	El Libertador ⁸	Pinel Brothers.....	Panama Bay, R. P.
June 5.....	Nora ¹	Arrow Oil Co.....	Los Angeles, Calif.	June 6.....	Nora ¹	Arrow Oil Co.....	Los Angeles, Calif.
June 7.....	Coya.....	Grace Line.....	Tacoma, Wash.	June 6.....	All America.....	All America Cables, Inc.....	Callao, Peru
June 8.....	Point Reyes.....	Buenaventura, Colombia	Buenaventura, Colombia	June 8.....	Coya.....	Grace Line.....	Valparaiso, Chile
June 9.....	Real ¹¹	McCormick S.S. Co.....	Darien, Rep. of Panama	June 9.....	Real ¹¹	Hans Elliot.....	Panama Bay, R. P.
June 9.....		Hans Elliot.....		June 10.....	Point Reyes.....	McCormick S.S. Co.....	San Francisco, Calif.

¹ Tanker.⁸ Motor ship.⁹ Air mail carrier.¹⁰ Motor boat.¹¹ Motor schooner.

* Other than ships passing through the Canal.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Week Ending June 3, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Guayaquil	Panama R.R.S.S. Line		May 28		467
Nuevo Panama	Hans Elliot		May 28		35
Haiti	Colombian S.S. Line		May 28		754
Sixaola	United Fruit Co.		May 28		105
Portland	Hamburg-American Line		May 28		297½
President Grant	Dollar Line	May 28	May 28	358	(²)
Washington	French Line	May 28	May 28	36	(²)
Feltre	Navigazione Libera-Triestina	May 28	May 29	103	(²)
Caribia	Hamburg-American Line	May 29	May 29	5	124
Pearl Marie	R. Feuillebois	May 29	May 29	(¹)	33
Cuba	French Line	May 29	May 29	9	750
Barneveld	Royal Netherlands S.S. Co.	May 29	May 29	5	61
Quirigua	United Fruit Co.	May 29	May 29	4	46
Osiris	Hamburg-American Line	May 29	May 31	574	80
C. Star	S. T. May	May 29	June 1	½	(²)
Cerigo	Hamburg-American Line		May 30		233
Lizzie D. Peabody	M. P. Martinez	May 30	May 30	(¹)	67
Cefalu	Standard Fruit & S.S. Co.	May 30	May 31	380	466
Porta	North German Lloyd	May 30	May 31	84	540
Simon Bolivar	Royal Netherlands S.S. Co.	May 30	May 31	127	(²)
Real	Hans Elliot	May 30	May 31	19	10
Cristobal	Panama R.R.S.S. Line	May 31		1,309	
West Ivis	McCormick S.S. Line	May 31	June 1	136	4
Abraham Lincoln	Fred Olsen & Co.	May 31	May 31	(¹)	325
Orduna	Pacific Steam Navigation Co.	May 31	June 1	39½	168½
Manizales	Grace Line	June 1		1,205	
Calí	North German Lloyd	June 2		1,228	
Kinai Maru	Osaka Shosen Kaisha	June 2	June 2	(¹)	96
Peten	United Fruit Co.	June 2	June 2	487	(³)
Zacapa	United Fruit Co.	June 2	June 3	618	467
Santa Cecilia	Panama Mail S.S. Co.	June 2	June 3	457	288
Santa Elena	Panama Mail S.S. Co.	June 2	June 3	308	144
San Felipe	Quaker S.S. Line	June 2	June 2	152	1
Metapan	United Fruit Co.	June 3		528	
Pastores	United Fruit Co.	June 3		149	
Nuevo Panama	Hans Elliot	June 3		179	
Kwansai Maru	Osaka Shosen Kaisha	June 3		213	
Zenon	French Line	June 3		115	
Salvador	Pacific Steam Navigation Co.	June 3		372½	

¹ No cargo discharged.

² No cargo laded.

³ Two packages.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C.Z., for Two Weeks Ending June 10, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Chiriqui	United Fruit Co.	May 28	May 28	199	37
Adna	Anglo-Saxon Petroleum Co.	May 28	May 31	6,388	
New Orleans	Roosevelt S.S. Co.	June 1	June 2	269	
Peter Maersk	A. P. Moller	June 2	June 3	44	2
Calí	North German Lloyd	June 2	June 2	2	
President McKinley	Dollar Line	June 2	June 2	19	
Santa Cecilia	Grace Line	June 2	June 2	34	1
Point Reyes	McCormick S.S. Co.	June 2	June 3	2,897	
Kwansai Maru	Osaka Shosen Kaisha	June 2	June 3	139	38
Santa Elena	Grace Line	June 3	June 3	175	
Amerika	East Asiatic Co.	June 4	June 4	579	33
Antigua	United Fruit Co.	June 4	June 4	236	50
Santa Paula	Grace Line	June 5	June 5	36	4
Nora	Grace Line	June 5	June 6	13,000	
Coya	Grace Line	June 7	June 7	349	
Sollund	Panama Mail S.S. Co.	June 7	June 8		285
Santa Clara	Grace Line	June 8	June 9	149	53
Point Ancha	Swayne & Hoyt	June 8	June 10	1,902	
Point Reyes	McCormick S.S. Co.	June 8	June 10	3,033	

Ships' Chandlery Supplies

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

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Volume XXVI.

Balboa Heights, C. Z., June 21, 1933.

No. 47.

Cargo Through the Canal During May 1933

On pages 624 and 625 of this issue will be found tables showing the origin and destination of cargo passing through the Canal in May 1933. This cargo, segregated according to direction as compared with May 1932, and the differences, are shown in the following tabulation:

	May 1932	May 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Atlantic to Pacific.....	457,027	409,941	-47,086
Pacific to Atlantic.....	1,219,763	1,220,041	+278
Total.....	1,676,790	1,629,982	-46,808

Total cargo through the Canal in May 1933 showed a decrease of 46,808 tons, or 2.8 percent. Cargo moving from the Pacific to the Atlantic showed a gain of 278 tons, while from the Atlantic to Pacific there was a loss of 47,086 tons, or 10.3 per cent.

ATLANTIC TO PACIFIC CARGO MOVEMENT

Origin.—A total of 299,364 tons, or 73.0 percent of the cargo tonnage moving from the Atlantic to the Pacific, originated on the eastern and Gulf seaboard of the United States, and 64,389 tons, or 15.7 percent, in Europe, these two areas contributing 88.7 percent of the total tonnage moving in this direction in May 1933. In comparison with May 1932, cargo tonnage originating in the United States registered a loss of 12,858 tons, or 4.1 percent, and from Europe a loss of 12,127 tons, or 15.8 percent. The United States contributed a greater proportion of the total tonnage than in the corresponding month last year, while Europe's proportion to the total decreased.

Destination.—Of the total cargo moving from the Atlantic to the Pacific, 164,215 tons, or 40.1 percent of the total, were destined to ports on the west coast of the United States; 152,774 tons, or 37.3 percent, to Asia; 42,284 tons, or 10.3 percent, to Australasia; and 21,711 tons, or 5.3 percent, to South America. In comparison with May 1932, cargo destined to Asia showed an increase of 14,505 tons, or 10.5 percent. All other areas declined as follows: To the United States, 34,933 tons, or 17.5 percent; to Australasia, 4,441 tons, or 9.5 percent; to South America, 14,768 tons, or 40.5 percent. The proportion of the total cargo destined to the United States was lower than in May 1932; Asia's proportion rose from 30.5 percent in 1932 to 37.3 percent in May 1933. Australasia's proportion was practically unchanged but South America declined.

PACIFIC TO ATLANTIC CARGO MOVEMENT

Origin.—Of the total cargo moving from the Pacific to the Atlantic in May 1933, 620,760 tons, or 50.9 percent of the total, originated in

the United States; 168,999 tons, or 13.8 percent, in Canada; 175,957 tons, or 14.4 percent, in South America; 164,978 tons, or 13.5 percent, in Asia; and 33,644 tons, or 2.8 percent, in Australasia. Cargo tonnage from the United States made an increase of 151,477 tons, or 32.3 percent, in comparison with May 1932. Increases were also recorded in tonnage coming from Asia and Australasia, these areas registering gains of 55,078 tons (50.1 percent) and 12,858 tons (61.9 percent), respectively. Tonnage from Canada declined 128,488 tons, or 43.2 percent, and also from South America, amounting to 80,584 tons, or 31.4 percent. The proportion of the total cargo originating in the United States was considerably higher than the proportion in May 1932; the percentages for Asia and Australasia were also higher, but Canada's and South America's proportions were lower.

Destination.—Segregated according to destination, 712,483 tons, or 58.4 percent of the total cargo moving from the Pacific to the Atlantic were reported destined to ports on the east coast of the United States, and 419,989 tons, or 34.5 percent, to European ports. These two areas absorbed nearly 93 percent of the total cargo. Cargo destined to the United States showed an increase of 138,566 tons, or 24.1 percent, in comparison with May 1932, and cargo to Europe made a decline of 136,180 tons, or 24.5 percent. The proportion of the total to the United States increased from 47.0 percent last year to 58.4 percent this year. Europe's proportion declined from 45.6 percent to 34.5 percent.

PRINCIPAL COMMODITIES, ATLANTIC TO PACIFIC

From the cargo declarations submitted it was possible to classify approximately 91 percent of the cargo in transit through the Canal from the Atlantic to the Pacific during the month of May 1933. The remaining 9 percent consisted, for the most part, of manufactured articles in small lots reported as "general cargo."

Pacific-bound commodities which aggregated more than 5,000 tons for May 1932, or May 1933, are listed in the following tabulation, showing the differences:

Commodity	May 1932	May 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Automobiles.....	4,298	6,028	+1,730
Cement.....	4,631	6,175	+1,544
Chemicals.....	6,043	5,975	-68
Coal and coke.....	3,030	7,704	+4,674
Canned goods (fish, fruit, vegetables, etc.).....	7,495	9,526	+2,031
Corn.....	9,746	6,537	-3,209
Cotton.....	30,383	17,168	-13,715
Iron and steel, manufactures of.....	60,611	44,640	-15,971
Metal scrap.....	21,574	61,016	+39,442
Oils, mineral.....	50,880	37,244	-13,636
Paper.....	19,649	14,954	-4,695
Phosphates.....	24,829	19,614	-5,215
Sugar.....	11,186	11,102	-84
Sulphur.....	22,937	11,551	-11,386
Tinplate.....	11,776	10,727	-1,049

The above 15 commodity groups for May 1933 comprise about 66 percent of the total cargo moving from the Atlantic to the Pacific. Five of the items made gains in comparison with May 1932, while 10 showed losses.

PRINCIPAL COMMODITIES, PACIFIC TO ATLANTIC

It was possible to classify almost 99 percent of the cargo moving from the Pacific to the Atlantic during May 1933. Commodities which

aggregated more than 5,000 tons either during the past month or May 1932, are listed below, showing the differences:

Commodity	May 1932	May 1933	Difference
	<i>Long tons</i>	<i>Long tons</i>	<i>Long tons</i>
Barley.....	24,211	5,618	-18,593
Beans.....	8,141	11,682	+3,541
Borax.....	6,516	5,176	-1,340
Canned goods (fish, fruit, vegetables, etc.).....	48,788	68,657	+19,869
Coffee.....	10,687	12,336	+1,649
Cold storage (food products).....	10,493	16,614	+6,121
Copra.....	4,476	14,429	+9,953
Flour.....	9,628	18,426	+8,798
Fruit, dried.....	19,340	13,862	-5,478
Fruit, fresh.....	13,199	20,078	+6,879
Guano.....		7,025	+7,025
Lumber.....	135,343	152,049	+16,706
Metals, various.....	25,982	35,892	+9,910
Nitrates.....	24,282	23,795	-487
Oats.....	22,971	5,799	-17,172
Oils, mineral.....	332,435	334,547	+2,112
Ores.....	54,013	7,105	-46,908
Paper.....	10,153	9,565	-588
Skins.....	3,965	6,384	+2,419
Sugar.....	163,438	216,506	+53,068
Wheat.....	209,624	116,206	-93,418
Wood pulp.....	12,175	10,389	-1,786
Wool.....	5,719	12,489	+6,770

¹ Does not include fresh fruit.

The above 23 commodity groups for May 1933 comprise over 92 percent of the cargo tonnage moving from the Pacific to the Atlantic. Fourteen of the items show increases in comparison with May 1932 and 9 decreases. Sugar, canned goods, and lumber showed the largest gains; heavy declines occurred in shipments of wheat, ores, and grains.

(Continued on next page.)

Supplement No. 1, Tariff No. 11

THE PANAMA CANAL, PANAMA RAILROAD COMPANY,
EXECUTIVE OFFICE, BALBOA HEIGHTS, C.Z., June 8, 1933.

ITEM 39.—Panama Railroad Company Freight Classification and Tariff.

(Effective June 15, 1933.)

Par. 2. Add:	Rating
(1) Coconuts—	
In bags, barrels, or boxes, L. C. L.....	4
In packages named or in bulk, C. L., minimum weight 40,000 pounds.....	6

J. L. SCHLEY,
Governor, The Panama Canal,
President, Panama Railroad Company.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C.Z., for Week Ending June 17, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				<i>Tons</i>	<i>Tons</i>
Santa Teresa.....	Panama Mail S.S. Co.....	June 10	June 10	51	2
Laurits Swenson.....	Fred Olsen & Co.....	June 10	June 10	433	6
Drechtijk.....	Holland-America Line.....	June 10	June 10		6
Salvador.....	Pacific Steam Navigation Co.....	June 10	June 10		2
San Benito.....	United Fruit Co.....	June 11	June 11	2	
Talamanca.....	United Fruit Co.....	June 11	June 11	137	37
Virginia.....	Panama-Pacific Line.....	June 12	June 12	1	537
Santa Ana.....	Panama Mail S.S. Co.....	June 15	June 16	37	63
Point Arena.....	McCormick S.S. Co.....	June 15	June 16	2,867	

Origin and Destination of Cargo Passing Through the Panama Canal from the Atlantic to the Pacific, May 1933.—Continued from page 623
(Figures represent tons of 2,240 pounds)

From—	NORTH AMERICA						SOUTH AMERICA						AUSTRALASIA				ASIA				Grand total	Percent of total cargo		
	West coast of United States	West coast of Canada	West coast of Central America	Balboa, C. Z. *	Hawaiian Islands	Total, North America	Chile	Colombia	Ecuador	Peru	West coast of South America †	Total, South America	Australia	New Zealand	Australasia †	Total, Australasia †	Philippine Islands	China	Japan	Far East †			Total, Asia	
NORTH AMERICA:																								
UNITED STATES—																								
North Atlantic ports.....	100,478	2,023	806	668	3,757	107,732	1,792	430	171	811	39	3,243	9,099	1,767		10,866	8,991	8,548	48,119	1,131	66,789	188,630	46.0	
South Atlantic ports.....	4,630					4,630											425	909	1,291	732	3,357	7,987	1.9	
Gulf ports.....	35,917					35,917											835	465	825	64,539	16	65,845	102,747	25.1
Total, United States.....	141,025	2,023	806	668	3,907	148,429	1,792	430	171	811	39	3,243	9,099	2,602		11,701	9,881	10,282	113,949	1,879	135,991	299,364	73.0	
East coast of Canada.....	2,233					2,233							3,121	1,140	4,261							6,494	1.6	
East coast of Central America.....	1,141	4,245	35			3,665	1,633	1,942	811	783	5	5,174	1,598	550	2,148							2,148	0.5	
Cristobal, C. Z. *	167	7,016		1		7,184																8,839	2.2	
West Indies.....																			3,874	10,926		14,800	21,984	5.4
Total, North America.....	142,333	11,276	3,291	704	3,907	161,511	3,425	2,372	982	1,594	44	8,417	13,818	4,292		18,110	9,881	14,156	124,875	1,879	150,791	338,829	82.7	
EUROPE:																								
British Isles.....	2,851	2,468	305			8,624	570		461	1,822	100	2,953			20,100	3,084	23,194					34,771	8.5	
Belgium.....	8,062	623	257			8,942	1,783	62	362	589		2,796										11,738	2.9	
Denmark.....									1,498			1,498										1,498	0.4	
France.....	133	50	66			249									980							1,229	0.3	
Germany.....	3,720	304	1,213			5,237	812	279	366	572	490	2,519										7,786	1.9	
Holland.....	365	18				383	345	69	115	309		1,038										1,421	0.3	
Italy.....	732	47				779																779	0.2	
Norway.....	243			1,148		1,391	1,062	90				1,152										2,543	0.6	
Spain and Portugal.....	147	11	18			176						1,101										176		
Sweden.....	1,087		35			1,122	881	1	2	217		1,101										2,223	0.5	
Europe †.....	39	5	192			236						19	19									255	0.1	
Total, Europe.....	17,379	3,526	5,086	1,148		27,139	4,591	2,371	1,396	3,509	609	13,076			20,100	4,074	24,174					64,389	15.7	
East coast of South America.....	4,459	19				4,478	53	165				218							1,983			6,679	1.6	
Asia.....	44					44																44		
Grand total.....	164,215	14,821	8,377	1,852	3,907	193,172	8,089	5,508	2,378	5,103	653	21,711	13,818	24,392	4,074	24,284	8,881	14,156	126,858	1,879	152,774	409,941	100.0	
Percent of total cargo:																								
May 1933.....	40.1	3.6	2.0	0.5	0.9	47.1	2.0	1.3	0.6	1.2	0.2	5.3	3.4	6.0	0.9	10.3	2.4	3.5	31.0	0.4	37.3	100.0		
May 1932.....	43.6	4.5	1.2	0.3	1.9	51.5	4.9	0.5	0.6	1.6	0.4	8.0	4.5	5.5	0.2	10.2	2.2	8.0	19.0	1.1	30.3	100.0		
May 1931.....	47.0	4.2	1.9	1.3	3.3	57.7	8.2	0.4	0.8	1.7	0.3	11.4	1.5	5.7	0.4	7.6	2.2	5.0	14.4	1.7	23.3	100.0		

Origin and Destination of Cargo Passing Through the Panama Canal from the Pacific to the Atlantic, May 1933

(Figures represent tons of 2,240 pounds)

From—	NORTH AMERICA						EUROPE														Grand total	Percent of total cargo						
	UNITED STATES						East coast of Cen- tral America	Cristobal, C.Z. 1	West Indies	Total, North America	British Isles	Belgium	Denmark	France	Germany	Holland	Italy	Norway	Sweden	Spain & Portugal			Europe 1	Total, Europe	East coast of South America	Africa	Far East	
NORTH AMERICA:																												
West coast of U. S.	410,162	14,994	47,451	472,607		699	2,910	15,008	491,224	79,047	2,107	226	17,386	7,574	5,516	619,153	300,117	640,125	928,179	1,797,126	543	620,760	50.9					
West coast of Canada	1,018	906	1,400	5,915		62	1,889	9,790	92,930	4,305	1,590	46	6,010	12,486	560,5,000	34,905	157,832	1,377,440	3,404	1,822	168,999	13.1						
West coast of Cen. Am.	400					3,220	34	3,664	2,840				357	1,133	74							8,058	0.7					
Bahama, C.Z.						396																396						
Hawaiian Islands	41,748		5,501	47,249					47,249													47,249	3.9					
Total, North America	453,328	14,994	53,858	522,180	5,915	699	6,588	16,931	552,313	174,817	6,412	1,816	17,789	14,717	18,076	1,796,513	300,465	545,288	1,043,174	1,268,543	845,462	69.3						
SOUTH AMERICA:																												
Chile	3,425	18,655		22,080			833	2,171	25,084	8,373	1,732	52	1,285	2,302	602,175	4,178	56	1,156	21,493	18	46,585	3.9						
Colombia	722			722			4,951	5,673	13	7		35	64	195					314		5,987	0.5						
Ecuador	7,974			7,974			2,969	10,943	30	37		74	87	12					328		11,271	0.9						
Peru	8,340			8,340			421	46,592	29,851	123	76	13,983	1,819	74	33	102	16,513	62,574	126		109,166	8.9						
West coast of S. Amer.	2,738			2,738				2,738											200		2,938	0.2						
Total, South America	23,199	18,655		41,854	37,831		9,174	2,171	91,030	38,341	1,899	128	15,377	4,272	959,1,802	4,280	56	17,795	84,909	18	175,957	14.4						
AUSTRALASIA:																												
Australia	354			354	743		13	1,110														1,110	0.1					
New Zealand	1,651			1,651	1,117			2,768	21,479				1,089						22,568		25,336	2.1						
Australasia									86				2,612						4,500		7,198	0.6						
Total, Australasia	2,005			2,005	1,860		13	3,878	21,565				3,701						4,500		33,644	2.8						
ASIA:																												
Philippine Islands	114,746			14,060	128,806			128,806														128,806	10.6					
China	3,422			3,422			549	56	4,027												68	4,085	0.3					
Japan	12,966	51		30	13,047		672	39	13,758													13,758	1.1					
Far East 1	195			974	1,169			1,169					8,800						8,350		18,319	1.5						
Total, Asia	131,329			51,156	146,444		1,221	95,147	760				8,800						8,350		164,978	13.5						
Grand total	609,861	33,700	68,922	712,483	45,606	699	16,996	19,197	794,981	234,723	8,311	1,944	36,867	27,789	19,035	2,981	6,513	4,280	356,777	1,904,983	2,688,543	1,220,041	100.0					
Percent of total cargo:																												
May 1933	50.0	2.8	5.6	58.4	3.7		1.4	1.6	65.1	19.2	0.8	0.2	3.0	2.3	1.6	0.2	0.5	0.4	6.3	34.5	0.3	0.1	100.0					
May 1932	43.3	0.2	3.5	47.0	4.9	0.1	1.1	0.8	53.9	25.4	1.5	0.4	1.8	1.9	2.1	0.3	0.2	0.2	11.8	45.6	0.5		100.0					
May 1931	50.4	1.5	4.4	56.3	3.2		1.1	3.3	63.9	16.7	1.7	0.7	3.0	2.8	1.3	0.6	1.1		7.8	35.7	0.4		100.0					

¹ General cargo not routed so as to allow segregation between definite ports.² Includes both local and transit cargo.

MOVEMENTS OF OCEAN VESSELS Week ending at midnight, June 17, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo			Panama Canal tonnage		
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross		Net	
Kansas	10	16.40	11	6.05	11	13.42	11	14.52	American	Amer.-Hawaiian Line	404.0	53.0	17.6	Boston, Mass	Portland, Oreg.	General	2,623	6,772	4,782
Mathew Luckenbach	10	22.35	11	7.15	11	16.08	11	17.28	American	Luckenbach Line	434.0	57.0	24.0	New Orleans, La.	Tacoma, Wash.	General	4,706	7,977	5,726
Junna	11	14.05	11	19.30	12	14.13	12	15.30	British	James Nourse & Co.	424.0	56.0	25.6	Port Arthur, Tex.	Moji, Japan	Scrap iron	7,652	7,263	5,187
Orazio	11	13.45	12	7.10	12	15.18	12	16.15	Italian	Soc. Italia-Flotte Riunite	482.0	61.0	22.1	Genoa, Italy	Valparaiso, Chile	Coconuts	938	12,977	9,377
Endurance	11	6.45	11	6.45	11	16.10	11	17.28	Panamanian	Enrique Garcia	60.0	14.0		Cristobal, C.Z.	Panama City, R.P.	Coconuts	24	36	24
Wirm	11		11						American	Mr. Wirt				Cristobal, C.Z.	Gatun, C.Z.	Ballast			1
Rafi	11		11						American	U. S. Navy				Cristobal, C.Z.	Gatun, C.Z.	Ballast			
Motor Sailer	11	16.30	12	8.20	12	16.31	12	18.00	American	Associated Oil Co.	431.0	59.0	24.0	Tiverton, R.I.	San Francisco, Cal.	Ballast	7,863	5,104	
Betterson	11	18.10	12	8.25	12	17.30	12	18.47	Japanese	Mitsui & Co.	417.0	54.0	22.8	New York, N.Y.	Yokohama, Japan	Gen., scrap iron	6,716	6,850	4,932
Yakiko Maru	11	13.35	12	8.45	12	16.34	12	18.00	Panamanian	Hans Elliot	108.0	20.0	7.6	Cristobal, C.Z.	Buenaventura, Col.	General	50	226	101
Nuevo Panama	11	19.25	12	9.20	12	18.30	12	19.45	American	Quaker Line	415.0	55.0	19.7	New York, N.Y.	Seattle, Wash.	General	4,290	7,704	5,696
Peter Kerr	11	19.35	12	9.50	12	19.24	12	20.44	Danish	Mersey Paper Co.	357.0	51.0	17.11	Liverpool, N.S.	Seattle, N.Z.	Newsprint	3,652	4,973	3,651
Lundby	12	5.20	12	10.55	12	20.34	12	22.10	American	Amer.-Hawaiian Line	415.0	56.0	18.0	Baltimore, Md	Seattle, Wash.	General	1,572	7,717	5,763
Wulboro	12	12.45	12	12.50	12	21.49	13	16.55	British	International Pet. Co.	565.0	75.0	23.0	Halifax, N.S.	Seattle, Wash.	General	16,750	9,585	
C.O. Stillman	12	22.25	13	6.00	13	15.47	13	18.00	British	Federal Steam Nav. Co.	460.0	62.0	27.2	Newport, England	Talara, Peru	General	5,955	10,609	8,135
Kent	13	3.45	13	7.20	13	16.45	13	19.03	American	Shell Petroleum Co.	435.0	56.0	18.6	Baltimore, Md	Seattle, Wash.	General, steel	3,378	7,611	5,395
Steel Trader	13	3.45	13	7.20	13	16.45	13	19.03	American	Shell Petroleum Co.	435.0	56.0	18.6	Baltimore, Md	Seattle, Wash.	General, steel	3,378	7,611	5,395
Antietam	13	5.30	13	8.25	13	18.41	13	19.55	British	Ellerman & Bucknall	465.0	58.0	22.0	Panama, N.J.	Fremantle, Ausla.	Ballast	2,607	9,344	6,977
City of Dieppe	13	5.30	13	8.25	13	18.41	13	19.55	British	Ellerman & Bucknall	465.0	58.0	22.0	Panama, N.J.	Fremantle, Ausla.	Ballast	2,607	9,344	6,977
Moldanger	13	6.25	13	9.40	13	20.58	13	22.15	American	Intercean Line	456.0	61.0	20.0	Lake Charles, La.	San Francisco, Cal.	Coke and general	1,883	5,983	4,354
Point Lobos	13	6.50	13	10.40	13	23.02	14	00.36	Norwegian	Gulf-Pacific Line	375.0	52.0	17.0	Buenos Aires, Arg	San Francisco, Cal.	Coke and general	3,993	5,953	4,354
Leikanger	13	6.50	13	10.40	13	23.02	14	00.36	Norwegian	Gulf-Pacific Line	375.0	52.0	17.0	Buenos Aires, Arg	San Francisco, Cal.	Coke and general	3,993	5,953	4,354
Durazzo	10	23.00	13	13.05	13	22.00	13	23.05	German	Westfal, Larsen & Co.	226.0	34.0	13.0	Cristobal, C.Z.	Guayaquil, Ecuador	General	425	1,633	1,041
Calarolite	13	9.00	13	11.40	14	00.13	14	1.48	British	Imperial Oil Co.	521.0	70.0	24.0	Montreal, Canada	Talara, Peru	Ballast	12,339	7,717	
Los Angeles	13	22.50	13	13.25	13	21.37	13	23.05	German	Hamburg-American Line	432.0	59.0	22.8	Hamburg, Germany	Portland, Oreg.	General	5,990	8,454	6,344
Oregonian	13	20.25	14	6.05	14	13.31	14	15.40	American	Amer.-Hawaiian Line	404.6	53.9	18.0	Rosston, Mass	Seattle, Wash.	General	2,733	6,755	4,785
Modavia	13	22.55	14	7.20	14	15.37	14	16.40	British	Donaldson Brothers	387.0	53.7	18.0	Glasgow, Scotland	Vancouver, B.C.	General	1,520	6,719	4,979
Sage Brush	14	2.20	14	8.30	14	16.46	14	17.55	American	Shepard Line	409.8	54.2	21.0	Boston, Mass	Seattle, Wash.	General	5,620	6,627	4,941
Chas. Christenson	14	6.25	14	8.40	14	17.50	14	18.48	American	Sudden & Christenson	409.0	54.0	18.8	Baltimore, Md	Seattle, Wash.	General	3,552	6,693	4,903
San Bruno	14	00.45	14	9.25	14	18.56	15	10.47	American	United Fruit Co.	325.0	46.3	18.0	Philadelphia, Pa.	Pro.Arnuellus,R.P.	Ballast	3,920	2,273	
Cable Enterprise	14	6.05	14	9.30	14	18.59	15	7.32	British	Western Telegraph Co.	198.9	30.1	13.0	St. Lucia, B.W.I.	Pacific Ocean	Ballast	1,000	455	
Sambu	13	17.10	14	6.05	14	15.37	14	16.40	Panamanian	Hans Elliot	62.0	13.6		Cristobal, C.Z.	Balboa, C.Z.	Ballast	34	25	12
Real	13	17.00	14	9.05	14	17.50	14	18.48	Panamanian	Hans Elliot	51.0	17.0		Cristobal, C.Z.	Pro.Arnuellus,R.P.	General	2,940	18,197	13,526
Rangitiki	15	6.05	15	6.15	15	14.24	15	21.10	British	N. Z. Shipping Co.	531.0	70.2	26.0	London, England	Auckland, N.Z.	General	4,171	8,982	6,274
Kokai Maru	15	1.55	15	7.15	15	15.44	15	16.50	Japanese	Osaka Shosen Kaisha	446.0	60.0	22.9	Philadelphia, Pa.	Kobe, Japan	General	4,171	8,982	6,274

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Robert Luckenbach	13	8.30	13	9.16	13	17.50	13	18.40	American	Luckenbach Line	445.0	58.0	27.0	Seattle, Wash	Boston, Mass	General	8,268	8,695	6,375
Steel Maker	13	6.30	13	10.33	13	19.05	13	19.05	American	Isthmian S.S. Lines	395.5	55.0	28.0	Honolulu, T.H.	New York, N.Y.	Can. goods, sugar	9,000	7,336	5,245
Stanford	13	12.05	13	12.40	13	20.15	13	20.15	American	Fern Line	387.8	54.2	26.0	San Carlos, P.I.	U.S. Atlantic port	Sugar	8,000	6,580	4,528
Point Salinas	13	15.50	14	6.31	14	14.05	14	14.05	Norwegian	Swayne & Hoyt	386.8	52.2	23.0	Portland, Oreg	Mobile, Ala	Lumber, general	5,277	5,706	4,167
Ohian	14	4.35	14	7.17	14	13.13	14	13.13	American	Amer-Hawaiian Line	407.7	53.7	25.0	Seattle, Wash	Boston, Mass	General	5,928	7,087	5,019
Stenmestad	14	10.55	14	11.35	14	18.30	14	18.30	Norwegian	Fern Line	376.5	53.8	25.0	Hingman, P.I.	U.S. Atlantic port	Sugar	7,200	6,256	4,663
Hakonezan	15	3.45	15	5.58	15	13.40	15	13.40	Japanese	Mitsui Bussan Kaisha	437.6	56.5	26.5	San Carlos, P.I.	New York, N.Y.	Sugar, general	8,082	7,414	5,055
Liverpool Maru	15	5.10	15	7.07	15	14.50	15	17.40	Japanese	Kokusai Kisen Kaisha	385.0	51.0	26.0	Iloilo, P.I.	New Orleans, La.	Sugar	7,000	5,919	4,436
Cadwood	15	7.00	15	8.05	15	16.15	15	16.15	American	Union Oil Co.	435.0	56.0	27.0	Los Angeles, Calif	Fall River, Mass.	Gasoline	8,479	7,452	5,143
Starck	15	10.30	15	11.17	15	19.05	15	19.35	Finnish	Murtio Hochschild Co.	370.5	52.0	25.0	Callao, Peru	New York, N.Y.	(+)	6,308		
Santa Ana	15	19.45	16	6.26	16	13.55	17	00.10	American	Grace Line	360.0	51.6	24.0	San Francisco, Cal.	New York, N.Y.	General, coffee	3,300	5,710	4,011
Vancouver	16	3.35	16	7.19	16	15.25	16	22.40	American	Hamburg-American Line	447.5	63.0	27.0	Vancouver, B.C.	Germany	General	8,735	10,267	7,252
San Rafael	15	16.00	16	8.03	16	16.30	16	16.30	American	States S.S. Co.	410.0	54.4	24.2	Portland, Oreg	Philadelphia, Pa.	General, lumber	7,204	6,454	4,675
Trondanger	15	24.00	16	9.14	16	17.55	17	5.25	Norwegian	Interocean Line	464.4	61.2	28.5	Vancouver, B.C.	Rotterdam, Holland	General	8,234	9,345	6,908
La Paz	16	6.05	16	10.10	16	20.00	17	00.40	British	Pacific Steam Nav. Co.	406.0	54.0	27.0	Talcahuano, Chile	Hull, England	General	8,498	7,216	4,912
Hollywood	16	11.55	16	14.33	16	23.05	16	23.05	American	McCormick S.S. Co.	410.0	54.3	26.0	Tacoma, Wash	Santa Fe, Argent'a	General, lumber	6,693	6,582	5,033
Tsuyama Maru	16	12.30	16	16.57	17	11.50	17	14.25	Japanese	Nippon Yusen Kaisha	445.0	58.0	26.0	Iloilo, P.I.	Boston, Mass	Sugar, general	9,075	7,955	5,681
Minden	16	14.00	17	6.15	17	15.05	18	10.25	German	North German Lloyd	378.0	51.0	24.0	Valparaiso, Chile	Hamburg, Germany	General	5,804	4,823	3,272
Acajutla	16	15.30	17	6.25	17	14.55			British	Pacific Steam Nav. Co.	215.7	33.9	15.0	Champerico, Guat.	Cristobal, C.Z.	Coffee, general	589	1,273	706
Gen. W. M. Graham	17	6.31	17	18.06					American	U. S. Army	156.0	32.0		Balboa, C.Z.	Cristobal, C.Z.	General	900	1,132	741
Manizales	17	2.25	17	7.16	17	15.50	18	13.15	German	Grace Line	216.5	32.9	15.1	Guayaquil, Ecuador	Hamburg, Germany	General	6,552	5,788	4,027
Isis	17	5.30	17	7.24	17	15.55	18	00.10	German	Hamburg-American Line	374.1	51.7	25.0	Talcahuano, Chile	Avonmouth, Eng.	General	7,795	7,611	5,450
Steel Engineer	17	3.30	17	8.22	17	18.15	17	22.40	German	Isthmian S.S. Lines	424.2	56.2	26.3	Seattle, Wash	Cristobal, C.Z.	Coffee	217	226	101
Nuevo Panama	17	5.30	17	7.46	17	18.06	18	10.30	Panamanian	Hans Eliot	108.5	20.6	9.0	Buenaventura, Col.	Cristobal, C.Z.	General	6,707	5,958	4,114
Elmworth	17	6.40	17	9.10	17	19.20	17	19.20	British	Canadian Transp. Co.	400.0	53.2	25.0	Vancouver, B.C.	Montreal, Canada	General	8,175	8,976	6,485
Nankai Maru	17	17.10	17	12.58	17	20.30	18	8.50	Japanese	Osaka Shosen Kaisha	446.0	60.5	28.0	Bais, P.I.	New York, N.Y.	Sugar, oil, general	1,125	1,572	1,011
Cengo	17	14.00	17	14.41	17	21.30			German	Hamburg-American Line	227.2	34.4	15.0	Guayaquil, Ecuador	Cristobal, C.Z.	General			

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmeridian.

PORT OF CRISTOBAL

* ARRIVALS

* DEPARTURES

Date	Vessel	Line	Date	Vessel	Line	For—
June 11	Canden	United Fruit Co.	June 11	Santa Marta	United Fruit Co.	New York via waypoints
June 11	Magallanes	Spanish Line	June 11	Colombia	Colombian Line	New York via waypoints

PORT OF CRISTOBAL—Continued

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
June 11	Colombie.	French Line.	Havre via waypoints	June 12	No. 600-M ¹²	Pan American Airways.	Barranquilla, Colombia
June 11	No. 9658 ¹²	Pan American Airways.	San Salvador via waypoints	June 12	Camden.	United Fruit Co.	Curacao, D.W.I.
June 11	No. 22-V ¹²	Pan American-Grace Airways.	Talara via waypoints	June 12	Troja.	Hamburg-American Line.	Port Limon, Costa Rica
June 11	Troja.	Hamburg-American Line.	Hamburg via waypoints	June 12	Veraqua.	United Fruit Co.	New York via waypoints
June 12	Veraqua.	United Fruit Co.	Port Limon, C.R.	June 13	No. 18-V ¹²	Pan American-Grace Airways.	Buenaventura, Colombia
June 12	No. 145-M ¹²	Uraba, Medellin & Cent. Airways	Medellin via waypoints	June 13	Colombie.	French Line.	Havre via waypoints.
June 12	No. 414-H ¹²	Pan American-Grace Airways.	San Salvador via waypoints	June 13	Anacuena ¹³	A. Tagaropulos.	Colon, Rep. of Panama
June 12	Trocas.	Anglo-Saxon Petroleum Co.	Curacao, D.W.I.	June 13	Inapachuna ¹³	P. W. Hamilton.	Colon, Rep. of Panama
June 13	Cefalu.	Standard Fruit & S.S. Co.	New Orleans via waypoints	June 13	Kiel.	Hamburg-American Line.	Europe via waypoints
June 13	Marques de Comillas.	Spanish Line.	Barcelona via waypoints	June 14	Crynsen.	Royal Netherlands S.S. Co.	New Orleans via waypoints
June 13	Kiel.	Barranquilla, Guatemala	Barranquilla via waypoints	June 14	Trocas.	Anglo-Saxon Petroleum Co.	Port Limon, Costa Rica
June 13	No. 600-M ¹²	Pan American Airways.	Barranquilla, Colombia	June 15	Marques de Comillas.	Spanish Line.	Barcelona via waypoints
June 13	Crynsen.	Pan American-Grace Airways.	Amsterdam via waypoints	June 15	No. 9658 ¹²	Pan American Airways.	San Salvador via waypoints
June 13	Inapachuna ¹³	A. Tagaropulos.	Colon, Rep. of Panama	June 15	No. 145-M ¹²	Uraba, Medellin & Cent. Airways	Miami via waypoints
June 13	Annetta I. ¹³	P. W. Hamilton.	Colon, Rep. of Panama	June 15	Magallanes.	Spanish Line.	Medellin, Colombia
June 13	Aneon.	Panama R.R.S.S. Line.	New York via Haiti.	June 15	No. 22-V ¹²	Pan American-Grace Airways.	New York via waypoints
June 14	No. 19-V ¹²	Pan American-Grace Airways.	San Salvador via waypoints	June 16	Quirigua.	United Fruit Co.	Chiclayo via waypoints
June 14	No. 9685 ¹²	Pan American Airways.	Liverpool via waypoints.	June 16	No. 145-M ¹²	Uraba, Medellin & Cent. Airways	Port Limon, Costa Rica
June 15	Auditor.	T. & J. Harrison.	Miami via waypoints	June 17	No. 414-H ¹²	Pan American Airways.	Medellin, Colombia
June 15	No. 670-M ¹²	Pan American Airways.	High seas.	June 17	Arguani.	T. & J. Harrison.	San Salvador via waypoints
June 16	Nekomis.	U. S. Navy.	New Orleans via waypoints	June 17	Antenor.	Elders & Fyffes, Ltd.	Sagua, Cuba.
June 16	Turrialba.	United Fruit Co.	New York via waypoints	June 17	Turrialba.	United Fruit Co.	Avonmouth via waypoints
June 16	Quirigua.	United Fruit Co.	Medellin, Colombia				New Orleans via waypoints
June 16	No. 145-M ¹²	Royal, Medellin & Cent. Airways	Port Limon, Costa Rica				
June 17	Crynsen.	Colombian Line	New York via waypoints				
June 17	Haiti.	United Fruit Co.	New York via Kingston.				
June 17	Skuala.	Elders & Fyffes, Ltd.	Avonmouth via waypoints				
June 17	Arguani.						

PORT OF BALBOA

Date	Vessel	Line	From—	Date	Vessel	Line	For—
June 11	Talamanca	United Fruit Co.	San Francisco, Calif.	June 11	Talamanca	United Fruit Co.	San Francisco, Calif.
June 13	Shasta ⁹ ¹⁴	Chas. A. Landers & L. Oliver	San Diego, Calif.	June 14	Shasta ⁹ ¹⁴	Chas. A. Landers & L. Oliver	San Diego, Calif.
June 11	Flying Cloud ⁹ ¹⁴	Toackichi Yamaguchi	San Diego, Calif.	June 14	Flying Cloud ⁹ ¹⁴	Toackichi Yamaguchi	San Diego, Calif.
June 15	Point Arena	McCormick S.S. Co.	San Francisco, Calif.	June 17	Point Arena	McCormick S.S. Co.	Buenaventura, Colombia
June 15	Libertador ⁹	Narciso Puel	Panama, Rep. of Panama	June 18	Libertador ⁹	Narciso Puel	Panama, Rep. of Panama
June 16				June 16			

¹ Tanker. ⁹ Motor ship. ¹⁰ Mine planter. ¹¹ Copper, silver, and gold. ¹² Air mail carrier. ¹³ Motor boat. ¹⁴ Fishing tug.

* Other than ships passing through the Canal.

Commercial Traffic Through the Panama Canal in May 1933, by Trade Routes

The following tabulation shows the commercial traffic through the Canal during the month of May 1933, classified according to trade routes and nationality of vessels in each trade route, together with the corresponding totals for May 1932 and 1931. The amount of cargo shown is the amount carried by vessels operating over the respective routes and in some cases includes cargo having other destinations:

ATLANTIC TO PACIFIC

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
United States intercoastal:							
United States	55	315,181	221,394	367,131	221,488	\$256,583 57	134,014
Europe to Canada:							
Belgian	1	6,292	5,421	7,816	5,758	4,530 24	.....
British	6	33,869	25,685	41,590	25,783	29,282 40	4,238
French	1	7,592	4,635	8,379	5,031	5,793 75	1,165
German	4	27,495	17,848	30,543	18,365	22,310 00	9,317
Italian	2	15,829	11,691	19,052	11,798	14,488 75	968
Norwegian	5	28,492	16,613	28,394	17,027	20,577 01	2,997
Swedish	1	5,337	2,861	5,210	3,747	3,576 25	1,977
Total	20	124,906	84,654	140,984	87,509	100,558 40	20,662
United States to Far East:							
British	6	36,775	23,823	40,215	23,932	29,778 75	16,415
Japanese	11	58,183	47,531	73,145	46,706	59,413 75	74,405
Norwegian	4	19,068	10,600	18,022	10,638	13,250 00	29,132
United States	1	5,233	3,838	6,204	3,851	4,797 50	1,827
Total	22	119,259	85,792	137,586	85,127	107,240 00	121,779
Europe to Australasia:							
British	9	68,267	49,343	81,079	49,673	57,431 37	23,194
French	1	3,772	3,087	5,111	3,070	3,858 75	980
Total	10	72,039	52,430	86,190	52,743	61,290 12	24,174
Europe to South America:							
British	2	11,032	9,334	15,361	9,256	9,518 72	3,072
Danish	1	1,844	1,410	2,357	1,423	1,762 50	1,598
Danzig	2	16,697	14,283	24,846	14,176	12,021 84	.....
Dutch	3	18,170	11,941	20,311	11,655	12,987 73	2,196
German	2	6,742	4,895	8,149	4,900	6,118 75	4,987
Swedish	1	3,985	2,281	3,858	2,859	2,851 25	2,666
Total	11	58,470	44,144	74,882	44,329	45,260 79	14,519
United States to South America:							
British	2	14,934	13,122	23,639	13,564	10,752 48	.....
Chilean	1	3,063	2,600	3,579	2,257	2,205 36	.....
Danish	1	4,066	3,142	5,177	3,199	2,927 52	.....
Norwegian	2	12,150	8,999	14,777	8,850	8,748 00	.....
United States	2	13,296	7,079	16,121	7,679	9,598 75	4,812
Total	8	47,509	35,542	63,293	35,549	34,232 11	4,812
United States to Philippine Islands:							
Danish	1	5,500	3,081	5,038	3,155	3,851 25	4,500
Panamanian	1	6,955	3,659	6,856	3,659	4,573 75	1,208
United States	4	32,267	24,804	39,779	23,822	31,005 00	13,312
Total	6	44,722	31,544	51,673	30,636	39,430 00	19,020
Europe to United States:							
British	1	6,497	5,562	8,939	5,240	4,677 84	.....
Norwegian	2	9,454	6,830	11,441	6,792	6,711 43	.....
Swedish	1	5,221	3,097	5,234	3,602	3,871 25	4,550
Total	4	21,172	15,489	25,614	15,634	15,260 52	4,550
United States to Australasia:							
British	2	12,845	8,569	13,408	8,579	10,711 25	8,603
United States	1	5,172	3,825	6,215	3,857	4,781 25	5,246
Total	3	18,017	12,394	19,623	12,436	15,492 50	13,849

ATLANTIC TO PACIFIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Around the world:							
United States.....	2	17,694	12,438	21,038	12,438	\$15,547.50	6,310
United States to Hawaiian Islands.....	3	16,350	10,395	17,061	10,350	12,179.25	2,473
United States to Canada:							
British.....	1	5,140	3,640	5,840	3,624	3,700.80	4,420
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	4,420
Total.....	2	10,590	7,105	11,527	7,074	8,032.05	4,420
South America to Canada:							
Norwegian.....	1	4,722	2,728	4,624	2,765	3,410.00	1,595
United States.....	1	5,024	3,731	5,835	3,731	4,663.75	2,263
Total.....	2	9,746	6,459	10,459	6,496	8,073.75	3,858
Canada to Australasia:							
British.....	2	8,493	6,527	10,887	6,667	8,158.75	4,261
Canadian intercoastal:							
British.....	2	6,964	4,614	7,499	4,603	5,767.50	2,233
Cristobal to South America:							
German.....	7	6,284	3,902	7,671	4,052	4,637.27	2,103
Panamanian.....	4	404	412	812	404	484.80	345
Total.....	11	6,688	4,314	8,483	4,456	5,122.07	2,448
South America to Far East:							
Japanese.....	1	5,798	4,170	7,267	4,363	5,212.50	3,270
West Indies to Far East:							
Norwegian.....	1	5,542	4,669	7,919	4,598	5,836.25	10,926
West Indies to Canada:							
British.....	1	5,208	3,024	4,909	3,012	3,780.00	7,000
West Indies to South America:							
British.....	1	4,247	2,554	4,246	2,546	3,057.84	.....
United States to Central America:							
Danish.....	1	1,827	1,399	2,355	1,411	1,315.44	.....
Panamanian.....	1	1,990	1,961	3,627	1,957	1,470.75	.....
Total.....	2	3,817	3,360	5,982	3,368	2,786.19	.....
Foreign vessels in ballast— United States inter- coastal:							
Japanese.....	1	3,207	2,638	4,399	2,591	2,309.04	.....
Cristobal to Central America:							
British.....	2	1,441	1,286	2,298	1,304	1,607.50	805
Norwegian.....	2	1,158	1,106	1,882	1,114	1,382.50	1,170
Panamanian.....	2	44	48	90	58	52.80	48
Total.....	6	2,643	2,440	4,270	2,476	3,042.80	2,023
Africa to South America:							
Norwegian.....	1	1,896	1,696	2,821	1,566	1,365.12	.....
Europe to Central America:							
British.....	1	1,639	1,482	2,500	1,456	1,852.50	3,305
Cristobal to Balboa:							
Panamanian.....	8	338	310	132	87	276.41	35
Grand total, May 1933.....	186	932,135	661,578	1,098,375	663,598	767,747.53	409,941
Grand total, May 1932.....	180	996,560	724,201	1,216,831	728,095	836,420.63	457,027
Grand total, May 1931.....	219	1,081,366	786,051	1,313,605	793,616	910,131.46	519,844

PACIFIC TO ATLANTIC

United States intercoastal:							
United States.....	59	358,091	256,755	423,492	256,126	\$320,943.75	468,643
Canada to Europe:							
British.....	9	46,846	31,632	51,791	31,710	39,540.00	73,496
Danish.....	2	12,948	8,484	14,775	9,215	10,605.00	16,376
Dutch.....	1	8,351	6,201	10,155	6,357	7,751.25	10,162
French.....	2	12,114	7,025	13,719	7,387	8,781.25	15,736
German.....	3	20,698	14,292	23,694	14,556	17,865.00	27,489
Italian.....	1	6,144	4,641	7,872	4,953	5,801.25	7,629
Norwegian.....	8	45,510	28,756	47,926	29,387	35,945.00	65,977
United States.....	1	5,450	3,465	5,687	3,450	4,331.25	7,882
Total.....	27	158,061	104,496	175,619	107,015	130,620.00	224,747

PACIFIC TO ATLANTIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Philippine Islands to United States:							
Japanese.....	9	49,955	37,056	57,909	36,543	\$46,320.00	69,875
Norwegian.....	6	30,981	17,061	29,823	17,214	21,326.25	43,607
United States.....	4	28,754	22,972	35,665	22,506	28,715.00	31,884
Total.....	19	109,690	77,089	123,397	76,563	96,361.25	145,366
South America to Europe:							
British.....	4	29,887	22,541	40,507	24,433	28,176.25	30,414
Danzig.....	1	8,124	6,935	12,425	7,090	8,668.75	16,482
Dutch.....	1	6,101	3,155	5,546	3,325	3,943.75	6,522
German.....	2	7,422	5,191	8,627	5,201	6,488.75	10,426
Italian.....	1	9,329	5,176	11,718	6,750	6,470.00	1,978
Norwegian.....	1	7,214	6,034	9,816	5,937	7,542.50	14,387
Swedish.....	1	5,039	2,751	4,896	3,548	3,438.75	7,195
Total.....	11	73,116	51,783	93,535	56,284	64,728.75	87,404
Australasia to Europe:							
British.....	5	48,569	32,700	58,115	35,694	40,875.00	27,770
French.....	1	3,681	3,096	5,123	3,078	3,870.00	2,612
Total.....	6	52,250	35,796	63,238	38,772	44,745.00	30,382
United States to Europe:							
British.....	2	12,847	11,489	18,509	11,467	14,361.25	24,015
Norwegian.....	3	15,143	12,899	21,330	12,787	16,123.75	30,608
United States.....	1	8,619	7,026	11,246	6,953	8,782.50	15,280
Total.....	6	36,614	31,414	51,085	31,207	39,267.50	69,903
South America to United States:							
British.....	3	13,617	10,759	17,316	10,729	13,448.75	26,646
Danish.....	2	5,785	4,481	7,418	4,547	5,601.25	10,655
Norwegian.....	1	1,846	1,588	2,496	1,433	1,985.00	3,900
United States.....	2	14,086	8,869	17,563	8,869	11,086.25	10,819
Total.....	8	35,334	25,697	44,793	25,578	32,121.25	52,020
Hawaiian Islands to United States:							
United States.....	6	32,010	21,894	35,569	21,797	27,367.50	46,557
Around the world:							
British.....	1	6,037	3,240	5,302	3,091	4,050.00	3,280
German.....	1	12,000	6,704	19,703	9,583	8,350.00	.....
Total.....	2	18,037	9,944	25,005	12,674	12,430.00	3,280
South America to Canada:							
British.....	1	9,885	8,727	16,436	9,182	10,908.75	21,831
United States.....	1	7,935	7,841	9,564	5,978	9,522.00	16,000
Total.....	2	17,820	16,568	26,000	15,160	20,430.75	37,831
Far East to United States:							
Japanese.....	2	11,385	9,205	14,941	9,066	11,506.25	4,021
Far East to Europe:							
British.....	2	9,820	6,746	10,938	6,767	8,432.50	17,150
Australasia to Canada:							
British.....	2	8,529	6,543	10,862	6,602	8,178.75	3,262
South America to Cristobal:							
German.....	6	5,243	3,385	6,518	3,496	4,231.25	6,129
Panamanian.....	4	404	412	812	404	494.40	848
Total.....	10	5,647	3,797	7,330	3,900	4,725.65	6,977
Canada to South America:							
United States.....	1	5,049	3,545	5,603	3,547	4,431.25	5,058
Canada to United States:							
United States.....	1	4,745	3,827	6,220	3,812	4,783.75	6,196
Balboa to West Indies:							
Norwegian.....	1	4,365	3,143	5,197	3,155	3,142.80	.....
Central America to Europe:							
Danish.....	1	1,427	1,119	1,899	1,119	1,398.75	2,759
German.....	1	2,931	1,743	2,964	1,739	2,110.32	.....
Total.....	2	4,358	2,862	4,863	2,858	3,509.07	2,759
Canadian intercoastal:							
British.....	1	3,757	3,070	4,968	3,042	3,837.50	5,915

PACIFIC TO ATLANTIC—Continued

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Central America to Cristobal:							
British.....	2	1,441	1,286	2,298	1,304	\$1,607.50	1,269
Norwegian.....	1	579	553	941	557	691.25	905
Total.....	3	2,020	1,839	3,239	1,861	2,298.75	2,174
Balboa to Cristobal:							
British.....	1	34	34	50	34	25.50	.....
Panamanian.....	10	382	358	660	420	439.10	396
Total.....	11	416	392	710	454	464.60	396
Vessels not engaged in commerce (naval):							
French.....	1					3,814.00	.....
Peruvian.....	3					2,055.50	.....
Total.....	4					5,869.50	.....
Grand total, May 1933.....	186	951,114	676,405	1,136,604	686,240	850,196.12	1,220,041
Grand total, May 1932.....	177	960,398	705,501	1,195,378	715,786	880,980.63	1,219,763
Grand total, May 1931.....	209	1,103,593	812,683	1,386,380	833,572	1,013,320.72	1,405,608

* Displacement tonnage, 11,739.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Week Ending June 10, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Cristobal.....	Panama R.R.S.S. Line.....	.....	June 4	.....	1,080
Metapan.....	United Fruit Co.....	.....	June 4	.....	210
Pastores.....	United Fruit Co.....	.....	June 4	.....	860
Zenon.....	French Line.....	.....	June 4	.....	46
Simon Bolivar.....	Royal Netherlands S.S. Co.....	.....	June 4	.....	419
Amerika.....	Danish East Asiatic Line.....	June 4	June 4	60	124
Annie Johnson.....	Johnson S.S. Line.....	June 4	June 5	(*)	149
Cali.....	North German Lloyd.....	.....	June 5	.....	218
Nuevo Panama.....	Hans Elliot.....	.....	June 5	.....	75
Peten.....	United Fruit Co.....	June 5	June 5	18	385
Santa Paula.....	Panama Mail S.S. Co.....	June 5	June 6	208	15
Manizales.....	Grace Line.....	.....	June 6	.....	54
Bodegraven.....	Royal Netherlands S.S. Co.....	June 6	June 6	107	3
Contessa.....	Standard Fruit & S.S. Co.....	June 6	June 7	271	501
Tillie Lykes.....	Lykes Brothers S.S. Co.....	June 6	June 7	273	183
West Ira.....	McCormick S.S. Line.....	June 6	June 7	47	(*)
Darian.....	Leyland S.S. Line.....	June 7	June 8	402	(*)
Santa Maria.....	Grace Line.....	June 7	June 8	885	(*)
Buenaventura.....	Panama R.R.S.S. Line.....	June 7	.....	1,075	.....
Santa Clara.....	Grace Line.....	June 8	June 8	220	283½
Sollund.....	Panama Mail S.S. Co.....	June 8	June 10	616	329
Spreewald.....	Hamburg-American Line.....	June 8	June 8	71	199
Oakland.....	Hamburg-American Line.....	June 8	June 8	72	156
Oregon.....	French Line.....	June 8	June 9	163	3
Canadian Constructor.....	Canadian National Steamships.....	June 8	June 9	3	30
President Pierce.....	Dollar Line.....	June 9	June 9	174	(*)
Veragua.....	United Fruit Co.....	June 9	June 9	450	15
Drechtijk.....	Holland-America Line.....	June 9	June 10	325½	1½
Laurits Swenson.....	Fred Olsen Line.....	June 9	June 10	152	(*)
Santa Teresa.....	Panama Mail S.S. Co.....	June 9	June 10	114	352
Charles Nelson.....	Nelson Line.....	June 9	June 9	329	(*)
Carrillo.....	United Fruit Co.....	June 9	June 10	598	743
Carmania.....	Colon Import & Export Co.....	June 10	June 10	(*)	28
Durazzo.....	Hamburg-American Line.....	June 10	.....	1,302	.....
Colombia.....	Colombian S.S. Line.....	June 10	.....	121	.....
Santa Marta.....	United Fruit Co.....	June 10	.....	381	.....
Salvador.....	Pacific Steam Navigation Co.....	.....	June 10	.....	607½

* No cargo discharged.

* No cargo laded.

* One package.

Traffic by Commodities for May 1933

The following table shows the cargo carried through the Canal in the United States intercoastal trade and the totals for all trade routes, segregated by commodities and direction, and also the grand totals by direction for the month of May in 1933, 1932, and 1931. Cargo statistics are compiled from cargo declarations submitted by masters of vessels and in these declarations small items are frequently grouped under the designation of "general cargo." These statistics are accordingly not precise, but they are indicative of the kind and quantity of cargo in transit through the Canal. The figures represent tons of 2,240 pounds:

Commodity	United States intercoastal		Total for all trade routes including U. S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Aircraft and parts.....			36	6
Agricultural implements.....	665		1,165	10
Alfalfa meal.....		1,278		1,278
Ammonium compounds.....	144		2,631	
Animal foods.....	40	256	55	256
Apparel, wearing (hats, shoes, clothing, etc.).....	233	92	235	131
Asbestos.....	175		660	
Asphalt and tar.....	59		4,136	425
Automobiles (and autotricks).....	3,465	71	6,028	86
Automobile parts and accessories.....	896	160	2,689	160
Bags and bagging, textile.....	242	483	301	483
Bananas.....		2	11	356
Barks, miscellaneous.....				342
Barley.....				5,618
Beans, edible, dry.....	197	7,571	205	11,682
Beer.....	1,808		2,655	2
Beverages, nonalcoholic.....	181		201	
Blood and tankage.....		100	200	100
Bones and bone meal.....			858	
Books and printed matter.....	203		203	
Borax.....	99	831	99	5,176
Bran and pollards.....				1,976
Bricks and tile.....			299	
Camphor, crude.....				195
Canned and preserved goods:				
Fish.....	419	8,016	601	11,965
Fruit.....	457	21,805	1,233	35,268
Meat.....	82	1,167	568	1,337
Milk.....	71	719	220	1,125
Soup.....	2,093		2,180	
Vegetables.....	988	4,997	1,019	5,082
Miscellaneous and unclassified.....	2,870	13,260	3,705	13,880
Carbon black.....			320	
Celite.....		742		868
Cement.....	186		6,175	547
Chalk.....			799	
Charcoal.....	38		63	
Chemicals.....	2,147	621	5,975	677
Clay, china and fire.....	257		468	
Clay, filtering.....		200		200
Coal.....	20		4,285	
Cocoa and cacao beans.....	127		506	2,301
Coconuts and products.....	39	596	66	838
Coffee.....	407	107	4,200	12,336
Coke.....	559		3,419	
Cold storage and refrigerated products:				
Dairy products.....		49	307	7,917
Eggs.....		985		1,050
Fish.....			9	330
Lard.....			53	
Meats.....			24	7,204
Vegetables.....				39
Other and unclassified.....	82		123	74
Confectionery.....	873	8	885	8
Copra.....				14,429
Copra meal and cake.....				1,040
Corn.....	6,356		6,537	
Cotton, raw.....	22	582	17,168	4,646
Creosote.....			37	
Drugs and medicines.....	1,248	94	1,326	212
Dyes.....			223	
Earthenware.....	50	16	111	16
Electrical apparatus and appliances.....	380	152	689	163

* Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U. S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Explosives.....	114	3	360	30
Extract, quebracho.....			363	
Fertilizers.....	19	272	146	755
Fish, salted or dry cured.....		3		36
Fish meal.....				239
Floor coverings.....	1,156	258	1,157	889
Flour.....	363	14,023	1,561	18,426
Fruit, dried.....	120	8,800	174	13,862
Fruit, fresh.....		2,127	18	20,078
Furniture and household goods.....	177	414	211	414
General.....	17,906	8,066	36,431	15,382
Glass and glassware.....	2,258	57	3,606	463
Glue.....		118		119
Groceries.....	538		1,144	
Guano.....				7,025
Gums.....		34		59
Hair, all kinds.....	138	19	140	65
Hay.....		1,124		1,157
Hemp, unmanufactured.....	28	311	33	2,160
Honey.....		68		275
Hops.....		53		53
Horns and hoofs.....			74	68
Infusorial earth.....		792		889
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	25,240	970	44,640	1,006
Ivory nuts.....			46	1,047
Lard substitute.....	1,576		1,576	
Lime.....	18		19	
Liquors.....	115		926	
Lumber (including manufactured mill products).....	2,981	104,640	3,547	152,049
Machinery.....	2,019	374	4,658	612
Malt.....	6		6	
Manufactured goods.....	3,395	500	6,995	985
Marble and granite.....	46		51	
Matches.....	144	90	193	90
Metals:				
Antimony.....				108
Copper.....	489	3,563	570	19,038
Gold and silver.....		413		456
Iron.....	110		152	
Lead.....	30	1,354	30	10,541
Scrap.....	50	160	61,016	170
Tin.....	221	79	235	336
Zinc.....	294		1,088	3,603
Other and unclassified.....	43	808	153	1,810
Milk, powdered.....		213	114	425
Molasses and syrups.....	217		225	
Nitrates.....		8,265	570	23,795
Nuts, edible (including meats).....	200	74	257	106
Oats.....	474	168	494	5,799
Oils, mineral:				
Crude.....	20		75	87,169
Gas and fuel.....	9	45,511	594	50,637
Gasoline, benzine, and naphtha.....	24	113,038	2,612	185,427
Kerosene.....	8,159	9,500	19,109	9,820
Lubricating and greases.....	4,389	1,332	14,854	1,494
Oils, vegetable:				
Coconut.....				3,601
Cottonseed.....	2,181		2,286	
Linseed.....			456	
Olive.....	35		557	1
Rapeseed.....		14		62
Wood.....	22		22	981
Other and unclassified.....	53		197	1,944
Oil, fish.....			66	64
Oil, whale.....		509		509
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....		26		487
Oilseed cake and meal.....	12		12	947
Ores:				
Copper.....		1,350		1,548
Gold and silver.....				8
Lead.....				749
Tin.....				3,011
Zinc.....				1,566
Other and unclassified.....				223
Paints and varnishes.....	754	73	957	78
Paper and paper products.....	5,815	8,099	14,954	9,565
Paper scrap.....		412	240	412
Peanuts.....	1,369	255	1,369	255
Peas, dry.....				474
Peatmoss.....				517
Phosphates.....	185			19,614

* Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U. S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Porcelainware.....	45	422	184	4,539
Potash.....	13	2,338	213	2,338
Pyrethrum flowers.....				27
Rags and waste.....		648	220	662
Railroad material.....	267		2,181	
Rice.....	1,068	830	1,196	3,594
Rope and twine.....	332	99	506	117
Rosin.....	1,513		3,069	
Rubber:				
Manufactured.....	706	30	869	36
Scrap.....		68	170	168
Salt.....	576		2,217	2,500
Sand.....			2,650	
Seeds (except oilseeds).....	44	405	2,370	1,066
Shells, oyster.....	1,852		1,852	124
Silk, raw.....		245		1,784
Skins and hides.....		3,335	110	6,384
Slag.....			2,400	
Slate.....	94		137	
Soaps and products.....	2,662	627	3,043	724
Soda and sodium compounds.....	1,334		1,578	20
Soy beans.....	200		200	17,232
Sugar.....	140	43,485	11,102	216,506
Sulphur.....	11,541		11,551	
Talc.....		188		188
Tallow.....		539		713
Tea.....	21		111	342
Textiles ²	4,160	880	6,301	2,123
Tinplate.....	768	248	10,727	248
Tobacco and manufactures.....	1,153		3,787	36
Toilet preparations.....	196		196	
Turpentine.....	116		136	
Vegetables, dry.....		29	43	1,169
Wall board.....		18		392
Wax, paraffin.....	280			32
Wheat.....		61	500	116,206
Wines.....	35	347	342	607
Wood pulp.....	209	7,394	1,160	10,389
Wool.....		7,169	538	12,489
Total, May 1933.....	141,025	472,607	409,941	1,220,041
Total, May 1932.....	151,988	336,677	457,027	1,219,763
Total, May 1931.....	199,626	492,524	519,844	1,405,608

² Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Notices to Mariners and Aviators

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 16, 1933.

No. 78.

The Panama Canal, Atlantic approach, artillery firing:

(1) There will be firing of 3-inch antiaircraft guns by the Harbor Defenses of Cristobal using Battery No. 5, located at Fort Randolph. Firing will begin June 19, 1933, and continue until further notice between the hours of 8 a.m. and 5 p.m., Sundays and holidays excepted.

The danger area will be from a line connecting the north end of Galeta Island to Largo Remo Island 13,000 yards to sea extending northeast toward Naranjo Arriba Island.

(2) There will be firing of 3-inch antiaircraft guns by the Harbor Defenses of Cristobal using Battery No. 4, located on Cristobal Mole. Firing will begin June 19, 1933, and continue until further notice between the hours of 8 a.m. and 5 p.m., Sundays and holidays excepted.

The danger area will be all the area including the entire length of the breakwater and extending 13,000 yards to sea.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 17, 1933.

No. 79.

The Panama Canal, Pacific approach, practice firing.—There will be practice firing of 3-inch antiaircraft guns and .30 and .50 caliber machine guns by the Harbor Defenses of Balboa, beginning June 19, 1933, and continuing until further notice, between the hours of 7:15 a.m. and 5 p.m.

The danger area will be all the water area included by the lines: Fort Amador, Bruja Point, and Venado Island; Fort Amador, Culebra Island, Flamenco Island, and San Jose Rock to a range of 12,000 yards from Naos Island.

J. L. SCHLEY,
Governor.

THE PANAMA CANAL RECORD

OFFICIAL PUBLICATION OF THE PANAMA CANAL.

PUBLISHED WEEKLY.

Subscription rates, domestic, \$0.50 per year; foreign, \$1.00; address
The Panama Canal Record, Balboa Heights, Canal Zone, or
The Panama Canal, Washington, D. C.

Entered as second-class matter February 6, 1918, at the Post Office
at Cristobal, C. Z., under the Act of March 3, 1879.

Certificate.—By direction of the Governor of The Panama Canal the matter contained herein is published as statistical information and is required for the proper transaction of the public business.

Volume XXVI.

Balboa Heights, C. Z., June 28, 1933.

No. 48.

Change of Canal Record to Monthly Publication

For reasons of economy the publication of THE PANAMA CANAL RECORD will be monthly instead of weekly, effective with the beginning of the new fiscal year, 1934. The next issue after the present one is to be dated July 15, 1933, and issues are to appear the 15th of each month thereafter. They will present in each case a summary of the traffic during the preceding month, reports of the movements of ocean vessels through the Canal and in its terminal ports, special notices, etc. Data will be presented in more condensed form than in the past. Subscription rates remain the same. Subscribers to the weekly may cancel their subscriptions if they desire and receive refunds in proportion to the extent to which they are paid in advance.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C. Z., June 24, 1933.

No. 83.

Colombia, Buenaventura approach, aids to navigation.—The following information was received by the Captain of the Port of Balboa in a letter from the master of the S.S. *Point Arena*, under date of June 23, 1933:

On June 21, 1933, the No. 4 channel buoy at Buenaventura was declared permanently discontinued, the shoal spot no longer existing. In latitude $3^{\circ} 47' 50''$ N., longitude $77^{\circ} 13' 25''$ W., a new buoy No. 5 has been placed.

Courses taken from H.O. Chart No. 1786 do not work out owing to distortion of the meridians.

J. L. SCHLEY,
Governor.

Comparison of Canal Traffic in May 1933 with May Traffic in Previous Years

Commercial traffic through the Canal during the month of May 1933, showed an increase of 15 transits, or 4.2 percent, in comparison with May 1932. Net tonnage (Panama Canal measurement) and tons of cargo carried by the traffic in the past month showed decreases, however, in comparison with May 1932, of 73,709 tons, or 3.8 percent, and 46,808 tons, or 2.8 percent, respectively. In comparison with May 1931, the number of transits last month showed a decrease of 56, or 13.1 percent; net tonnage (Panama Canal measurement), a loss of 301,710 tons, or 13.8 percent; and cargo tonnage a decrease of 295,470 tons, or 15.3 percent.

The peak month of May since the opening of the Canal occurred in 1929 when 524 vessels, aggregating 2,496,905 net tons (Panama Canal measurement), and carrying 2,536,839 tons of cargo were passed through. In comparison with these high figures last month's traffic shows a loss of 29.0 percent in transits, 24.6 percent in net tonnage (Panama Canal measurement), and 35.7 percent in cargo tonnage.

In the tabulation below are shown the number of transits, net tonnage (Panama Canal measurement), and the tons of cargo carried

through the Canal during the month of May each year from 1915 to 1933, inclusive, and for comparison the monthly averages for the corresponding fiscal year ending June 30 following:

Calendar year	Month of May			Fiscal year	Average per month for fiscal year		
	Commer- cial transits	Panama Canal net tonnage	Tons of cargo		Commer- cial transits	Panama Canal net tonnage	Tons of cargo
1915.....	138	475,004	584,020	1915.....	102	361,197	465,567
1916.....	123	385,062	479,961	1916.....	63	199,687	257,843
1917.....	145	468,665	596,425	1917.....	150	483,213	588,213
1918.....	198	658,174	757,984	1918.....	172	547,839	627,669
1919.....	176	566,892	642,171	1919.....	169	510,416	576,385
1920.....	224	852,425	974,919	1920.....	206	712,170	781,208
1921.....	210	864,617	792,735	1921.....	241	951,323	966,601
1922.....	243	1,032,816	1,158,507	1922.....	228	951,455	907,075
1923.....	419	2,128,414	2,265,083	1923.....	331	1,550,482	1,630,656
1924.....	417	2,085,670	2,353,986	1924.....	436	2,179,073	2,249,559
1925.....	372	1,847,682	1,823,042	1925.....	389	1,904,596	1,996,570
1926.....	470	2,243,103	2,416,701	1926.....	433	2,064,549	2,169,787
1927.....	471	2,248,892	2,379,713	1927.....	456	2,185,651	2,312,351
1928.....	508	2,274,612	2,497,588	1928.....	538	2,454,886	2,469,226
1929.....	524	2,496,905	2,536,839	1929.....	534	2,468,483	2,555,250
1930.....	479	2,418,633	2,261,616	1930.....	515	2,498,385	2,502,519
1931.....	428	2,184,959	1,925,452	1931.....	461	2,316,012	2,090,233
1932.....	357	1,956,958	1,676,790	1932.....	376	1,968,785	1,650,667
1933.....	372	1,883,249	1,629,982	1933 ³	375	1,901,887	1,498,771

¹ Canal opened August 15, 1914.

² Average for 10½ months.

³ Average for 11 months of fiscal year.

CANAL WORK IN MAY 1933

The following is the report of the Governor to the Secretary of War, of Canal work in the month of May 1933.

BALBOA HEIGHTS, C.Z., June 22, 1933.

*The Honorable, the Secretary of War,
Washington, D.C.*

SIR: I have the honor to submit the following report covering operations of The Panama Canal during the month of May 1933:

TRANSITS AND TOLLS

During the month, 372 commercial vessels and 15 small nonseagoing launches under 20 tons transited the Canal. In addition to these there were 28 vessels belonging to the United States Army, Navy, or other branch of the Government, on which no tolls were collected, making a total of 415 transits for the month, or a daily average on all traffic of 13.39.

Tolls on the 372 commercial vessels amounted to \$1,617,943.65, and on the launches to \$159.75, a total of \$1,618,103.40, or a daily average on all traffic of \$52,196.88. In comparison with the previous month (April 1933), commercial traffic showed a gain of 2 transits, or 0.5 of 1 percent, and \$63,693.51, or 4.1 percent in tolls. In comparison with May 1932, transits in May 1933 increased by 15, or 4.2 percent, while tolls declined \$99,457.61, or 5.8 percent.

In comparison with the first 11 months of the fiscal year 1932, commercial traffic this year shows a decrease of 1.0 percent in transits, 4.4 percent in net tonnage (Panama Canal measurement), 10.4 percent in cargo tonnage, and 6.2 percent in tolls collection. In comparison with the first 11 months of the fiscal year 1931, there was a decline of 19.5 percent in transits, 18.7 percent in net tonnage (Panama Canal measurement), 29.3 percent in cargo tonnage, and 21.2 percent in tolls collected.

The total numbers of craft of all kinds transiting the Canal during the month of May in the two preceding years and in 1933 are shown in the following tabulation:

	May 1931	May 1932	May 1933
Commercial vessels.....	428	357	372
Launches (under 20 tons measurement).....	10	8	15
Noncommercial vessels:			
United States Government.....	19	25	28
Total.....	457	390	415

In addition to the vessels listed above, Panama Canal equipment consisting of barges, tugs, dredges, etc., was passed through the locks as follows:

	North-bound	South-bound	Total
Gatun.....	8	3	11
Pedro Miguel.....	27	31	58
Miraflores.....	21	22	43
Total.....	56	56	112

COMMERCIAL TRAFFIC ¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried, and tolls collected, from the commercial traffic transiting the Canal each month from the beginning of the fiscal year 1933 to the end of May 1933, as compared with the same months in the previous year:

Month	No. of vessels		Panama Canal net tonnage		Tons of cargo		Tolls	
	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September.....	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October.....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November.....	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December.....	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
January.....	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
February.....	358	368	1,878,177	1,832,658	1,645,393	1,434,862	1,647,797.06	1,575,708.35
March.....	363	399	1,864,896	1,989,044	1,643,952	1,738,227	1,645,366.81	1,718,908.41
April.....	370	370	1,863,692	1,839,597	1,443,731	1,527,978	1,608,634.67	1,554,250.14
May.....	357	372	1,956,958	1,883,249	1,676,790	1,629,982	1,717,401.26	1,617,943.65
Total.....	4,170	4,130	21,882,269	20,920,759	18,403,440	16,486,481	19,172,583.86	17,991,047.25

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

The following is a summary of the commercial traffic for May in the years 1931, 1932, and 1933, and comparison with the monthly averages for the calendar year 1932:

	May 1931	May 1932	May 1933	Average per month for calendar year 1932
Number of vessels.....	428	357	372	364
Panama Canal net tonnage.....	2,184,959	1,956,958	1,883,249	1,886,345
United States net tonnage.....	1,598,734	1,429,702	1,337,983	1,367,686
Registered gross tonnage.....	2,699,985	2,412,209	2,234,979	2,277,608
Registered net tonnage.....	1,627,188	1,443,881	1,349,838	1,381,155
Tolls.....	\$1,923,452.18	\$1,717,401.26	\$1,617,943.65	\$1,640,472.65
Tons of cargo carried.....	1,925,452	1,676,790	1,629,982	1,508,328

The daily average number of transits, net tonnage (Panama Canal measurement), tolls, and tons of cargo, are shown in the following statement, in comparative form, commercial vessels only:

	Average per day			Average per day for calendar year 1932
	May 1931	May 1932	May 1933	
Number of transits.....	13.81	11.52	12.00	11.93
Panama Canal net tonnage.....	70,483	63,125	60,750	61,847
Tolls.....	\$62,046.84	\$55,400.04	\$52,191.73	\$53,785.99
Tons of cargo.....	62,111	54,090	52,580	49,453

AVERAGE TONNAGE, TOLLS, AND TONS OF CARGO PER VESSEL

The average tonnage, tolls, and tons of cargo per vessel transiting the Canal during the month of May in 1931, 1932, and 1933, and the average for the calendar year 1932, are shown in the following tabulation:

	Average per vessel			Average per vessel for calendar year 1932
	May 1931	May 1932	May 1933	
Panama Canal net tonnage.....	5,165	5,482	5,118	5,195
United States net tonnage.....	3,780	4,005	3,636	3,767
Registered gross tonnage.....	6,383	6,757	6,073	6,273
Registered net tonnage.....	3,487	4,044	3,668	3,804
Tolls.....	\$4,494.05	\$4,810.65	\$4,349.31	\$4,507.83
Tons of cargo (including vessels in ballast).....	4,595	4,737	4,429	4,154
Tons of cargo (laden vessels only).....	5,409	5,374	5,126	4,997

NOTE.—In computing above averages, vessels paying on displacement tonnage are not considered except in average tolls per vessel.

NATIONALITY OF VESSELS

Fifteen nationalities were represented in the commercial traffic through the Canal in May 1933, in comparison with 16 the previous month and 14 in May 1932. Vessels of United States registry, with 146, led in the number of transits, while those flying the British flag, with 71, were second. Vessels of these two nationalities made up 58.3 percent of the total transits for the month. Vessels of Norwegian registry, with 39, were next in numerical importance, followed by Panamanian with 30, German with 26, and Japanese with 24. With respect to net tonnage (Panama Canal measurement), vessels of the United States, with 880,406 tons, made up 46.7 percent of the aggregate; British, with 408,620 tons, 21.7 percent; Norwegian, with 188,125 tons, 10.0 percent; Japanese, with 128,528 tons, 6.8 percent; and German, with 88,815 tons, 4.7 percent.

CARGO AND PRINCIPAL COMMODITIES

The total cargo through the Canal during the month of May 1933, was 1,629,982 tons, a decrease of 46,808 tons, or 2.8 percent, in comparison with May 1932. Cargo from the Atlantic to the Pacific aggregated 409,941 tons, compared with 398,096 tons in the previous month, and 457,027 tons in May 1932. From the Pacific to the Atlantic cargo amounted to 1,220,041 tons, as compared with 1,129,882 tons in the previous month, and 1,219,763 tons in May 1932. The combined cargo movement in May 1933 was 102,004 tons greater than in the previous month, a gain of 6.7 percent.

From the Atlantic to the Pacific, scrap metal was the leading commodity, with shipments totaling 61,016 tons, followed by manufactures of iron and steel with 44,640 tons, mineral oils with 37,244 tons, phosphates with 19,614 tons, cotton with 17,168 tons, and paper with 14,954 tons. Scrap metal was the only one of the above commodities to show an increase, in comparison with shipments in May 1932.

From the Pacific to the Atlantic, mineral oils, totaling 334,547 tons, formed the leading commodity, followed by sugar with 216,506 tons, lumber with 152,049 tons, wheat with 116,206 tons, canned goods with 68,657 tons, and various metals with 35,892 tons. The above leading commodities all showed increases, with the exception of wheat, in comparison with shipments in May 1932. The increases in sugar, canned goods, and lumber were quite large, ranging from 12 to 40 percent higher than in May 1932. A large number of commodities of smaller tonnage also showed increases. Offsetting these gains, however, were heavy losses in ores and grains. The decline in shipments of ores was 87 percent, wheat 45 percent, oats 74 percent, and barley 77 percent.

There was a decline of 47,086 tons (10.3 percent) in cargo moving from the Atlantic to the Pacific compared with May 1932, and a gain of 278 tons in the movement from the Pacific to the Atlantic.

TOLLS

At present tolls are collected at rates of \$1.20 per net ton for laden and \$0.72 per ton for vessels in ballast, computed on the basis of The Panama Canal rules of measurement, with the provision that tolls shall not exceed \$1.25 per ton, nor be less than \$0.75 per ton as determined in accordance with the United States rules for measurement of net registered tonnage. In order to ascertain the proper tolls charges it is necessary, therefore, that the net tonnage of vessels transiting the Canal be determined in accordance with both The Panama Canal and the United States rules of measurement.

Due to this limiting proviso the tolls actually collected last month on laden vessels average \$0.874 per net ton (Panama Canal measurement) and tolls on vessels in ballast averaged \$0.720 per net ton (Panama Canal measurement).

Taking the traffic through the Canal for the month of May 1933, the following tabulation shows a comparison of tolls actually collected under the present method of assessing tolls with the tolls that would have been collected on the basis of The Panama Canal rules of measurement at the proposed rates of \$1 laden and \$0.60 ballast with no added charges for deck loads, together with the pro rata per net ton (Panama Canal measurement) of tolls actually collected on laden vessels and those in ballast. The traffic for the month is segregated by flag:

Nationality	Tolls actually collected under present dual system	Tolls that would have been collected under proposed rates of \$1 laden and 60c ballast on basis of Panama Canal net tonnage	Difference		Pro rata of tolls actually collected per Panama Canal net ton	
			Increase	Decrease	Laden	Ballast
Belgian.....	\$4,530.24	\$3,775.20		\$755.04		\$0.720
British.....	353,519.45	380,442.40	\$26,922.95		\$0.895	.720
Chilean.....	2,205.36	1,837.80		367.56		.720
Danish.....	27,461.71	31,039.80	3,578.09		.844	.720
Danzig.....	20,690.59	18,142.20		2,548.39	1.067	.720
Dutch.....	24,682.73	30,068.40	5,385.67		.766	.720
French.....	26,117.75	30,973.00	4,855.25		.821	
German.....	72,141.34	87,346.20	15,204.86		.816	.720
Italian.....	26,760.00	31,302.00	4,542.00		.855	
Japanese.....	124,761.54	127,215.20	2,453.66		.977	.720
Norwegian.....	148,036.86	175,125.80	27,088.94		.801	.7170
Panamanian.....	7,792.01	9,609.00	1,816.99		.741	.7400
Peruvian.....	2,055.50	2,055.50				
Swedish.....	13,737.50	19,582.00	5,844.50		.702	
United States.....	763,451.07	850,749.60	87,298.53		.881	.720
Total.....	1,617,943.65	1,799,294.10	185,021.44	3,670.99	.874	.720
Net increase for all traffic.....			181,350.45			

* Includes \$3,814 collected on naval vessel at \$0.50 per ton displacement.

* Collected on 3 naval vessels at \$0.50 per ton displacement.

The increase on vessels of United States registry would have been distributed with respect to channels of trade in which the vessels were engaged as follows:

United States intercoastal trade.....	\$70,448.28
United States foreign trade.....	16,850.25
Total.....	87,298.53

RATIO OF CARGO TONNAGE TO NET TONNAGE

The ratio of cargo to net tonnage, Panama Canal measurement, of vessels transiting the Panama Canal in May 1933, is shown in the following tabulation, segregated by nationality of vessels and direction of transits; laden vessels only are included:

Nationality	Atlantic to Pacific	Pacific to Atlantic	Total
British.....	.50	1.23	1.02
Danish.....	.83	1.48	1.30
Danzig.....		2.04	2.04
Dutch.....	.19	1.15	.72
French.....	.19	1.16	.75
German.....	.41	.97	.71
Italian.....	.06	.62	.34
Japanese.....	1.21	1.21	1.21
Norwegian.....	.84	1.57	1.32
Panamanian.....	.21	1.58	.35
Swedish.....	.63	1.43	.84
United States.....	.51	1.31	.97
Average, May 1933.....	.57	1.29	.98
Average, May 1932.....	.58	1.28	.96
Average, May 1931.....	.66	1.28	1.02

CLASSIFICATION OF VESSELS

A further classification of vessels passing through the Canal during the month of May 1933, is as follows:

Class	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Panama Canal net tonnage	Tolls	No. of ships	Panaman Canal net tonnage	Tolls
Cargo-carrying ships:						
Tank ships—						
Ballast.....	20	122,381	\$88,114.32	1	4,365	\$3,142.80
Laden.....	4	19,678	20,910.00	27	170,554	180,009.50
All others—						
Ballast.....	26	94,775	68,187.76	2	2,965	2,135.82
Laden.....	135	695,226	590,479.20	152	773,230	659,038.50
Noncargo-carrying ships:						
Yachts.....	1	75	56.25			
Naval.....				4		5,869.50
Total.....	186	932,135	767,747.53	186	951,114	850,196.12
Method of propulsion:						
Cargo-carrying vessels—						
Steam.....	116	602,035	511,470.49	107	567,946	509,370.62
Motor.....	59	329,643	255,891.58	64	382,752	334,491.40
Motor schooner.....	10	382	329.21	11	416	464.60
Other craft (yachts, naval, etc.):						
Miscellaneous.....	1	75	56.25	4		5,869.50
Total.....	186	932,135	767,747.53	186	951,114	850,196.12

Of the 223 steam-driven vessels, 168 were oil burning, 49 coal burning, and 6 burned either oil or coal.

NONCOMMERCIAL VESSELS

The following statement shows the number of transits and tonnage of vessels transiting the Canal free of tolls during the month of May 1933. If tolls had been assessed against these vessels at commercial rates the amounts would have been approximately as indicated:

Class and nationality	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Tonnage	Tolls	No. of ships	Tonnage	Tolls
U. S. Naval vessels:						
Cruisers.....	2	¹ 17,050	\$8,525.00			
Destroyers.....	1	¹ 1,215	607.50			
Launches.....	4	¹ 31	23.25			
Mine sweepers.....	1	¹ 950	475.00	2	¹ 1,900	\$950.00
Submarine chasers.....	1	¹ 77	38.50			
Tankers.....	1	² 6,415	4,618.80	1	³ 6,424	8,030.00
Training ships.....	1	² 2,595	1,297.50			
Transports.....				1	³ 3,908	4,885.00
U. S. Army vessels:						
Launches.....	3	³ 30	22.50			
Transports.....	2	³ 11,932	14,915.00			
Tugs.....	5	³ 460	391.00	1	³ 92	69.00
Department of Commerce:						
Lighthouse tenders.....	1	² 704	352.00	1	² 704	352.00
Total.....	22		31,266.05	6		14,286.00

¹ Indicates displacement tonnage. ² Indicates Panama Canal net tonnage. ³ Indicates United States net tonnage

The foregoing noncommercial vessels transiting the Canal during the month carried cargo as follows: Atlantic to Pacific, 3,536 tons; Pacific to Atlantic, 10,800 tons; total 14,336 tons.

LAUNCHES UNDER 20 TONS MEASUREMENT

The following statement shows the number of launches under 20 tons measurement (Panama Canal net), transiting the Canal during the month of May 1933. These launches, although paying tolls, are excepted from statements concerning commercial traffic:

	No. of transits	Panama Canal net tonnage	Tolls	Tons of cargo
Atlantic to Pacific	6	67	\$55.65	28
Pacific to Atlantic	9	89	104.10	95
Total	15	156	159.75	123

STATEMENT OF TERMINAL OPERATIONS

Details of the business transacted at the Atlantic and Pacific terminals of the Panama Canal during the month of May 1933 are shown in the following tabulation:

	Cristobal	Balboa	Total
Number of vessels docked.....	193	83	276
Services to ships docked:			
Handling cargo and/or passengers.....	170	49	219
Supplies.....	11	26	37
Bunkers.....	64	34	98
Water.....	92	51	143
Repairs.....		6	6
Miscellaneous.....	2	7	9
Local cargo arriving..... tons	86,959	28,577	115,536
Local cargo shipped..... tons	5,077	498	5,575
Cargo received for transshipment..... tons	27,408	3,656	31,064
Cargo transshipped..... tons	28,969	3,133	32,102
"Canal Zone for Orders" cargo:			
Number of receipts issued.....	103	33	136
Number of releases issued.....	683	214	897
Tons received.....	333	320	653
Tons withdrawn.....	355	244	599
Packages received.....	4,849	2,238	7,087
Packages withdrawn.....	5,206	2,337	7,543
Vessels supplied with bunker coal:			
Commercial other than Panama Railroad Company.....	19		19
Coal supplied to above vessels:			
Commercial, other than Panama Railroad Company..... tons	2,796		2,796
Coal issued, miscellaneous:			
Panama Canal departments..... tons	46	2	48
U. S. Army, including vessels..... tons	235		235
Individuals and companies..... tons	39	7	46
Transferred to Navy..... tons	9		9
Total sales and issues..... tons	3,125	9	3,134
Coal on hand, May 1, 1933..... tons	19,420		19,420
Coal on hand, June 1, 1933..... tons	39,191		39,191
Coal received during month..... tons	22,896		22,896
Coal received from Navy..... tons		9	9
Fuel oil issued from Panama Canal tanks:			
Panama Canal departments..... bbls	4,369.65	19,263.15	23,632.80
Panama Railroad Company..... bbls	15,747.41	506.00	16,253.41
U. S. Army and Navy..... bbls		104.96	104.96
Individuals and companies..... bbls		29.88	29.88
Total sales and issues..... bbls	20,117.06	19,903.99	40,021.05
Fuel oil received during May 1933..... bbls	66,435.81		66,435.81
Fuel oil on hand, June 1, 1933..... bbls	100,703.41	30,234.96	130,938.37
Diesel oil issued and sold during May 1933..... bbls	204.97	4,522.60	4,727.57
Diesel oil on hand, June 1, 1933..... bbls	3,813.35	937.04	4,750.39
Miscellaneous transfers..... bbls	467.23	2,931.21	3,398.44
Gasoline and kerosene pumped for The Panama Canal..... bbls	10,310.62	22,735.22	33,045.84
Gasoline pumped for individuals and companies..... bbls	1,945.41	8,870.11	10,815.52
Oil pumped for individuals and companies:			
Receipts..... bbls	166,441.25	51,693.03	218,134.28
Issues..... bbls	138,838.10	70,764.38	209,602.48
Oil pumped for U. S. Navy..... bbls	204.00	17,140.00	17,344.00
Total fuel oil, gasoline, and kerosene handled..... bbls	338,528.64	198,560.54	537,089.18
Admeasurement of vessels:			
U. S. equivalent certificates issued.....	8	2	10
Measured for Panama Canal net tonnage.....	4	2	6
Remeasured for Panama Canal net tonnage.....	6	8	14
Panama Canal net tonnage corrected.....	5	8	13
U. S. equivalent tonnage corrected.....	13	18	31

	Cristobal	Balboa	Total
Services of harbor equipment:			
Tugs, total operating hours.....	205½	140½	345½
Launches, total operating hours.....	903½	1,066½	1,970
Revenue from tug service, pilotage, etc.:			
Tug revenue.....	\$7,078.75	\$4,392.50	\$11,471.25
Pilotage.....	14,158.00	6,516.00	20,674.00
Seamen.....	8,260.00	8,108.00	16,368.00
Launch service.....	1,710.50	2,137.00	3,847.50
Wharfage.....	12,282.88	4,595.48	16,868.36
Ships measured.....	130.00	15.00	145.00
Miscellaneous.....	283.70	192.40	476.10
Clearances issued.....	230	198	428
Bills of health issued.....	238	202	440

ALL VESSELS ENTERING AND CLEARING PORT

	Port of Cristobal			Port of Balboa		
	No. of ships	Registered gross tonnage	Registered net tonnage	No. of ships	Registered gross tonnage	Registered net tonnage
<i>Ships entering</i>						
All vessels, including those transiting Canal..	421	2,688,367	1,606,366	382	2,392,157	1,458,745
Vessels entering port but not transiting Canal..	66	382,336	221,587	19	85,001	54,822
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	91	720,594	433,791	93	686,953	403,335
<i>Ships clearing</i>						
All vessels, including those transiting Canal..	419	2,668,397	1,592,275	385	2,398,771	1,464,336
Vessels clearing port but not transiting Canal..	62	363,823	209,066	20	85,089	54,881
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	93	723,790	435,065	93	686,953	403,335

MOVEMENT OF PASSENGERS

	At Cristobal			At Balboa			Total		
	First-class	Others	Total	First-class	Others	Total	First-class	Others	Total
Disembarking:									
From Atlantic ports.....	562	303	865	59	94	153	621	397	1,018
From Pacific ports.....	89	177	266	174	140	314	263	317	580
Total disembarking.....	651	480	1,131	233	234	467	884	714	1,598
Embarking:									
For Atlantic ports.....	916	588	1,504	85	76	161	1,001	664	1,665
For Pacific ports.....	93	119	212	235	261	501	328	385	713
Total embarking.....	1,009	707	1,716	320	342	662	1,329	1,049	2,378
Remaining on board:									
From Atlantic to Pacific ports.....	948	809	1,757				948	809	1,757
From Pacific to Atlantic ports.....				885	1,424	2,309	885	1,424	2,309
From Atlantic to Atlantic ports.....	476	160	636				476	160	636
From Pacific to Pacific ports.....				43	142	185	43	142	185
Total remaining on board.....	1,424	969	2,393	928	1,566	2,494	2,352	2,535	4,887
Total arriving on Canal Zone.....	2,075	1,449	3,524	1,161	1,800	2,961	3,236	3,249	6,485
Total departing from Canal Zone.....	2,433	1,676	4,109	1,248	1,908	3,156	3,681	3,584	7,265

NOTE.—In passengers "remaining on board," those from the Atlantic to the Pacific and Pacific to the Atlantic are reported only at port of arrival from the sea, and not again at the other terminus of the Canal.

PASSENGER-CARRYING VESSELS THROUGH CANAL

	Total commercial vessels	Passenger-carrying vessels	Percent of total transits	Number of passengers carried
Atlantic to Pacific.....	186	62	33.3	2,122
Pacific to Atlantic.....	186	61	32.8	4,227
Total.....	372	123	33.1	6,349

In addition to the aforesaid, 47 passenger-carrying vessels called at the port of Cristobal and 7 at the port of Balboa without transiting the Canal, making a total of 177 passenger-carrying vessels calling at Canal ports during the month.

AIRCRAFT ENTERING AND CLEARING

During the month of May 1933, 42 commercial airplanes entered and 41 cleared at Cristobal, and 2 entered and cleared at Balboa. A total of 100 passengers (56 from the north and 44 from the south) disembarked from the planes landing at Cristobal and 78 passengers embarked (55 to the north and 23 to the south). Five passengers (from the south) disembarked from the planes landing at Balboa.

COMMISSARY SALES TO VESSELS

The following is a statement of commissary sales to vessels during the month of May 1933, together with the total sales in the corresponding month in 1932 and 1931:

	Ice	Groceries	Cold storage	Laundry	Miscellaneous	Total
Sales at Cristobal to:						
Commercial vessels.....	\$651.90	\$3,706.80	\$8,661.16	\$27.27	\$2,653.63	\$15,700.76
Government vessels.....	94.70	599.52	2,037.55		169.71	2,901.48
Panama Railroad vessels.....		240.46	59.89	326.72	3.74	630.81
Total sales, May 1933.....	746.60	4,546.78	10,758.60	353.99	2,827.08	19,233.05
Total sales, May 1932.....	1,091.56	5,764.25	11,933.73	488.46	3,876.37	23,154.37
Total sales, May 1931.....	1,569.05	9,980.12	23,960.16	760.86	7,944.31	44,214.50
Sales at Balboa to:						
Commercial vessels.....	329.56	2,333.89	4,724.50	201.57	1,786.46	9,375.98
Government vessels.....	450.15	2,584.34	11,639.65	815.27	1,053.20	16,542.61
Total sales, May 1933.....	779.71	4,918.23	16,364.15	1,016.84	2,839.66	25,918.59
Total sales, May 1932.....	781.03	4,152.66	15,628.16	906.76	3,498.61	24,967.22
Total sales, May 1931.....	789.10	2,731.75	21,979.40	881.60	8,182.95	34,564.80

The aggregate sales to commercial vessels during the month were \$25,076.74; to Government vessels, \$19,444.09; and Panama Railroad vessels, \$630.81, making the total sales to all vessels, \$45,151.64. The figures are subject to minor change on final audit.

LOCK OPERATIONS

The following tabulation shows the number of lockages, and the number of vessels passing through the locks during the month of May 1933, as compared with the corresponding month in 1932 and 1931:

Locks	Number of lockages						Comparative grand totals		
	Commercial			Noncommercial ^a			May 1931	May 1932	May 1933
	North	South	Total	North	South	Total			
Gatun.....	171	170	341	10	6	16	425	362	357
Pedro Miguel.....	170	167	337	11	19	30	444	380	367
Miraflores.....	170	166	336	9	14	23	441	386	359
Number of vessels put through locks									
Gatun.....	185	186	371	39	37	76	478	416	447
Pedro Miguel.....	186	186	372	45	50	95	517	444	467
Miraflores.....	186	186	372	39	41	80	511	445	452

^a Includes tolls-paying craft under 20 tons measurement.

CLASSIFICATION OF NONCOMMERCIAL VESSELS

	Gatun	Pedro Miguel	Miraflores
Army and Navy vessels.....	48	23	23
Panama Canal equipment.....	11	58	43
Launches under 20 tons measurement.....	17	14	14

The total consumption of water for lockages, loss in leakage and maintenance, was as follows in May 1933, as compared with the preceding month and the corresponding month in 1932:

	Gatun	Pedro Miguel	Miraflores
	<i>Cubic feet</i>	<i>Cubic feet</i>	<i>Cubic feet</i>
Lockages.....	1,343,760,000	944,720,000	961,350,000
Leakage.....	30,000,000	50,000,000	20,000,000
Maintenance.....			13,410,000
Totals, May 1933.....	1,373,760,000	994,720,000	994,760,000
Total, April 1933.....	1,427,790,000	1,221,970,000	1,230,980,000
Total, May 1932.....	1,462,140,000	1,157,100,000	1,244,960,000

HYDROGRAPHY

The hydrographic conditions in the Canal Zone and vicinity during the month of May 1933, are shown in comparative form in the following tabulation:

	May		May—Years of record		
	1932	1933	Maximum	Minimum	Mean
	<i>C.f.s.</i>	<i>C.f.s.</i>	<i>C.f.s.</i>	<i>C.f.s.</i>	<i>C.f.s.</i>
Discharge of Chagres River at Alhajuela.....	2,171	1,343	5,189	491	2,096
Maximum momentary discharge for the month.....	13,358	12,816	63,500	231	
Gatun Lake watershed, total yield.....	4,954	2,961	8,665	1,417	4,508
Gatun Lake watershed, net yield.....	4,346	2,245	7,964	583	3,856
Draft on Gatun Lake for lockages and power.....	2,512	2,474	2,910		2,404

¹ May 5, 1918.

² May 1930.

³ 10-year average (1921–1930).

The monthly mean discharge of the Chagres River at Alhajuela for May 1933 was 1,343 c.f.s., which is 36 percent below the 32-year mean of 2,096 c.f.s. The maximum monthly discharge on record for May is 5,189 c.f.s. in 1910 and the minimum is 491 c.f.s. in 1920. The maximum momentary discharge for the month was 12,816 c.f.s. at elevation 98.22 feet on the 13th and the minimum was 394 c.f.s. at elevation 91.56 feet on the 4th. The maximum momentary discharge on record for May is 63,500 c.f.s. at elevation 110.00 feet on May 5, 1918, and the minimum is 231 c.f.s. at elevation 90.17 feet on May 11, 1920. There was one rise of five feet or more during the month.

Gatun Lake varied in elevation during May from a maximum of 81.98 feet on the 14th to a minimum of 81.39 feet on the 26th, averaged 81.61 feet, and ended the month at elevation 81.59 feet. The minimum Gatun Lake elevation of record since its formation (81.39 feet on May 24, 1926) was equalled this year, and the elevation of May 31—81.50 feet—is the lowest ever recorded for the end of May (a normal rainy-season month). The net yield of the Gatun Lake watershed amounted to 2,245 c.f.s. or 6,013 million cubic feet.

Miraflores Lake varied between elevations 54.36 feet on the 16th and 52.70 feet on the 23d, averaged 53.54 feet, and ended the month at elevation 53.96 feet.

SEISMOLOGY

Seven seismic disturbances were recorded during the month on the 3d, 6th (2), 14th, 24th, and 30th (2), two of which were felt by local residents.

ELECTRICAL DIVISION

The gross generator output of the Gatun hydroelectric station for the month was 5,663,400 kilowatt hours, and the computed water consumption was 4,337,341,773 cubic feet. Continuous service was maintained at this station throughout the month. The Miraflores Diesel-electric station had a gross output of 1,187,700 kilowatt hours, and the fuel oil consumption was 2,295.42 barrels. This station carried a 2-engine load for the first 10 days of the month, and in addition to this one engine was required on the bus 12 times for overload, twice for drydock pump load, once for test, and once for demonstration. The operation of two engines the first part of the month was required on account of water conservation in Gatun Lake.

Work was completed on the laying of armored cable from existing telephone station at Salamanca to the new stations on the Boqueron and Pequeni Rivers to provide telephone service and circuits for river level recording equipment.

In addition to the usual operating and maintenance work performed, electrical additions or repairs were made on 30 vessels during the month. There were 404 work orders issued during the month, as compared with 349 during the previous month.

MECHANICAL DIVISION

Marine work at the Cristobal and Balboa shops during the month of May 1933, is summarized as follows:

	Ships repaired (including those in drydock)		
	Remaining from previous month	Entered during month	Completed during month
At Cristobal:			
Commercial.....		28	28
United States Army and Navy.....		5	3
Other departments, United States Government.....		1	1
Panama Canal equipment.....		2	
Total.....		36	32
At Balboa:			
Commercial.....		10	8
United States Army and Navy.....	4	5	5
Panama Canal equipment.....	4	10	9
Total.....	8	25	22
Vessels in drydock			
At Cristobal:			
None (drydock under repairs).....			
At Balboa:			
Commercial.....		4	4
United States Army and Navy.....		5	5
Panama Canal equipment.....	4	6	8
Total.....	4	15	17

Repairs were completed on U.S.S. *Memphis*. Boiler repairs were completed on U.S.S. *Salinas*, and work was carried forward on U.S.S. *Overton*, U.S.S. *Sturtevant*, and submarine *S-17*.

MUNICIPAL ENGINEERING DIVISION

At the Cristobal drydock, which is being reconstructed, there were excavated 400 cubic yards of earth and 300 cubic yards of rock during the month, making a total excavation to date of 37,043 cubic yards. Forms were constructed and reinforcing placed, and a total of 3,213 cubic yards of concrete placed in this project, which is 75 percent complete.

Work on a number of other improvement projects in the Canal Zone and in the cities of Panama and Colon was carried on. The usual work was performed on streets, roads, walks, and the water and sewer systems. The amount of water pumped during the month totaled 773,178,000 gallons.

DREDGING DIVISION

The movement of West Culebra slide on the 450-foot west base line showed an average of 2.8 feet toward the Canal between stations 1773+00 and 1794+00 W. The reference points on this slide showed no movement during the month. Dredging equipment worked one-half day in this slide, removing a total of 1,000 cubic yards, of which 250 cubic yards were rock and 750 cubic yards earth. The total excavation to date from West Culebra slide is 10,701,300 cubic yards.

No movement was observed on any of the reference points on East Culebra slide during the month. There was no dredging in this area during the month. The total excavation to date from East Culebra slide, excluding East Culebra slide extension is 20,543,350 cubic yards.

East Culebra slide extension showed a slight movement during the month, which was verified by the readings of the reference points at the end of the month. Dredging equipment worked 7½ days in this slide, removing a total of 29,400 cubic yards, of which 8,500 cubic yards were rock and 20,900 cubic yards earth.

No movement on any of the other slides during the month was shown. There was no interference with shipping on account of slides during the month.

The total excavation during May 1933, was 789,150 cubic yards, as follows:

	Wet excavation		
	Earth	Rock	Total
	Cubic yds.	Cubic yds.	Cubic yds.
Work excavation:			
Atlantic entrance—			
Maintenance.....	649,400		649,400
Gatun Lake—			
Maintenance.....	11,200	1,250	12,450
Gaillard Cut—			
West Culebra slide.....	750	250	1,000
East Culebra slide extension.....	² 20,900	8,500	29,400
Maintenance.....	34,400	22,900	57,300
Canal prism, Pacific entrance—			
Project No. 1.....		² 15,200	15,200
Maintenance.....	4,900	19,500	24,400
Total.....	721,550	67,600	789,150

¹ Sluiced material. ² Mined rock, all other unmined.

The ferry service between the east and west banks of the Canal at the Thatcher Highway crossing in Balboa operated 31 days during the month. A total of 1,528 single trips was made, and 965 Panama Canal, 168 United States Army, and 11,330 other vehicles, a total of 12,463, were ferried across the Canal.

MADDEN DAM DIVISION

The average working force for May 1933, including both the Government and the contractor, was 283 gold and 1,044 silver employees.

Excavation was completed for block 4 and for the balance of the spillway apron. No work was done on the right abutment. The rock nose about 150 feet upstream from the dam axis opposite block 4 was shot down but not removed. At the end of the month the excavation status was 99.19 percent complete for common, and 79.6 percent complete for rock excavation. Concrete placed during the month exceeded 60,000 cubic yards which is probably the largest monthly total which will be poured during the life of the project.

Foundation grouting was practically completed during the month in blocks 5, 6, 7, and 8. On the last day of the month the program for the grouting along the upstream edge of the clay blanket was started.

No work was performed on the left ridge dam during the month. On saddle dam No. 8 no work was performed on the principal phases of that job during the month. The rock fill lacks only a few loads of rock to complete it and the gravel blanket and riprap have been completed to within about 6 feet of the parapet wall. On saddle dam No. 13 the placing of rock in fill was completed on the 12th. On saddle dam No. 18 clearing, grubbing, and stripping were completed at the end of April; construction of earth embankment was begun on May 1 and finished on the 2d; the rock fill was begun on the 3d and finished on the 12th.

Clay grouting was continued in area No. 2 during the month, a total of 1,829 lineal feet having been drilled during May. Injecting grout in the drilled holes was begun on the 9th, and a total of 670 cubic yards was placed.

The Chief Designing Engineer, United States Bureau of Reclamation, with Mr. C. P. Berkey, of Columbia University, visited the Madden Dam project between the dates of May 15 and 18, in the capacity of consulting engineers.

OCCUPANTS OF QUARTERS

The number of persons, including men, women, and children, occupying Panama Canal quarters on May 31, 1933, was 24,029, composed of 8,134 Americans, 2,815 of whom were men, 2,606 women, and 2,713 children; 192 Europeans, 77 of whom were men, 38 women, and 77 children; and 15,703 West Indians, 4,233 of whom were men, 2,834 women, and 8,636 children. The total number of persons in quarters on May 31, 1932, was 24,284.

WORKING FORCE

The following tabulation shows the number of gold and silver employees as of May 17, 1933, with a comparison of the working force for the preceding month and for May 1932:

	Total employees		As of May 17, 1933		
	May 1932	April 1933	Gold	Silver	Total
Operation and Maintenance:					
Office.....	91	114	55	62	117
Electrical.....	360	400	147	261	408
Municipal Engineering.....	960	1,183	104	1,096	1,200
Lock Operation.....	919	1,458	254	1,138	1,392
Dredging.....	1,044	1,004	163	841	1,004
Madden Dam.....	256	212	65	120	185
Mechanical.....	1,080	1,141	401	738	1,139
Marine.....	667	618	177	481	658
Fortifications.....	117	95	12	90	102
Total.....	5,494	6,225	1,378	4,827	6,205
Supply Department:					
Quartermaster.....	1,658	1,644	184	1,444	1,628
Commissary.....	1,481	1,450	225	1,230	1,455
Cattle Industry—Plantations.....	99	95	2	91	93
Hotel Tivoli.....	100	98	7	91	98
Hotel Washington.....	85	86	7	81	88
Transportation.....	309	302	80	218	298
Total.....	3,732	3,675	505	3,155	3,660
Accounting Department.....	199	193	188	5	193
Health Department.....	1,091	1,113	275	841	1,116
Executive Department.....	937	924	562	361	923
Total.....	2,227	2,230	1,025	1,207	2,232
Panama Railroad Company:					
General Manager.....	77	94	23	54	77
Transportation.....	314	318	75	239	314
Receiving & Forwarding Agency.....	661	816	84	760	844
Coaling Stations.....	103				
Total.....	1,155	1,228	182	1,053	1,235
Grand total, May 1932.....	12,608				
Grand total, April 1933.....		13,358			
Grand total, May 1933.....			3,090	10,242	13,332

Additions to the gold force on the Isthmus in May 1933 were as follows: Employed in the United States, 4; reemployed in the United States, 3; employed on the Isthmus, 8; reemployed on the Isthmus, 7; total, 22. Separations from the gold force totaled 27, as follows: Resigned, 12; discharged, 7; retired, 5; died, 3. At the end of the month there were on file 1,050 applications from residents of the Isthmus for employment on the gold roll. In the silver force the employments during the month totaled 336 and separations from service, 290; the number seeking employment was estimated at approximately 2,300.

VITAL STATISTICS

A total of 136 deaths occurred during the month of May 1933, among the population of the Canal Zone (42,070) and the cities of Panama (79,000) and Colon (30,000), total population of 151,070, which is equivalent to an annual death rate of 10.80 per 1,000 population. The leading causes of death were: Tuberculosis (various organs), 26; pneumonia (broncho and lobar), 12; diarrhea and enteritis, 10; nephritis (acute and chronic), 8; cancer, 7; and organic diseases of the heart, 6. There were 5 deaths from syphilis, and 1 each from diphtheria and influenza. There were 28 deaths among nonresidents, which are not included in the above statistics.

There were 306 live births and 10 stillbirths reported during the month. Including stillbirths this is equivalent to an annual birth rate of 25.10. Deaths among children under one year of age numbered 27, giving an infant mortality rate, based on the number of live births reported, of 88.24.

The total number of malaria cases reported from the Canal Zone and the cities of Panama and Colon was 240, of whom 28 were employees (5 white and 23 colored), 17 were members of employees families (6 white and 11 colored), 15 were employees of the Madden Dam contractors (6 white and 9 colored), and 9 were Canal Zone agriculturists, 44 were other civilian nonemployees, and 127 were Army and Navy personnel. Of the 45 employees and members of employees' families, 16 were probably infected outside our sanitaried areas as they gave a history of working, living, or having been in such areas at night previous to their becoming sick.

There were two deaths among residents, from malaria, one an American soldier at Corozal who had been sick three days before reporting to the surgeon, and one, a Panamanian laborer of the Madden Dam contractor, who had been living in camp No. 3 at Madden Dam.

RECEIPTS AND SALES OF MATERIAL AND SUPPLIES

The value of material ordered on United States requisitions for which invoices were received on the Isthmus during the month totaled \$484,561.67, of which \$465,713.05 was for the Department of Operation and Maintenance, and \$18,848.62 was for other Panama Canal departments.

Cash sales on the Isthmus from stock, fuel oil, scrap, and obsolete and second-hand material amounted to \$32,097.05.

FINANCIAL STATEMENT

The following statement shows in a condensed form the aggregate revenues and expenditures for the month of April 1933, as compared with April 1932, with the figures for the first 10 months of the current fiscal year as compared with the same period in the fiscal year 1932.

It is impossible to submit figures for the month of May at the time of writing this report, since all charges, etc., involved in the accounting have not been completed

	April 1932	April 1933	Fiscal year	
			Last year	This year
Tolls.....	\$1,608,683.45	\$1,554,379.59	\$17,454,268.83	\$16,373,559.18
Other receipts.....	255,700.09	253,345.95	2,691,228.65	2,507,766.05
Total transit revenues.....	1,864,383.54	1,807,725.54	20,145,497.48	18,881,325.23
Total transit expenses.....	1,041,014.49	1,024,704.25	10,434,969.02	9,816,188.99
Net transit revenues.....	823,369.05	783,021.29	9,710,528.46	9,065,136.24
3% fixed capital charge.....	1,266,455.35	1,272,757.12	12,624,970.97	12,690,801.01
Surplus or (deficit).....	(443,086.30)	(489,735.83)	(2,914,442.51)	(3,625,664.77)
Business revenues.....	1,655,973.00	1,467,274.28	14,801,456.98	13,013,397.47
Business expenses.....	1,601,016.42	1,190,202.14	14,240,469.33	12,116,956.40
Net business revenues.....	54,956.58	277,072.14	560,987.65	896,441.07
3% fixed capital charge.....	59,742.86	60,007.90	637,011.13	636,849.19
Surplus or (deficit).....	(4,786.28)	217,064.24	(76,023.48)	259,591.88
Combined revenues.....	3,520,356.54	3,274,999.82	34,946,954.46	31,894,722.70
Combined expenses.....	2,642,030.91	2,214,906.39	24,675,438.35	21,933,145.39
Net revenues.....	878,325.63	1,060,093.43	10,271,516.11	9,961,577.31
3% fixed capital charge.....	1,326,198.21	1,332,765.02	13,261,982.10	13,327,650.20
Surplus or (deficit).....	(447,872.58)	(272,671.59)	(2,990,465.99)	(3,366,072.89)

() Indicates deficit.

Respectfully,

J. L. SCHLEY,
Governor.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 26, 1933.

No. 85.

(2) *Panama, Panama Bay, floating signal rafts removed.*—The following dispatch was received from the Aide to Commandant of the 15th Naval District, Balboa, C.Z.:

With reference to my letter of June 7, 1933 (see Notice to Mariners, No. 73, Balboa Heights, C.Z.) the commanding officer of the U.S.S. *Hannibal*, reports by dispatch this date that all floating signals have been removed.

J. L. SCHLEY,
Governor.

Regulating Level of Gatun Lake

The Engineer of Maintenance issued on June 26, 1933, the schedule for maintaining the level of Gatun Lake during the 1933 rainy season. The following will be adhered to as closely as conditions permit:

The Lake will be allowed to fill to elevation 85.50 before any water is wasted over the spillway. However, spilling for sanitary purposes or for exhibition will be permitted upon approval of the Chief of Surveys. The Lake will be held between elevations 85.50 and 86.00 until November 1; filled to elevation 86.50 after November 1; and to elevation 87.00 as water supply conditions may indicate. After spillage is begun, a variation of 0.50' from above elevations will be allowed to lessen the number of gate operations.

Notice to Mariners

THE PANAMA CANAL, EXECUTIVE DEPARTMENT,
BALBOA HEIGHTS, C.Z., June 22, 1933.

No. 82.

Colombia, Buenaventura approach, aids to navigation.—The following information was received by the Port Captain of Balboa in a letter from the first officer of the T. E. S. *Santa Clara* under date of June 10, 1933:

Approaching Buenaventura June 10, 1933, Palmas Island light was flashing one flash every seven seconds and the Buenaventura entrance buoys No. 1 and No. 2 lights were not burning.

J. L. SCHLEY,
Governor.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Week Ending June 17, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				<i>Tons</i>	<i>Tons</i>
Buenaventura.....	Panama R.R.S.S. Line.....	June 11	June 11	.....	619
Colombia.....	Colombian S.S. Line.....	June 11	June 11	.....	466
Santa Marta.....	United Fruit Co.....	June 11	June 11	.....	223
President Lincoln.....	Dollar Line.....	June 11	June 11	651	(³)
San Benito.....	United Fruit Co.....	June 11	June 11	3	(²)
Camden.....	United Fruit Co.....	June 11	June 12	9,772	(²)
Peter Kerr.....	Quaker S.S. Line.....	June 11	June 12	93	(²)
Nuevo Panama.....	H. Elliot.....	June 11	June 12	233	47
Orazio.....	Italian S.S. Line.....	June 11	June 12	124	23
Troja.....	Hamburg-American Line.....	June 11	June 12	123	29
Colombie.....	French Line.....	June 11	June 13	64	506
Magallanes.....	Spanish Line.....	June 11	June 15	89	(²)
Veragua.....	United Fruit Co.....	June 12	June 12	23	273
Delftdijk.....	Holland-America Line.....	June 12	June 12	25	76½
Wisconsin.....	French Line.....	June 12	June 13	36	(²)
Los Angeles.....	Hamburg-American Line.....	June 12	June 13	210	274
Durazzo.....	Hamburg-American Line.....	June 12	June 13	.....	425
Cefalu.....	Standard Fruit & S.S. Co.....	June 13	June 14	392	525
Fella.....	Navigacion Libera-Triestina.....	June 13	June 14	(¹)	411
Kiel.....	Hamburg-American Line.....	June 13	June 14	(¹)	602
Crijnsen.....	Royal Netherlands S.S. Co.....	June 13	June 14	182	½
Marques de Comillas.....	Spanish Line.....	June 13	June 15	5½	279
Trocas.....	Anglo-Saxon Petroleum Co.....	June 13	June 15	10,337	(²)
Real.....	H. Elliot.....	June 13	June 14	23	35
Ancon.....	Panama R.R.S.S. Line.....	June 14	June 14	1,670	.....
President Grant.....	Dollar Line.....	June 15	June 16	4	(²)
Auditor.....	T. & J. Harrison.....	June 15	June 17	395	(²)
Quirigua.....	United Fruit Co.....	June 16	June 16	387	6
Santa Lucia.....	Panama Mail S.S. Co.....	June 16	June 17	320	272
Turrialba.....	United Fruit Co.....	June 16	June 17	680	272
Vancouver.....	Hamburg-American Line.....	June 16	June 16	117	44
Buenos Aires.....	Johnson S.S. Line.....	June 16	June 16	111	(²)
Santa Ana.....	Panama Mail S.S. Co.....	June 16	June 17	409	7
Tsuyama Maru.....	Nippon Yusen Kaisha.....	June 17	June 17	249	(²)
Sixola.....	United Fruit Co.....	June 17	June 17	475	.....
Haiti.....	Colombian S.S. Line.....	June 17	June 17	130	.....
Nuevo Panama.....	H. Elliot.....	June 17	June 17	225	.....
Nankai Maru.....	Osaka Shosen Kaisha.....	June 17	June 17	387	.....
Crijnsen.....	Royal Netherlands S.S. Co.....	June 17	June 17	23	.....
Minden.....	North German Lloyd.....	June 17	June 17	231	.....
Manizales.....	Grace Line.....	June 17	June 17	1,003	.....
Isis.....	Hamburg-American Line.....	June 17	June 17	161	.....
Cerigo.....	Hamburg-American Line.....	June 17	June 17	1,249	.....
Acajutla.....	Pacific Steam Navigation Co.....	June 17	June 17	589	.....
Ariguani.....	Elders & Fyffes, Ltd.....	June 17	June 17	8	(²)

¹ No cargo discharged.

² No cargo laded.

³ Three packages.

MOVEMENTS OF OCEAN VESSELS

Week ending at midnight, June 24, 1933

THROUGH THE CANAL—ATLANTIC TO PACIFIC

Ship	Arrived at port		Entered Canal		Completed transit		Cleared for sea		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage
	Day	Hour	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	
Bronxville ¹	17	15 35	18	6 05	18	14 22	18	15 20	Norwegian	Fern Line	386.3	54.2	24.0	Jacksonville, Fla.	Moji, Japan	Scrap iron	7,689	6,715
India ²	17	19 20	18	7 25	18	15 33	18	12 30	Danish	East Asiatic Co.	470.0	63.5	18.6	Copenhagen, Den.	Vancouver, B.C.	Ballast	11,157	8,309
Tolson	18	7 15	18	8 50	18	16 35	21	15 15	Swedish	Transatlantic S.S. Co.	377.0	50.0	22.6	Antwerp, Belgium	Everett, Wash.	Sand, clay, coke	6,250	4,536
Nuevo Panama ³	17	18 05	18	10 30	18	16 31	18	22 17	Panamanian	Hans Eliott	108.0	24.0	7.6	Cristobal, C.Z.	Buenaventura, Col.	General	55	226
Manizales	17	15 50	18	13 15	18	20 05	18	21 35	German	Grace Line	216.5	32.9	12.2	Cristobal, C.Z.	Guayaquil, Ecuador	General	352.1	741
Florence ³	18	15 08	18	7 00	18	16 40	19	12 35	American	J. E. Kirkpatrick	436.0	58.0	23.6	Cristobal, C.Z.	Balboa, C.Z.	Ballast	338	2
Chamout ⁴	17	10 20	19	6 00	19	12 57	20	7 25	American	U. S. Navy	477.6	63.0	23.6	Hampton Rds., Va.	San Francisco, Cal.	General	5,058	7,304
Tacoma ²	18	12 20	19	7 20	19	14 57	20	15 55	German	Hamburg-American Line	440.0	60.0	25.1	Hamburg, Germany	Vancouver, B.C.	General	7,205	8,912
Kirishima	19	00 10	19	8 20	19	15 43	19	16 55	Japanese	Kokusai Kisen Kaisha	480.5	66.0	22.7	New York, N.Y.	Moji, Japan	Ballast	9,798	6,725
Meryu ¹	19	5 00	19	8 35	19	20 19	20	20 30	American	Stand. Vac. Transp. Co.	390.8	54.7	19.3	New York, N.Y.	Los Angeles, Calif.	General	2,500	6,822
Daylight ²	19	5 20	19	10 25	19	20 09	19	21 30	Norwegian	Stand. South Pac. Line	365.5	54.0	23.3	Gothenburg, Sweden	Valparaiso, Chile	General	6,780	5,579
Samuel Bakke ¹	19	9 35	19	12 00	19	20 49	19	22 25	Danish	Isbrandtsen Moller Co.	400.0	61.0	25.6	Newport News, Va.	Yokohama, Japan	General	3,397	4,164
Chr. Sass ²	19	15 00	20	6 00	20	13 09	21	1 20	American	U. S. Navy	420.5	54.2	18.7	Boston, Mass.	Puget Sound, Wash.	Naval stores	2,732	7,139
Nitro ²	19	18 50	20	7 05	20	14 15	20	15 40	British	Pacific Steam Nav. Co.	180.0	33.6	12.2	Hull, England	Corral, Chile	General	877	7,817
Laguna ²	20	9 45	20	9 00	20	17 02	20	19 00	American	U. S. Navy	499.2	68.1	22.6	Cristobal, C.Z.	Balboa, C.Z.	Ballast	2,500	6,747
E. T. Bedford ¹	19	20 55	20	10 40	20	19 08	20	20 35	Dutch	Standard Shipping Co.	404.6	54.0	20.0	New York, N.Y.	Talara, Peru	General	3,001	5,308
Boskoop	20	13 15	20	13 35	20	20 18	20	21 35	American	Royal Neth. S.S. Co.	398.0	54.4	15.4	Boston, Mass.	Seattle, Wash.	Passengers only	300	1,572
Columbian	20	13 35	20	14 15	20	22 08	20	23 35	Norwegian	Amer.-Hawaiian Line	227.2	34.4	14.5	Rotterdam, Holland	Vancouver, B.C.	General	7,470	5,144
Taranga ²	20	13 45	20	14 30	20	22 16	20	23 35	German	Inter-ocean Line	435.0	56.0	20.0	Cristobal, C.Z.	Guayaquil, Ecuador	Ballast	11,224	7,895
Cerigo	17	21 45	20	14 30	20	22 16	20	23 35	American	Hamburg-American Line	500.0	68.2	20.0	Philadelphia, Pa.	Los Angeles, Calif.	General	3,897	6,492
W. S. Miller ¹	20	1 35	21	6 05	21	14 53	21	16 30	American	Shell Oil Co.	325.0	46.3	13.4	Fall River, Mass.	Panama, P.	General	25	12
W. S. Rheem ¹	20	18 40	21	7 15	21	16 07	21	17 15	Panamanian	Sun Oil Co.	334.7	54.4	17.0	Boston, Mass.	Panama, P.	General	46	22
San Gil	21	4 50	21	8 45	21	17 55	21	19 00	Panamanian	United Fruit Co.	51.0	13.6	17.0	Newcastle, Eng.	Vancouver, B.C.	General	9,713	6,536
Nordfarer ¹	21	8 30	21	8 45	21	17 00	21	18 15	Danish	Hans Eliott	62.0	17.0	17.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	12,285	8,188
Saebu ⁷	20	14 10	21	8 45	21	17 00	21	18 15	Panamanian	Hans Eliott	62.0	17.0	17.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	778	337
Real ⁷	20	14 45	21	8 45	21	17 00	21	18 15	Panamanian	Hans Eliott	62.0	17.0	17.0	Cristobal, C.Z.	Balboa, C.Z.	Ballast	2,893	8,720
J-26 ¹	20	14 45	21	8 45	21	17 00	21	18 15	American	U. S. Army	480.5	66.0	21.3	Chester, Pa.	Los Angeles, Calif.	Ballast	3,149	7,011
Mercury Sun ¹	21	12 05	21	12 10	21	19 03	22	00 38	American	Shell Oil Co.	521.0	70.0	22.0	Bowling, Scotland	Talara, Peru	Ballast	2,472	6,808
F. H. Bedford, Jr. ²	21	12 30	21	13 10	21	21 55	21	22 55	American	Agwi Petroleum Corp.	204.0	28.0	14.0	Southampton, Eng.	World's cruise	General	2,935	10,626
Hatropolis ¹⁰	21	12 55	21	14 40	21	22 37	22	1 45	Belgian	Baron Empain	446.5	56.1	21.0	Boston, Mass.	Seattle, Wash.	General	3,819	12,023
Walter A.	21	20 10	22	6 25	22	13 38	22	14 40	American	Luckenbach Line	399.0	56.0	19.4	Boston, Mass.	Seattle, Wash.	Steel	6,495	4,450
Lukenbach	22	5 10	22	7 55	22	15 01	22	16 05	American	Isthmian S.S. Lines	424.0	54.0	18.0	Mobile, Ala.	Seattle, Wash.	General	2,472	6,808
Amstion City	22	5 10	22	7 55	22	15 01	22	16 05	American	Isthmian S.S. Lines	424.0	54.0	18.0	Mobile, Ala.	Seattle, Wash.	General	2,472	6,808
Odenwald ²	22	5 10	22	7 55	22	15 01	22	16 05	American	Isthmian S.S. Lines	424.0	54.0	18.0	Mobile, Ala.	Seattle, Wash.	General	2,472	6,808
Santa Maria ²	22	4 05	23	6 00	23	14 07	23	15 18	American	Hamburg-American Line	466.0	64.0	24.8	New York, N.Y.	Valparaiso, Chile	Gen., iron, cement	2,935	10,626
President	23	5 30	23	7 05	23	14 27	23	21 30	American	Grace Line	502.2	62.2	24.0	New York, N.Y.	Valparaiso, Chile	General	3,819	12,023
Monroe	23	5 30	23	7 05	23	14 27	23	21 30	American	Dollar Line	502.2	62.2	24.0	New York, N.Y.	San Francisco, Cal.	General	3,819	12,023

THROUGH THE CANAL—PACIFIC TO ATLANTIC

22	San Anselmo.	22	9 10	23	7 40	23	15 31	23	16 30	American.	Quaker Line.	409.8	54.0	17.6	Albany, N.Y.	Tacoma, Wash.	General, autos.	3,156	6,755	4,887
22	Steel Ranger.	22	15 45	23	8 30	23	16 03	23	17 00	American.	Isthmian S.S. Lines.	424.2	56.2	20.6	Portland, Me.	Vancouver, B.C.	General, tin.	4,095	7,611	5,450
23	Muncaster.	23	6 10	23	9 30	23	17 24	23	18 30	British.	Barber S.S. Line.	428.0	54.0	20.0	New York, N.Y.	Shanghai, China.	General.	1,472	7,596	5,159
23	Delfon.	23	6 10	23	9 30	23	17 24	23	18 30	Norwegian.	Anglo-Saxon P&O Co.	475.4	64.2	19.0	Hamburg, Germany	Los Angeles, Calif.	Ballast.	10,024	6,191	7,787
23	Gertunde.	23	6 40	23	9 55	23	18 43	23	20 12	American.	Kellogg S.S. Corp.	391.9	51.2	21.0	Houston, Texas	San Francisco, Cal.	Cottonseed oil.	2,500	5,419	3,787
23	Kellogg.	23	6 00	23	11 15	23	19 34	23	21 05	French.	Messageries Maritimes.	411.0	53.5	25.6	Dunkirk, France	Noumea, N. Caled.	Coal, wines, etc.	4,537	7,677	5,633
23	Motor Sailer.	23	17 20	24	6 05	24	13 25	24	14 30	American.	U. S. Navy.	466.9	59.8	22.1	Cristobal, C.Z.	Gatun, C.Z.	Ballast.	2,438	9,959	7,226
23	Port Dunedin.	23	18 05	24	7 20	24	15 03	24	16 00	British.	Com th & Dom. Line.	377.6	54.0	24.5	London, England.	Dunedin, N.Z.	General.	7,046	6,108	4,358
24	Nordward.	24	1 25	24	8 25	24	15 21	24	16 00	Norwegian.	Lauritz Kloster.	424.0	56.0	23.0	Baltimore, Md.	Yokohama, Japan.	Scrap steel.	5,208	7,111	5,497
24	Steel Worker.	24	1 35	24	7 20	24	15 03	24	16 00	American.	Isthmian S.S. Lines.	398.0	56.0	26.0	Baltimore, Md.	Honolulu, T.H.	General.	8,120	7,381	5,909
24	Alamar.	24	11 45	24	14 05	24	20 48	24	22 05	American.	Calmar Line.	418.5	54.0	20.0	Boston, Mass.	Seattle, Wash.	Steel, general.	2,750	7,110	4,900
24	Kentuckian.	24	13 45	24	14 05	24	20 48	24	22 05	American.	Amer-Hawaiian Line.	390.0	52.0	23.1	New York, N.Y.	Portland, Oreg.	General.	2,906	5,797	4,188
23	Chateau Cecilia.	23	19 00	24	14 35	24	21 32	25	2 10	American.	Panama Mail S.S. Co.	436.0	58.0	24.3	New York, N.Y.	San Francisco, Cal.	Coffee, general.	954	.....	.....
24	Chateau Thierry.	24	8 55	24	15 00	24	22 27	.....	.....	American.	U. S. Army.	.....	.....	.....	New York, N.Y.	Balboa, C.Z.	General.	.....	.....	.....

18	Heinrich V.	18	2 10	18	6 17	18	14 15	18	14 15	Danzig.	W. Tankerschiff Rhederei.	521.1	70.2	31.0	Talara, Peru.	Southampton, Eng.	Crude oil.	16,729	12,535	8,224
18	Riedemann.	18	2 54	18	7 11	18	14 30	18	14 30	Panamaian.	United Fruit Co.	325.0	46.3	21.0	Pto. Armales, R.P.	Boston, Mass.	Bananas.	1,068	.....	.....
18	El Aleto.	18	3 20	18	10 15	18	17 20	18	17 20	British.	Anglo-Panama Oil Co.	440.8	53.2	27.0	La Libertad, Peru.	Philadelphia, Pa.	Crude oil.	10,281	7,555	5,049
18	American.	18	10 45	18	11 27	18	18 35	18	18 35	American.	Amer-Hawaiian Line.	404.6	53.2	27.0	Portland, Oreg.	Boston, Mass.	General.	3,603	13,948	9,217
19	Santa Rosa.	19	9 56	19	15 21	19	22 00	20	14 05	American.	Grace Line.	434.4	72.2	25.3	Seattle, Wash.	New York, N.Y.	Wheat.	6,755	6,809	4,842
19	Avila.	19	14 15	19	14 59	20	11 55	20	11 55	Yugoslav.	Baburiza & Co.	325.0	58.2	27.0	Victoria, B.C.	St. Thomas.	General.	9,882	7,710	5,674
19	Marie Bakke.	19	13 50	20	6 37	20	14 00	20	18 50	Norwegian.	Knut Knutsen.	375.6	53.8	24.0	San Antonio, Chile	Oslo, Norway.	General.	6,929	.....	.....
20	Cheyenne.	20	14 20	20	7 20	20	14 50	20	16 35	British.	Intern'l Shipping Co.	477.0	63.8	27.0	Talara, Peru.	Stettin, Germany.	Gasoline.	11,144	9,072	6,554
20	Real.	20	.....	20	6 51	20	14 43	21	8 45	Panamaian.	Haus Elliot.	62.2	17.0	6.0	Darien, R.P.	Cristobal, C.Z.	Bananas.	35	46	22
20	Santa Rosa.	20	.....	20	6 51	20	14 10	21	8 45	Panamaian.	Haus Elliot.	52.0	13.6	5.0	Darien, R.P.	Cristobal, C.Z.	Bananas.	10	25	12
19	K. I. Lucken- bach.	19	18 00	20	8 21	20	16 10	20	16 10	American.	Luckenbach Line.	446.0	56.1	29.2	Seattle, Wash.	Mobile, Ala.	General.	8,518	8,552	6,236
20	Meritor.	20	7 50	20	8 44	20	17 20	20	18 20	Belgian.	Cie. Maritime Belge.	473.6	60.8	28.0	Vancouver, B.C.	Antwerp, Belgium.	General, wheat.	10,180	8,772	6,292
20	Messula.	20	7 50	20	9 15	20	18 20	20	18 20	American.	Amer-Hawaiian Line.	362.3	51.2	23.3	San Francisco, Cal.	Baltimore, Md.	(?)	3,268	4,947	3,374
20	Gracia.	20	13 15	21	6 30	21	14 30	21	16 50	British.	Donaldson Brothers.	415.5	54.2	26.0	Vancouver, B.C.	Glasgow, Scotland.	General.	6,755	6,809	4,842
20	Attila.	20	19 00	21	7 24	21	16 50	21	16 50	Norwegian.	Tankships Centrals.	461.0	59.5	28.0	Los Angeles, Calif.	Lahds End, Eng.	Gasoline.	10,786	.....	.....
20	Santa Barbara.	20	22 00	21	8 25	21	15 55	21	20 10	American.	Grace Line.	466.0	64.0	24.5	San Antonio, Chile	New York, N.Y.	General.	4,265	10,687	6,630
21	Oregon Maru.	21	00 15	21	8 26	21	17 55	21	17 55	Japanese.	K. Mawasaki Zosenhe.	335.0	51.0	16.0	Kobe, Japan.	Baltimore, Md.	General.	2,975	6,251	4,700
21	S.C.T. Dodd.	21	7 00	21	9 35	21	18 20	21	18 20	American.	Shell Oil Co.	425.0	57.2	29.0	Los Angeles, Calif.	Fall River, Mass.	General.	10,069	7,481	5,095
21	Virginian.	21	7 30	21	9 53	21	19 25	21	19 25	American.	Amer-Hawaiian Line.	491.5	58.2	28.0	Seattle, Wash.	Boston, Mass.	General, lumber.	9,300	10,491	7,601
21	Steel Voyager.	21	8 05	21	10 16	21	20 45	21	22 45	American.	Isthmian S.S. Lines.	395.6	56.2	26.0	Portland, T.H.	Baltimore, Md.	Sugar, pineapples	8,450	7,330	5,249
21	Steel Exporter.	21	2 00	21	11 09	21	21 45	21	21 45	British.	Isthmian S.S. Lines.	425.0	58.2	26.0	Portland, T.H.	U. S. Atlantic port.	Sugar.	8,450	7,330	5,249
21	Calgarville.	21	14 15	21	14 58	21	23 00	21	23 00	British.	Imperial Oil Co.	521.5	70.4	32.0	Honolulu, T.H.	U. S. Atlantic port.	Crude oil.	16,878	12,339	7,717
21	Granville.	21	15 40	21	16 24	21	22 22	21	22 22	British.	Fred Olsen Line.	426.4	58.2	26.0	Talara, Peru.	Montreal, Canada.	Wheat, general.	7,539	6,387	6,065
22	Port Hunter.	22	4 30	22	6 45	22	14 00	22	18 45	British.	Royal Mail Lines, Ltd.	481.2	62.3	25.0	Vancouver, B.C.	Antwerp, Belgium.	Frozen, general.	6,741	11,170	8,208
22	Solaris.	22	21 45	22	10 07	22	18 20	22	23 20	British.	A. Wier & Co.	330.0	47.3	21.3	Coquimbo, Chile.	New York, N.Y.	Ores.	4,708	3,807	2,597

For orders.

Yacht.

Towing barge.

Phosphate, cotton, etc.

Motor schooner.

Mine sweeper.

Transport.

Launch.

Motor ship.

Lumber, wool, and copper.

MOVEMENTS OF OCEAN VESSELS—Continued

THROUGH THE CANAL—PACIFIC TO ATLANTIC—Continued

Ship	Arrived at port		Entered Canal		Completed transit		Nationality	Line (Charterer or operator)	Length	Beam	Salt water draft	From—	For—	Cargo		Panama Canal tonnage	
	Day	Hour	Day	Hour	Day	Hour								Nature	Tons	Gross	Net
Allington	22	9.35	22	10.49	22	19.30	22	19.30	405.6	55.6	27.0	Cheminus, B.C.	London, England	Lumber, general	9,050	6,989	5,251
Court ¹³	22	10.20	22	11.23	22	20.35	22	20.35	401.4	53.2	28.0	Tacoma, Wash.	New York, N.Y.	Lumber, general	8,553	7,082	5,167
Sidney M.	22	10.20	22	11.23	22	20.35	22	20.35	401.4	53.2	28.0	Tacoma, Wash.	New York, N.Y.	Lumber, general	8,553	7,082	5,167
Haupmann	22	10.20	22	11.23	22	20.35	22	20.35	401.4	53.2	28.0	Tacoma, Wash.	New York, N.Y.	Lumber, general	8,553	7,082	5,167
C. O. Still-	22	10.42	22	12.42	22	22.05	22	22.05	565.7	75.6	33.3	Cabo Blanco, Peru	Halifax, N.S.	Crude oil	21,856	16,780	9,885
Runkine	22	4.30	23	6.09	23	13.30	23	20.50	480.6	60.3	27.2	Lyttleton, N.Z.	London, England	Frozen, general	4,700	11,443	8,469
Pacific	22	4.30	23	6.09	23	13.30	23	20.50	480.6	60.3	27.2	Lyttleton, N.Z.	London, England	Frozen, general	4,700	11,443	8,469
Trader ¹³	22	23.53	23	7.15	23	14.55	23	20.10	420.0	57.9	28.0	Vancouver, B.C.	Glasgow, Scotland	General	8,471	7,979	5,916
Hague ¹³	23	00.20	23	8.09	23	15.25	23	15.25	416.9	56.2	27.0	Los Angeles, Calif.	Whilmington, Del.	Naphtia	10,085	6,728	4,737
Cluster	23	5.00	23	8.41	23	16.55	23	16.55	480.6	66.0	28.2	Los Angeles, Calif.	Chester, Pa.	Gasoline	13,141	9,607	6,548
Sun	23	6.25	23	9.29	23	17.25	23	17.25	420.0	53.9	26.1	Manila, P.I.	New York, N.Y.	Sugar, hemp	8,294	7,101	5,018
Clydebank ¹³	23	8.00	23	9.38	23	18.10	23	16.35	416.8	56.1	26.1	Los Angeles, Calif.	Baltimore, Md.	Gasoline	8,423	6,931	4,971
Drigo ¹³	23	8.00	23	9.38	23	18.10	23	16.35	416.8	56.1	26.1	Los Angeles, Calif.	Baltimore, Md.	Gasoline	8,423	6,931	4,971
Nuevo	23	8.20	23	9.45	23	17.20	23	6.05	438.7	20.6	9.0	Buenaventura, Col.	Cristobal, C.Z.	Coffee, general	218	226	101
Panama ¹³	23	16.00	23	10.28	23	18.35	24	13.40	108.0	54.3	19.0	San Francisco, Cal.	Brooklyn, N.Y.	Army supplies	2,074		
Megs	23	9.30	23	10.54	23	19.45	23	19.45	400.2	52.6	25.0	Cheminus, B.C.	Grangemouth, Eng.	Gasoline	7,500	5,822	4,103
Bennevis	23	10.15	23	11.24	23	20.55	23	20.55	435.0	56.0	27.0	Los Angeles, Calif.	Tiverton, R.I.	Gasoline	10,500	7,452	5,199
Deroche ¹³	23	10.15	23	11.24	23	20.55	23	20.55	435.0	56.0	27.0	Los Angeles, Calif.	Tiverton, R.I.	Gasoline	10,500	7,452	5,199
Andrea F.	23	12.09	23	13.26	23	21.55	23	21.55	496.0	68.2	29.0	Seattle, Wash.	Boston, Mass.	General, lumber	10,131	11,487	8,762
Luckenbach	23	12.09	23	13.26	23	21.55	23	21.55	496.0	68.2	29.0	Seattle, Wash.	Boston, Mass.	General, lumber	10,131	11,487	8,762
Luckenbach	23	12.09	23	13.26	23	21.55	23	21.55	496.0	68.2	29.0	Seattle, Wash.	Boston, Mass.	General, lumber	10,131	11,487	8,762
Margaret	23	14.05	23	14.49	23	23.15	24	10.30	407.3	54.1	26.0	San Francisco, Cal.	Stockholm, Sweden	Barley, fruits	5,948	7,048	5,337
Johnson	23	14.35	24	6.15	24	14.40	24	14.40	378.0	54.2	24.0	Port Pirie, Auslia	Rotterdam, Holland	General	7,818	6,235	4,486
Roxen	23	14.35	24	6.15	24	14.40	24	14.40	378.0	54.2	24.0	Port Pirie, Auslia	Rotterdam, Holland	General	7,818	6,235	4,486
Swan ¹⁴	23	14.35	24	6.15	24	14.40	24	14.40	378.0	54.2	24.0	Port Pirie, Auslia	Rotterdam, Holland	General	7,818	6,235	4,486
Soeramento	23	15.20	24	7.25	24	15.20	24	15.20	401.6	54.3	25.8	Prince Rupert, B.C.	Falmouth, Eng.	Wheat	8,000	6,621	4,916
Valley	23	15.30	24	7.52	24	15.55	24	15.55	406.1	54.2	20.6	Magallanes, Chile	Glasgow, Scotland	General	4,563	7,220	4,844
Losada ¹³	23	22.45	24	8.39	24	18.05	24	18.05	434.3	51.7	26.9	Seattle, Wash.	Albany, N.Y.	Lumber, general	7,435	7,980	5,945
Georgan	23	22.45	24	8.39	24	18.05	24	18.05	434.3	51.7	26.9	Seattle, Wash.	Albany, N.Y.	Lumber, general	7,435	7,980	5,945
France Maru	24	5.55	24	9.09	24	19.15	24	19.15	385.0	51.0	26.1	Manila, P.I.	U. S. Atlantic port	Sugar	7,460	6,209	4,645
Tai Yang ¹³	23	22.00	24	10.54	24	20.20	25	9.30	461.4	60.6	27.6	Cebu, P.I.	Boston, Mass.	General	7,420	10,009	7,075
Calif.	24	11.45	24	12.35	24	21.20	24	21.20	216.5	32.9	14.10	Guayaquil, Ecuador	Cristobal, C.Z.	General	838	1,105	688

All hours are expressed on the 24-hour basis and all hours greater than 12 are postmidnight.

PORT OF CRISTOBAL

* ARRIVALS				* DEPARTURES			
Date	Vessel	Line	From—	Date	Vessel	Line	For—
June 18.....	No. 9673 ¹⁶	Pan American Airways.....	San Salvador via wayports	June 18.....	Crynssen.....	Royal Netherlands S.S. Co.....	Amsterdam via wayports
June 18.....	No. 18-V ¹⁶	Pan American-Grace Airways.....	Talara via wayports	June 18.....	Skaola.....	United Fruit Co.....	New York via wayports
June 18.....	R. J. Hanna.....	The Texas Co.....	Port Arthur, Texas	June 18.....	Ancon.....	Panama R.R.S.S. Line.....	New York via Haiti
June 19.....	Quirigua.....	United Fruit Co.....	Port Limon, Costa Rica	June 18.....	Haiti.....	Colombian Line.....	New York via wayports
June 19.....	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia	June 18.....	R. J. Hanna.....	The Texas Co.....	Houston, Texas
June 19.....	No. 670-M ¹⁶	Pan American Airways.....	Barraquilla, Colombia	June 19.....	Pan American Airways.....	Pan American Airways.....	Barraquilla, Colombia
June 19.....	No. 9685 ¹⁶	Pan American Airways.....	San Salvador via wayports	June 19.....	United Fruit Co.....	United Fruit Co.....	New York via wayports
June 20.....	Contessa.....	Pan American-Grace Airways.....	New Orleans via Habana	June 19.....	U. S. Navy.....	U. S. Navy.....	Costa Rica
June 20.....	Magdalena ¹⁷	Hamburg-American Line.....	Hamburg via wayports	June 20.....	Pan American-Grace Airways.....	Pan American-Grace Airways.....	Buenaventura, Colombia
June 20.....	Anachucua ¹⁷	A. Tzagaropoulos.....	Colon, Rep. of Panama	June 20.....	Hamburg-American Line.....	Hamburg-American Line.....	San Salvador via wayports
June 21.....	Annetta I. ¹⁷	P. W. Hamilton.....	Colon, Rep. of Panama	June 20.....	Anachucua ¹⁷	A. Tzagaropoulos.....	Belize via wayports
June 21.....	Pearl Marie ¹⁸	G. I. Bryan.....	San Salvador via wayports	June 21.....	Annetta I. ¹⁷	P. W. Hamilton.....	Colon, Rep. of Panama
June 21.....	No. 9688 ¹⁶	Pan American Airways.....	Chiclayo via wayports	June 21.....	Contessa.....	Standard Fruit & S.S. Co.....	New Orleans via wayports
June 22.....	No. 22-V ¹⁶	Pan American-Grace Airways.....	New York, N.Y.	June 21.....	Pearl Marie ¹⁸	G. I. Bryan.....	Bluefields, Nicaragua
June 22.....	Guayaquil.....	Panama R.R.S.S. Line.....	Port Arthur via wayports	June 22.....	No. 9685 ¹⁶	Uraba, Medellin & Cent. Airways.....	Medellin, Colombia
June 22.....	Velma Lykes.....	Lykes Brothers S.S. Co.....	Miami via wayports	June 22.....	No. 145-M ¹⁶	Pan American Airways.....	Miami via wayports
June 22.....	No. 667-M ¹⁶	Pan American Airways.....	New York via wayports	June 22.....	No. 670-M ¹⁶	Pan American Airways.....	Santo Domingo via wayports
June 23.....	Peten.....	United Fruit Co.....	Medellin, Colombia	June 22.....	Velma Lykes.....	Lykes Brothers S.S. Co.....	ports
June 23.....	No. 145-M ¹⁶	Uraba, Medellin & Cent. Airways.....	New Orleans via Habana	June 23.....	Pan American-Grace Airways.....	Pan American-Grace Airways.....	Chiclayo via wayports
June 23.....	Tivives.....	United Fruit Co.....	Hamburg via wayports	June 23.....	United Fruit Co.....	United Fruit Co.....	Port Limon, Costa Rica
June 24.....	Pastores.....	Royal Netherlands S.S. Co.....	New York via wayports	June 24.....	Royal Netherlands S.S. Co.....	Royal Netherlands S.S. Co.....	Port Limon, Costa Rica
June 24.....	Metapan.....	Colombian Line.....	New York via Kingston	June 24.....	Tivives.....	United Fruit Co.....	New Orleans via wayports
June 24.....	United Fruit Co.....	United Fruit Co.....					

PORT OF BALBOA

June 18.....	Santa Margarita ¹³	Atlas Imperial Diesel Engine Co.	Los Angeles, Calif.
June 18.....	Chiriqui.....	United Fruit Co.....	San Francisco, Calif.
June 19.....	Bokuyo Maru.....	Nippon Yusen Kaisha.....	Valparaiso, Chile
June 20.....	Pirre ¹⁸	A. A. Valdez.....	Panama Bay, R.P.
June 20.....	Caldas ¹³	Grace Line.....	Mazatlan, Mexico
June 20.....	Cauca ¹³	Grace Line.....	Mazatlan, Mexico
June 22.....	Iocoma.....	West India Oil Co.....	Talara, Peru
June 24.....	Point Arena.....	McCormick S.S. Co.....	San Francisco, Calif.

¹³ Motor schooner.

¹⁷ Motor boat.

¹⁸ Motor schooner.

¹⁶ Air mail carrier.

¹⁷ Motor boat.

¹⁸ Motor schooner.

¹⁶ Air mail carrier.

¹⁷ Motor boat.

¹⁸ Motor schooner.

¹⁶ Air mail carrier.

¹⁷ Motor boat.

¹⁸ Motor schooner.

¹⁶ Air mail carrier.

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Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Balboa, C.Z., for Week Ending June 24, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Nankai Maru.....	Osaka Shosen Kaisha.....	June 16	June 17	92	
California.....	Panama-Pacific Line.....	June 16	June 16	10	40
Santa Lucia.....	Grace Line.....	June 17	June 17	173	10
Chiriqui.....	United Fruit Co.....	June 18	June 18	619	
Chaumont.....	U. S. Government.....	June 19	June 20	1	34
Bokuyo Maru.....	Nippon Yusen Kaisha.....	June 19	June 19	89	
Marie Bakke.....	Knut Knutsen.....	June 19	June 20	40	
Santa Rosa.....	Grace Line.....	June 19	June 19	115	4
Nitro.....	U. S. Government.....	June 20	June 20	2	
Santa Barbara.....	Grace Line.....	June 20	June 21	74	10
Iocoma.....	International Petroleum Co.....	June 21	June 22	343	
Meigs.....	U. S. Government.....	June 22	June 23	411	3
Aldington Court.....	Canadian Transport Co.....	June 22	June 22		5
Point Arena.....	McCormick S.S. Co.....	June 23	June 23	247	2,375
Tai Yang.....	Barber-Wilhelmsen Line.....	June 23	June 24	199	
Santa Cecilia.....	Grace Line.....	June 24	June 24	22	
Antigua.....	United Fruit Co.....	June 24	June 25	193	
Sollund.....	Grace Line.....	June 24	June 25	1	
Chateau Thierry.....	U. S. Government.....	June 24	(¹)	954	

¹ In port.

Report of Cargo Discharged and Laded by Vessels Entering and Clearing from Port of Cristobal, C.Z., for Week Ending June 24, 1933

Name of vessel	Line or charterer	Arrived	Departed	Cargo—	
				Discharged	Laded
				Tons	Tons
Ancor.....	Panama R.R.S.S. Line.....		June 18		1,210
Sixtoia.....	United Fruit Co.....		June 18		263½
Haiti.....	United Fruit Co.....		June 18		176
Nuevo Panama.....	Hans Elliot.....		June 18		57
Nankai Maru.....	Osaka Shosen Kaisha.....		June 18		64
Crijnsen.....	Royal Netherlands S.S. Co.....		June 18		414
Minden.....	North German Lloyd.....		June 18		166
Manizales.....	Grace Line.....		June 18		348
Isis.....	Hamburg-American Line.....		June 18		111
R. J. Hanna.....	Standard Oil Co.....	June 18	June 18	8,445	(²)
Tacoma.....	Hamburg-American Line.....	June 18	June 19	161	505
Quirigua.....	United Fruit Co.....	June 19	June 19	16½	91
Samuel Bakke.....	Scandinavian South Pacific Line.....	June 19	June 19	35	(²)
Santa Rosa.....	Panama Mail S.S. Co.....	June 19	June 20	139	63
Laguna.....	Pacific Steam Navigation Co.....	June 19	June 20	17	54
Boskoop.....	Royal Netherlands S.S. Co.....	June 19	June 20	50	47
Marie Bakke.....	Knut Knutsen.....	June 19	June 20	25	(²)
Cerigo.....	North German Lloyd.....		June 20		294
Magdalena.....	Hamburg-American Line.....	June 20	June 20	225	2
Contessa.....	Standard Fruit & S.S. Co.....	June 20	June 21	371	709
Santa Barbara.....	Grace Line.....	June 21	June 21	279	116
Pearl Marie.....	R. Feuillebois.....	June 21	June 21	(¹)	16
Odenwald.....	Hamburg-American Line.....	June 21	June 22	54	213
Granville.....	Fred Olsen Line.....	June 22	June 22	(¹)	450
Velma Lykes.....	Lykes Brothers.....	June 22	June 22	314	19
Santa Maria.....	Grace Line.....	June 22	June 23	315	688½
San Anselmo.....	Quaker S.S. Line.....	June 22	June 23	153	(²)
Guayaquil.....	Panama R.R.S.S. Line.....	June 22		1,135	
Ruahine.....	New Zealand Shipping Co.....	June 23	June 23	47	(²)
Peten.....	United Fruit Co.....	June 23	June 23	355	8
President Monroe.....	Dollar Line.....	June 23	June 23	3	(²)
Dirigo.....	Texas Oil Co.....	June 23	June 24	250	(²)
Santa Cecilia.....	Panama Mail S.S. Co.....	June 23	June 24	224	774
Tivies.....	United Fruit Co.....	June 23	June 24	678	573
Nuevo Panama.....	Hans Elliot.....	June 23		244	
Margaret Johnson.....	Johnson S.S. Line.....	June 23	June 24	(¹)	82
Pastores.....	United Fruit Co.....	June 24		123½	
Metapan.....	United Fruit Co.....	June 24		279	
Cali.....	North German Lloyd.....	June 24		972	
Colombia.....	Royal Netherlands S.S. Co.....	June 24	June 24	147	(²)
Tai Yang.....	Barber Wilhelmsen Line.....	June 24		577	

¹ No cargo discharged.

² No cargo laded.

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Volume XXVI.

Balboa Heights, C. Z., July 15, 1933.

No. 49.

Traffic Through the Panama Canal in June 1933, and in Fiscal Year

The total vessels of all kinds transiting the Canal during the month of June in the two preceding years and in 1933 are shown in this tabulation:

Class	June 1931	June 1932	June 1933
Commercial ocean vessels.....	400	336	364
Launches (under 20 tons).....	5	11	11
Noncommercial vessels:			
United States Government.....	26	40	20
Vessels transiting solely for repairs.....	1		
Total.....	432	387	395

COMMERCIAL TRAFFIC ¹

The following tabulation shows the number of vessels, Panama Canal net tonnage, tons of cargo carried and tolls collected, from the commercial traffic transiting the Canal each month for the fiscal year ended June 30, 1933, as compared with the same months in the previous year:

Month	No. of vessels		Panama Canal net tonnage		Tons of cargo		Tolls	
	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33	1931-32	1932-33
July.....	406	326	2,110,701	1,676,492	1,866,803	1,259,981	\$1,848,638.45	\$1,468,728.36
August.....	390	314	1,998,194	1,658,112	1,789,234	1,349,453	1,770,202.71	1,440,848.87
September.....	396	353	2,070,873	1,868,391	1,754,855	1,347,144	1,820,735.75	1,598,265.98
October.....	390	394	2,081,600	1,988,133	1,762,670	1,582,261	1,823,650.74	1,714,779.06
November.....	376	388	2,001,745	2,035,796	1,577,523	1,531,509	1,762,036.19	1,756,865.84
December.....	387	431	2,033,158	2,080,069	1,648,904	1,621,581	1,757,869.54	1,781,940.03
January.....	377	415	2,022,275	2,069,218	1,593,585	1,463,503	1,770,250.68	1,762,808.56
February.....	358	368	1,878,177	1,832,658	1,645,393	1,434,862	1,647,797.06	1,575,708.35
March.....	363	399	1,864,896	1,989,044	1,643,952	1,738,227	1,645,366.81	1,718,908.41
April.....	370	370	1,863,692	1,839,597	1,443,731	1,527,978	1,608,634.67	1,554,250.14
May.....	357	372	1,956,958	1,883,249	1,676,790	1,629,982	1,717,401.26	1,617,943.65
June.....	336	364	1,743,150	1,901,117	1,404,558	1,691,247	1,534,793.19	1,629,411.28
Total...	4,506	4,494	23,625,419	22,821,876	19,807,998	18,177,728	20,707,377.05	19,620,458.53

¹ Commercial traffic includes all ocean-going vessels paying tolls. Vessels in direct service of the United States, Panamanian, and Colombian Governments, including merchant vessels chartered by these Governments, and vessels transiting solely for repairs, do not pay tolls. Statistics on vessels not paying tolls are shown under "Noncommercial traffic."

Summary of Traffic by Nationality of Vessels for June 1933

Nationality	No. of ships	Panama Canal net tonnage	Tons of cargo	Nationality	No. of ships	Panama Canal net tonnage	Tons of cargo
Belgian.....	2	6,629	10,180	Japanese.....	20	114,436	137,384
British.....	71	396,979	347,498	Netherlands.....	5	33,806	25,756
Danish.....	8	38,627	29,224	Norwegian.....	29	139,135	128,988
Danzig.....	5	40,933	49,597	Panamanian.....	31	24,440	14,962
Finnish.....	1	3,329	6,308	Swedish.....	9	40,790	47,102
French.....	4	25,245	15,465	United States.....	152	938,776	778,956
German.....	22	61,997	61,478	Yugo-Slav.....	2	10,779	19,337
Italian.....	3	25,216	19,012				

¹ Includes 2 naval vessels totaling 11,540 tons displacement in transits but not in tonnage.

Traffic by Trade Routes, June 1933

The movement of vessels over trade routes is summarized in the following table. They are classified according to primary origin and ultimate destination of the voyage through the Canal and the cargo listed is the total aboard at time of transit. Cargo may be laden or discharged between the terminal areas indicated, hence in the cargo listed below there may be some which had other origin or destination:

Trade route	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Panama Canal net tonnage	Tons of cargo	No. of ships	Panama Canal net tonnage	Tons of cargo
United States intercoastal.....	61	378,964	167,671	59	356,362	460,551
East coast United States and:						
Philippine Islands.....	6	50,780	21,965	15	87,305	117,362
Far East.....	23	128,656	122,488	2	8,602	9,775
South America.....	8	44,206	5,722	9	39,402	56,740
Hawaiian Islands.....	1	5,497	5,208	4	21,181	32,580
Australasia.....	4	18,184	19,962			
Central America.....	4	8,699		4	8,471	5,767
Canada.....				1	4,103	3,428
Europe and:						
Canada.....	20	128,125	39,654	33	186,542	273,682
South America.....	10	68,348	13,558	13	72,937	123,462
Australasia.....	8	70,734	20,634	4	30,740	23,627
United States.....	2	15,410		2	11,184	16,734
Central America.....				1	1,829	3,193
Canadian intercoastal.....	1	3,757	1,700	1	4,114	6,707
East coast Canada and:						
South America.....	2	17,602		4	30,880	65,588
Australasia.....	2	9,219	6,409			
Far East.....	1	4,658	7,859			
East coast South America and:						
Canada.....	4	19,055	10,371	1	5,033	6,693
Far East.....	1	7,626	4,600			
Cristobal and:						
South America.....	10	5,334	2,001	12	6,176	8,372
Central America.....	4	1,355	1,010	5	3,334	2,364
Balboa.....	6	695	82	6	136	151
West Indies to Balboa.....	1	4,890	9,870			
West Indies to United States.....	1	5,338				
Around the world.....	2	19,006	7,605	1	5,806	6,102
Vessels not engaged in commerce (yachts, etc.).....	5	839				

Principal Commodities

Commodities which aggregated 10,000 or more tons either during the past month or in the corresponding month in 1932 are listed below:

Commodity	June		Commodity	June	
	1932	1933		1932	1933
<i>Atlantic to Pacific</i>			<i>Pacific to Atlantic</i>		
Automobiles and parts.....	6,637	10,022	Barley.....	16,643	21,464
Canned goods (various).....	5,263	12,232	Canned goods (various).....	48,004	71,345
Coal and coke.....	8,030	13,323	Coffee.....	9,773	12,016
Corn.....	13,534	6,233	Cold storage (food products).....	9,546	11,771
Cotton, raw.....	33,284	25,121	Flour.....	9,413	24,259
Iron and steel, manufactures of.....	43,803	58,390	Fruit, dried.....	12,189	13,078
Oils, mineral.....	40,586	27,793	Fruit, fresh.....	13,297	14,408
Paper.....	15,315	18,832	Lumber.....	115,840	167,118
Phosphates.....	15,098	27,784	Metals.....	22,939	40,076
Scrap metal.....	14,882	51,429	Nitrates.....	14,856	25,148
Sugar.....	14,391	44	Oils, mineral.....	341,449	340,225
Sulphur.....	15,797	10,442	Oils, vegetable.....	9,293	12,391
Tinplate.....	9,924	17,312	Ores.....	33,889	13,290
			Sugar.....	105,983	161,740
			Wheat.....	158,000	156,370
			Wool.....	5,886	11,904

NOTE.—Figures indicate tons of 2,240 pounds.

¹ Does not include fresh fruit.

Commodities in Detail

The following statement lists all commodities passing through the Canal during the month of June 1933, as reported in the cargo declarations, showing the movement, by directions, in the United States intercoastal trade and in the total traffic. In the cargo declarations small items are frequently grouped under the designation

of "general cargo;" the statistics are accordingly not precise but are indicative of the kinds and quantity of cargo in transit through the Canal. The figures are for tons of 2,240 pounds:

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Aircraft and parts.....			15	10
Agricultural implements.....	353	158	744	193
Alfalfa meal.....		1,374		1,374
Ammonium compounds.....	231		1,923	
Animal foods.....	160	299	164	399
Apparel, wearing (hats, shoes, clothing, etc.).....	117		132	22
Asbestos.....	170		813	
Asphalt and tar.....	344	106	3,719	783
Automobiles (and autotrucks).....	4,577	27	6,879	38
Automobile parts and accessories.....	956	72	3,143	82
Bananas.....				5,918
Bags and bagging, textile.....	255	104	939	108
Barks, miscellaneous.....		11	107	205
Barley.....				21,464
Beans, edible, dry.....	23	2,221	23	5,987
Beer.....	2,288		2,808	5
Beverages, nonalcoholic.....	749		816	
Bones and bone meal.....			1,474	
Books and printed matter.....	242		267	
Borax.....	20	1,022	20	4,781
Bran and pollards.....			750	2,205
Bricks and tile.....	93		449	
Camphor, crude.....				10
Canned and preserved goods:				
Fish.....	331	9,431	689	15,186
Fruit.....	1,616	22,676	1,713	38,444
Meat.....	21	50	914	436
Milk.....		423	148	663
Soup.....	3,595		3,756	
Vegetables.....	1,322	4,485	1,379	5,106
Miscellaneous and unclassified.....	3,197	10,461	3,633	11,510
Carbon black.....	46		165	
Celite.....		345		345
Cement.....	283		4,566	2
Chalk.....	40		535	
Charcoal.....			40	
Chemicals.....	4,743	1,289	7,068	1,335
Clay, china and fire.....	122		1,895	10
Clay, filtering.....		71		86
Coal.....	2,446		6,262	
Cocoa and cacao beans.....	316		838	1,184
Coconuts and products.....	60	434	132	741
Coffee.....	273	9	6,822	12,016
Coke.....	1,377		7,061	
Cold storage and refrigerated products:				
Dairy products.....			405	4,923
Eggs.....		347		414
Fish.....	18		18	132
Lard.....	100		161	
Meats.....	18		123	6,072
Poultry.....		58		58
Other and unclassified.....		17	5	172
Confectionery.....	1,132		1,198	
Copra.....				5,647
Copra meal and cake.....				153
Corn.....	6,079		6,233	
Cotton, raw.....	269	780	25,121	6,805
Creosote.....				16
Drugs and medicines.....	1,709	112	1,913	229
Dyes.....			906	
Earthenware.....			80	
Eggs, dried.....		50		60
Electrical apparatus and appliances.....	1,589		1,911	13
Explosives.....	73	10	186	10
Extract, quebracho.....			254	
Fertilizers.....	25		544	
Fish, salted or dry cured.....				282
Fish meal.....				662
Floor coverings.....	820	535	880	
Flour.....	594	19,216	1,825	24,259
Fruit, dried.....		7,727	32	13,078
Fruit, fresh.....		2,144	48	14,408
Furniture and household goods.....	488	120	528	123
General.....	33,350	6,453	52,285	14,710
Glass and glassware.....	7,975	49	9,520	233

* Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Glue.....	9	90	183	90
Groceries.....	1,065	4	1,284	4
Guano.....				8,000
Gums.....		72		77
Hair, all kinds.....	155	78	160	81
Hay.....	15	432	15	432
Hemp, unmanufactured.....			32	874
Honey.....		99		228
Hops.....		58		58
Infusorial earth.....		766		953
Iron and steel, manufactures of (structural steel, plates, bars, angles, pipe, etc.).....	37,305	2,047	58,390	2,065
Ivory nuts.....	25	25	100	1,655
Jute, unmanufactured.....				34
Lard substitute.....	82		82	
Lime.....	99	20	142	20
Liquors.....	103		650	25
Lumber (including manufactured mill products).....	1,193	109,235	1,317	167,118
Machinery.....	2,281	250	5,460	337
Malt.....	168		877	
Manufactured goods ¹	3,215	2,143	4,675	2,415
Marble and granite.....	142		142	6
Matches.....	471	245	507	330
Metals:				
Antimony.....				201
Copper.....	80	2,513	1,004	18,565
Gold and silver.....		196	8	942
Iron.....	613	317	897	317
Lead.....		733	181	13,253
Tin.....	141	286	516	1,776
Zinc.....	102		546	4,800
Other and unclassified.....	47		2,222	222
Milk, powdered.....		281	46	1,588
Molasses and syrups.....	175		212	
Nitrates.....	3,381		4,753	25,148
Nuts, edible (including meats).....		141	383	147
Oats.....	97		152	8,948
Oils, mineral:				
Crude.....				113,737
Gas and fuel.....		32,612	9,870	45,911
Gasoline, benzine, and naphtha.....		133,265	84	167,734
Kerosene.....		10,824	125	10,824
Lubricating and greases.....	7,360	311	17,660	502
Other and unclassified.....		1,515	54	1,517
Oils, vegetable:				
Coconut.....			7	6,944
Cottonseed.....	2,809		2,828	9
Linseed.....	77	7	204	7
Olive.....	15	30	159	30
Rapeseed.....			6	35
Wood.....			18	3,218
Other and unclassified.....	545	10	1,460	2,148
Oil, fish.....	100		130	15
Oil, whale.....				60
Oilseeds (cotton, flax, hemp, sesame, rapeseed, etc.).....	206	31	206	1,784
Oilseed cake and meal.....				1,273
Ores:				
Antimony.....				103
Copper.....		500		4,089
Gold and silver.....				2,751
Iron.....	53		53	
Lead.....				848
Manganese.....		400		400
Tin.....				1,912
Other and unclassified.....				3,187
Paints and varnishes.....	139	40	775	108
Paper and paper products ¹	8,317	5,152	18,832	6,772
Paper, scrap.....		707	410	707
Peanuts.....	874	247	874	247
Peas, dry.....		77		721
Peatmoss.....			670	
Phosphates.....	242	130	27,784	179
Porcelainware.....	60	153	130	2,173
Potash.....		1,495	20	1,495
Pyrethrum flowers.....		11		33
Rags and waste.....	113	207	276	292
Railroad material.....	60	30	4,607	30
Rice.....	584	274	1,305	2,604
Rope and twine.....	275	116	1,068	132
Rosin.....	973	162	3,024	162

¹ Except as otherwise classified.

Commodity	United States intercoastal		Total for all trade routes including U.S. intercoastal	
	Atlantic to Pacific	Pacific to Atlantic	Atlantic to Pacific	Pacific to Atlantic
Rubber:				
Manufactured.....	1,071	9	1,459	84
Raw.....			10	232
Scrap.....		27	38	88
Salt.....	76		1,717	1,018
Sand.....			3,043	
Scrap metal.....	340	357	51,429	681
Seeds (except oilseeds).....		142	1,963	226
Shells, oyster.....	415		415	
Silk, raw.....		238		1,460
Skins and hides.....		2,841	112	4,610
Slate.....	85		85	
Soaps and products.....	4,027	101	4,315	253
Soda and sodium compounds.....	818		1,912	
Soy beans.....	188		261	
Sugar.....	18	29,188	44	161,740
Sulphur.....	230		10,442	3,410
Talc.....		159	5	180
Tallow.....		342	54	940
Tea.....			83	201
Textiles ²	5,170	360	9,650	977
Tinplate.....	1,890		17,312	
Tobacco and manufactures.....	1,089	15	2,502	15
Toilet preparations.....	152	10	154	31
Turpentine.....	86		457	
Vegetables, dry ¹		54	63	474
Wall board.....		100		100
Wax, paraffin.....	309		1,179	
Wheat.....		3,414		156,370
Wines.....		419	366	496
Wood pulp.....	312	8,232	4,344	8,841
Wool.....	110	9,349	403	11,904
Total, June 1933.....	174,757	456,380	468,369	1,222,878
Total, June 1932.....	125,143	327,508	367,741	1,036,817
Total, June 1931.....	184,042	461,038	472,778	1,286,198

¹ Except as otherwise classified.² Cotton, silk, wool, rayon goods.

Tanker Traffic

The following tabulation shows the tanker traffic through the Canal during June, 1933, classified according to trade route:

Trade route	Atlantic to Pacific			Pacific to Atlantic		
	No. of ships	Panama Canal net tonnage	Tons of cargo	No. of ships	Panama Canal net tonnage	Tons of cargo
United States intercoastal.....	17	100,459	² 2,500	16	90,963	² 179,001
East coast United States to South America.....	2	13,049		1	5,049	10,281
East coast Canada to South America.....	2	17,602		4	30,880	65,588
West Indies to Balboa.....	1	4,890	9,870			
West Indies to United States.....	1	5,338				
Europe to United States.....	2	15,410		1	5,847	10,786
Europe to South America.....	2	16,412		5	38,345	74,020
East coast United States to Far East.....				1	3,902	² 6,800
Total.....	27	173,160	12,370	28	174,986	346,476

¹ Cottonseed oil.² 712 tons discharged at Cristobal.³ Vegetable oils.

Ships' Chandlery Supplies

Panama Canal Storehouses carry a complete line of ships' chandlery supplies, available for sale to ships at C. I. F. cost plus 25 per cent surcharge which covers local freight, handling, and other costs.

Comparison of Canal Traffic in June 1933, with June Traffic in Previous Years

Calendar year	Month of June			Fiscal year	Average per month for fiscal year		
	Commercial transits	Panama Canal net tonnage	Tons of cargo		Commercial transits	Panama Canal net tonnage	Tons of cargo
1915.....	142	498,084	567,285	1915.....	102	361,197	465,567
1916.....	121	381,256	482,767	1916.....	63	199,687	257,843
1917.....	170	538,614	630,638	1917.....	150	483,213	588,213
1918.....	169	573,944	629,210	1918.....	172	547,839	627,669
1919.....	161	517,442	586,887	1919.....	169	510,416	576,385
1920.....	201	704,712	834,421	1920.....	206	712,170	781,208
1921.....	192	761,477	694,720	1921.....	241	951,323	966,601
1922.....	228	970,713	977,478	1922.....	228	951,455	907,075
1923.....	417	2,035,902	2,096,446	1923.....	331	1,550,482	1,630,656
1924.....	377	1,928,039	2,022,850	1924.....	436	2,179,073	2,249,559
1925.....	368	1,753,327	1,920,323	1925.....	389	1,904,596	1,995,570
1926.....	419	1,990,344	2,134,686	1926.....	433	2,064,549	2,169,787
1927.....	455	2,152,926	2,229,097	1927.....	456	2,185,651	2,312,851
1928.....	481	2,227,865	2,139,565	1928.....	538	2,454,886	2,469,226
1929.....	503	2,352,431	2,424,002	1929.....	534	2,468,483	2,555,250
1930.....	478	2,358,237	2,147,181	1930.....	515	2,498,385	2,502,519
1931.....	400	2,058,546	1,758,976	1931.....	461	2,316,012	2,090,233
1932.....	336	1,743,150	1,404,558	1932.....	376	1,968,785	1,650,667
1933.....	364	1,901,117	1,691,247	1933.....	375	1,901,823	1,514,811

* Canal opened August 15, 1914.

* Average for 10½ months.

Terminal Activities

Ships repaired during the month of June, 1933, numbered 32, including 4 which were drydocked. Fuel oil in the quantity of 204,836 barrels was delivered as bunkers to 85 vessels. Bunker coal amounting to 1,609 tons was delivered to 14 vessels. Sales of commissary supplies to vessels aggregated \$33,281.44.

Cargo Handled at Terminal Ports

	Cristobal	Balboa	Total
Local cargo arriving.....	46,523	43,172	89,695
Local cargo shipped.....	4,299	901	5,200
Cargo received for transshipment.....	26,331	1,691	28,022
Cargo transhipped.....	24,720	1,221	25,941
"Canal Zone for orders" cargo:			
Number of receipts issued.....	102	47	149
Number of releases issued.....	705	252	957
Tons received.....	587	240	827
Tons withdrawn.....	436	235	671

All Vessels Entering and Clearing Port

	Port of Cristobal			Port of Balboa		
	No. of ships	Registered gross tonnage	Registered net tonnage	No. of ships	Registered gross tonnage	Registered net tonnage
<i>Ships entering</i>						
All vessels, including those transiting Canal..	408	2,667,091	1,588,563	384	2,425,025	1,465,969
Vessels entering port but not transiting Canal.	55	332,955	188,570	20	73,570	42,592
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	112	799,993	470,879	88	678,147	399,250
<i>Ships clearing</i>						
All vessels, including those transiting Canal..	407	2,667,920	1,591,695	383	2,414,535	1,464,317
Vessels clearing port but not transiting Canal.	56	326,346	185,011	20	72,686	42,680
Vessels transiting Canal and handling passengers and cargo at terminal ports.....	109	798,928	472,492	86	661,429	389,172

Passengers

Ocean ship passengers disembarking at Cristobal numbered 1,371; embarking, 2,000; at Balboa, 632 disembarking and 823 embarking. Passengers passing through the Canal from the Atlantic to the Pacific numbered 4,165; from the Pacific to the Atlantic, 2,523. Commercial aircraft numbering 38 entered Cristobal, and 97 passengers disembarked; clearances were 40, with 81 passengers embarking. One aircraft entered Balboa, discharging 5 passengers; one aircraft cleared with no passengers embarking.

Movements of Ocean Vessels Through the Panama Canal

From midnight June 24 to midnight July 15, 1933

ATLANTIC TO PACIFIC

Ship	Date arrived	Date cleared	Nationality	Line (Charterer or operator)	Port		Cargo	
					From—	For—	Nature	Tons
Nuevo Panama ²	23	25	Pan.	Hans Elliot	Cristobal, C.Z.	B'ventura, Col.	General	100
Antares ⁶	25	25	Amer.	Edwin M. Chance	Philadelphia, Pa.	Pearl Is., R.P.	Ballast	
Sun ²	25	25	Amer.	Sun Oil Co.	Chester, Pa.	Los Angeles, Cal.	Ballast	
Berganger ²	25	25	Nor.	Intercean Line	Rotterdam, Holl.	Vancouver, B.C.	Passengers	
Edgar F. Luckenbach	25	26	Amer.	Luckenbach-Gulf S.S. Co.	Houston, Texas.	Tacoma, Wash.	General	7,884
Willzipo	26	26	Amer.	Williams S.S. Line	Baltimore, Md.	Seattle, Wash.	General	3,300
City of Pittsburg	26	26	Brit.	Ellerman Lines, Ltd.	Baltimore, Md.	Dairen, China	General	3,424
Sollund	25		Nor.	Panama Mail S.S. Co.	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
Republic ⁴	27	27	Amer.	U.S. Army	Brooklyn, N.Y.	Honolulu, T.H.	General	1,658
Iowan	27	27	Amer.	Amer.-Hawaiian Line	Boston, Mass.	Seattle, Wash.	General	3,441
San Benito	27		Pan.	United Fruit Co.	Boston, Mass.	Pto. Arm'les, R.P.	Ballast	
Real ²	27	28	Pan.	Hans Elliot	Cristobal, C.Z.	Pto. Arm'les, R.P.	General	34
Calí	24	28	Ger.	North German Lloyd	Cristobal, C.Z.	Guayaquil, Ec'd'r	General	400
Nebraska	27	28	Brit.	Royal Mail Line, Ltd.	Rotterdam, Holl.	Vancouver, B.C.	General	1,777
Svealand ²	28	29	Swed.	Ore S.S. Co.	Baltimore, Md.	Cruz Gr'de, Chile	Ballast	
Taihei Maru ²	28	28	Jap.	Mitsui Bussan Kaisha	New York, N.Y.	Kobe, Japan	(¹⁴)	7,365
Fernwood ²	28	29	Nor.	Fern Line	Houston, Texas	Shanghai, China	Cotton, gen.	5,222
Paul Luckenbach	29	29	Amer.	Luckenbach Line	Boston, Mass.	Seattle, Wash.	General	3,466
Felix Luckenbach	28	29	Amer.	Luckenbach Line	Mobile, Ala.	Los Angeles, Cal.	Ballast	
Felix Taussig	28	29	Amer.	McCormick Line	Albany, N.Y.	Seattle, Wash.	Coffee, gen.	4,012
Hoyanger ²	29	29	Nor.	General S.S. Corp.	Buenos Aires, Arg.	Vancouver, B.C.	General	1,905
Pacific Reliance ²	29	30	Brit.	Furness, Withy & Co.	Glasgow, Scot.	Vancouver, B.C.	General	605
J-26 ⁵			Amer.	U.S. Army	Cristobal, C.Z.	Gatun, C.Z.		
President Lincoln	29	30	Amer.	Dollar Line	New York, N.Y.	S. Francisco, Cal.	General	1,546
Virginia	30	1	Amer.	Panama-Pacific Line	New York, N.Y.	S. Francisco, Cal.	General	2,470
Santa Rita ²	29	30	Amer.	Grace Line	New York, N.Y.	Valparaiso, Chile	General	70
Lisbon Maru	29	30	Jap.	Nippon Yusen Kaisha	Boston, Mass.	Yokohama, Japan	(¹⁵)	7,643
Kwansai Maru ²	29	30	Jap.	Osaka Shosen Kaisha	Philadelphia, Pa.	Moji, Japan	(¹⁶)	4,786
Javanese Prince ²	30	30	Brit.	Prince Line, Ltd.	New York, N.Y.	Hongkong, China	General	1,423
Karamea	30	1	Brit.	Shaw, Savill & Albion	London, Eng.	Wellington, N.Z.	Ballast	
Sagona ²	30	30	Nor.	Anglo-Saxon Pet. Co.	Curacao, D.W.I.	Los Angeles, Cal.	Ballast	
Endurance ²	30	30	Pan.	E. Garcia	Cristobal, C.Z.	Balboa, C.Z.	Coconuts	24
Chwiri No. 2 ²			Amer.	F. Ehrman	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
L-53 ¹³			Amer.	U. S. Army	Cristobal, C.Z.	Gatun, C.Z.	Tow'g barge	
Santa Paula	30	1	Amer.	Panama Mail S.S. Co.	New York, N.Y.	Seattle, Wash.	General	2,710
Anthony Johnson ²	30	1	Swed.	Johnson Line	Stockholm, Swed.	Vancouver, B.C.	Coffee, gen.	2,910
Hudiksvall	30	1	Swed.	Beko S.S. Co.	Cartagena, Col.	Corinto, Nica'gua	Ballast	
San Antonio	30	1	Fr.	French Line	Havre, France	Vancouver, B.C.	General	2,122
Acajutla	17	1	Brit.	Pacific Steam Nav. Co.	Cristobal, C.Z.	Cham ico, Guat.	General	966
John Jay	1	4	Amer.	Amer. Tankers Corp.	New York, N.Y.	S. Francisco, Cal.	Sulphur	6,500
Henry S. Grove	1	1	Amer.	Argonaut Line	New York, N.Y.	Seattle, Wash.	Steel, gen.	3,217
S. A. Perkins	1	1	Amer.	Swayne & Hoyt, Inc.	Houston, Texas	Seattle, Wash.	General	4,435
Tainui	1	2	Brit.	Shaw, Savill & Albion	London, Eng.	Auckland, N.Z.	General	2,525
Ontariolite ²	2	2	Brit.	Imperial Oil Co., Ltd.	Montreal, Canada	Talara, Peru	Ballast	
Californian ²	2	2	Amer.	Amer.-Hawaiian Line	Boston, Mass.	Portland, Oreg.	General	2,951
Nuevo Panama ²	1	2	Pan.	Hans Elliot	Cristobal, C.Z.	B'ventura, Col.	General	50
Manizales	30	2	Ger.	Grace Line	Cristobal, C.Z.	Guayaquil, Ec'd'r	General	300
Point Fernin	2	2	Amer.	Swayne & Hoyt, Inc.	Lake Charles, La.	S. Francisco, Cal.	General	3,850
Mobile City	2	2	Amer.	Isthmian Line	Baltimore, Md.	Tacoma, Wash.	Steel, gen.	3,358
Justin	2	2	Ger.	North German Lloyd	Hamburg, Ger.	Vancouver, B.C.	General	3,332
Toba Maru	2	2	Jap.	Nippon Yusen Kaisha	New York, N.Y.	Osaka, Japan	(¹⁷)	7,937
Durazzo	1	2	Ger.	Hamburg-Amer. Line	Cristobal, C.Z.	Tumaco, Col.	General	200
Papoose ²	3	3	Amer.	G.H. Corse, Jr., & Co.	Texas City, Texas	Portland, Oreg.	Gasoline	8,000
City of Elwood ²	3	3	Amer.	Roosevelt Line	Baltimore, Md.	Shanghai, China	General	3,336
Glasgow, Maru	3	3	Jap.	Kokusai Kisen Kaisha	Montreal, Canada	Yawati, Japan	(¹⁸)	7,800
Bralanta ²	3	3	Nor.	Anglo-Saxon Pet. Co.	Curacao, D.W.I.	Tsingtau, China	Kerosene	10,626
Cathwood ²	3	4	Amer.	Union Oil Co.	Fall River, Mass.	Los Angeles, Cal.	Ballast	
Q.M.C. No. 1			Amer.	U.S. Army	Cristobal, C.Z.	Gatun, C.Z.		
Calí	3	4	Ger.	North German Lloyd	Cristobal, C.Z.	Guayaquil, Ec'd'r	General	82
Empire Star	3	4	Brit.	Blue Star Line	Tyne, England	Vancouver, B.C.	Ballast	
Hanley	3	4	Amer.	Amer.-Hawaiian Line	Boston, Mass.	Seattle, Wash.	Ballast	
Gregalia	4	4	Brit.	Donaldson Brothers	Glasgow, Scot.	Vancouver, B.C.	General	990
Fernlane ²	4	4	Nor.	Fern Line	New Orleans, La.	Shanghai, China	(¹⁹)	5,228
San Marcos	4	4	Amer.	Quaker Line	New York, N.Y.	Seattle, Wash.	Gen., lub. oil	2,177
Americeland ²	5	5	Swed.	Ore S.S. Corp.	Baltimore, Md.	Cruz Gr'de, Chile	Ballast	
Somerville ²	4	5	Nor.	A.F. Klaveness & Co.	Baltimore, Md.	Los Angeles, Cal.	Ballast	
Mallard ¹⁰			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
Nebraskan	4	5	Amer.	Amer.-Hawaiian Line	Boston, Mass.	Seattle, Wash.	General	1,973
San Bruno	5	6	Pan.	United Fruit Co.	Boston, Mass.	Pt. Arm'les, R.P.	Ballast	
S-17 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
S-16 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
S-11 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
S-12 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	

¹ Tanker. ² Motor ship. ³ Motor schooner. ⁴ Launch. ⁵ Yacht. ⁶ Submarine. ⁷ Transport. ⁸ Mine sweeper. ⁹ Barge. ¹⁰ General, nitrates, phosphate. ¹¹ Phosphate rock and general. ¹² Scrap, copper, autos, soda ash, general. ¹³ Cotton, scrap iron, fertilizers. ¹⁴ Scrap iron, asbestos, zinc. ¹⁵ Cotton, spelter, general.

ATLANTIC TO PACIFIC—Continued

Ship	Date arrived	Date cleared	Nationality	Line (Charterer or operator)	Port		Cargo	
					From—	For—	Nature	Tons
S-15 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
S-13 ⁷			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
West Cactus	5	5	Amer.	McCormick S.S. Co.	Bahia Bla'ca, Arg.	Vancouver, B.C.	Coffee, gen.	2,678
Adrastus	5	5	Brit.	Alfred Holt & Co.	New York, N.Y.	Yokohama, Japan	General	4,033
Europa ⁹	5	5	Dan.	East Asiatic Co.	Copenhagen, Den.	Vancouver, B.C.	General	199
Christy Payne ²	5	5	Amer.	Standard Ship. Co.	Baltimore, Md.	Talara, Peru	Ballast	
Retriever ¹³			Amer.	U.S. Navy	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
Almelo	5	6	Dutch	Royal Neth. S.S. Co.	Amsterdam, Holl.	Pisco, Peru	Ballast	
Susan V. Luckenbach	6	6	Amer.	Luckenbach Line	Boston, Mass.	Seattle, Wash.	General	2,474
Harpoon	6	6	Amer.	Shepard S.S. Co.	Boston, Mass.	Seattle, Wash.	General	6,853
Santa Barbara ²	6	7	Amer.	Grace Line	New York, N.Y.	San Ant'io, Chile.	General	2,657
Cellina ²	6	7	Ital.	Nav. Lib. Triestina	Trieste, Italy	Vancouver, B.C.	General	2,526
Pres. Van Buren	7	7	Amer.	Dollar Line	New York, N.Y.	S. Francisco, Cal.	General	3,497
Childs ⁹	7	11	Amer.	U.S. Navy	Norfolk, Va.	San Diego, Calif.	Ballast	
Barry ⁹	7	11	Amer.	U.S. Navy	Norfolk, Va.	San Diego, Calif.	Ballast	
Williamson ⁹	7	11	Amer.	U.S. Navy	Norfolk, Va.	San Diego, Calif.	Ballast	
Tai Yin ²	6	7	Nor.	Barber Line	New York, N.Y.	Shanghai, China	General	2,149
El Aleto ²	7	7	Brit.	Anglo-Ecuad. Oil Co.	Philadelphia, Pa.	La Libertad, Ec.	Ballast	
Franz Klasen ²	7	7	Danz.	Baltic-Amer. Pet. Co.	Rotterdam, Holl.	Talara, Peru	Ballast	
Vancouver Maru	7	7	Jap.	Kokusai Kisen Kaisha	Chester, Pa.	Yawata, Japan	(*)	5,855
Villanger ²	7	7	Nor.	Intercean S.S. Corp.	Rotterdam, Holl.	Vancouver, B.C.	Ballast	
Canadian Scottish	7	8	Brit.	Can. Nat. Steamships	Montreal, Canada	Sydney, Aust'lia	General	1,851
Canada ²	8	8	Swed.	Johnson Line	Malmo, Sweden	Honolulu, T.H.	General	4,844
Cerigo	5	8	Ger.	Hamburg-Amer. Line.	Cristobal, C.Z.	Guayaquil, Ec'd'r.	General	100
Athelviscount ²	8	8	Brit.	Asano Busan Co.	Falmouth, Eng.	Los Angeles, Cal.	Ballast	
Emergency Aid	8	9	Amer.	Pac.-Arg.-Brazil Line.	Buenos Aires, Arg.	S. Francisco, Cal.	(*)	3,615
Jefferson Myers	8	8	Amer.	States S.S. Co.	Philadelphia, Pa.	Portland, Oreg.	General	2,153
Nelson Traveler	8	8	Amer.	Nelson Line	Albany, N.Y.	Seattle, Wash.	General	3,214
Santa Ana	8	9	Amer.	Panama Mail S.S. Co.	New York, N.Y.	S. Francisco, Cal.	Gen., coffee	2,293
Real ³	4	8	Pan.	Hans Elliot	Cristobal, C.Z.	Pto. Arm'as, R.P.	General	38
Heffron	9	9	Amer.	Robert C. Herd	New York, N.Y.	Tacoma, Wash.	Steel, gen.	3,100
Reina del Pacifico	8	9	Brit.	Pacific Steam Nav. Co.	Liverpool, Eng.	Talcahuano, Chile	General	1,911
Pan Aruba ²	8	9	Nor.	Standard Ship. Co.	Talara, Peru	Talara, Peru	Ballast	
Eleanor Christenson	8	9	Amer.	Arrow Line	Baltimore, Md.	Seattle, Wash.	General	3,887
Vermar	9	9	Amer.	Calmar Line	Baltimore, Md.	Seattle, Wash.	Steel, gen.	7,820
Panaman	9	9	Amer.	Amer.-Hawaiian Line.	Boston, Mass.	Portland, Oreg.	General	2,750
Eisenach	8	9	Ger.	North German Lloyd	Hamburg, Ger.	Corral, Chile	General	2,857
Steel Traveler	9	9	Amer.	Isthmian S.S. Line	Baltimore, Md.	Singapore, St. Set.	Tinplate, gen.	7,161
Nuevo Panama ²	8	10	Pan.	Hans Elliot	Cristobal, C.Z.	B'ventura, Col.	Gen., gasoline	135
Dilworth ³	9	9	Amer.	Shell E.P. Prod. Corp.	Baltimore, Md.	Los Angeles, Cal.	Ballast	
Lena Luckenbach	9	10	Amer.	Luckenbach Line	Mobile, Ala.	Seattle, Wash.	General	6,520
Chekink ¹⁰		10	Amer.	U.S. Navy	Cristobal, C.Z.	Los Angeles, Cal.	Ballast	
Chester Sun ²	10	10	Amer.	Sun Oil Co.	Chester, Pa.	Los Angeles, Cal.	Ballast	
Herman F. Whiton	10	10	Amer.	Texas Gulf Sul. Co.	Galveston, Texas	Tacoma, Wash.	Sulphur	7,425
Damsterdyk	10	11	Dutch	Holland-Amer. Line.	Rotterdam, Holl.	Vancouver, B.C.	General	1,360
Willkeno	11	11	Amer.	Williams S.S. Line	Baltimore, Md.	Seattle, Wash.	General	2,161
San Francisco ²	10	11	Ger.	Hamburg-Amer. Line.	Hamburg, Ger.	Vancouver, B.C.	General	2,234
Durazzo	10	11	Ger.	Hamburg-Amer. Line.	Cristobal, C.Z.	Guayaquil, Ec'd'r.	General	237
Deroche ²	11	12	Amer.	Union Oil Co.	Tiverton, R.I.	Los Angeles, Cal.	Ballast	
Absaroka	11	11	Amer.	McCormick S.S. Co.	Philadelphia, Pa.	Tacoma, Wash.	(*)	3,577
S. C. T. Dodd ²	11	12	Amer.	Shell Oil Co.	Fall River, Mass.	Los Angeles, Cal.	Ballast	
Hagan ²	11	12	Amer.	Shell Oil Co.	Wilmington, N.C.	Los Angeles, Cal.	Ballast	
San Angelo	11	12	Amer.	Quaker S.S. Line	Chester, Pa.	Los Angeles, Cal.	Ballast	
San Gil	12	12	Pan.	United Fruit Co.	Boston, Mass.	Pto. Arm'as, R.P.	General	
Real ³	11	12	Pan.	Hans Elliot	Cristobal, C.Z.	Pedregal, R.P.	Cement	43
Knut Nelson ²	12	12	Nor.	Fred Olsen & Co.	Oslo, Norway	Vancouver, B.C.	General	2,963
Texan	12	12	Amer.	Amer.-Hawaiian Line.	Boston, Mass.	Seattle, Wash.	General	2,670
Heranger ²	12	13	Nor.	Westfal Larsen & Co.	Rotterdam, Holl.	Vancouver, B.C.	Passengers	
Chilore	13	13	Amer.	Ore S.S. Corp.	Baltimore, Md.	Cruz Gr'de, Chile	Ballast	
C.O. Stillman ²	13	13	Brit.	International Pet. Co.	Halifax, N.S.	Talara, Peru	Ballast	
Robert Luckenbach	13	13	Amer.	Luckenbach Line	Boston, Mass.	Tacoma, Wash.	General	2,988
Laganbank ²	13	13	Brit.	Andrew Weir & Co.	Philadelphia, Pa.	Shanghai, China	General	2,257
Northern Sun ²	13	13	Amer.	Sun Oil Co.	Baltimore, Md.	Los Angeles, Cal.	Ballast	
Rangitane ²	13	14	Brit.	N. Z. Shipping Co.	London, Eng.	Wellington, N.Z.	General	6,390
President McKinley	13	14	Amer.	Dollar Line	New York, N.Y.	Manila, P.I.	Autos., gen.	1,858
Alkmaar	13	14	Neth.	Royal Neth S.S. Co.	Hamburg, Ger.	Talcahuano, Chile	General	840
Pensacola ¹²	14	16	Amer.	U.S. Navy	H'pton R'ds, Va.	San Diego, Cal.	Ballast	
Canadian Highlander	13	14	Brit.	Can. Nat. Steamships	Montreal, Canada	Brisbane, Aust.	(*)	1,121
Selma City	13	14	Amer.	Isthmian S.S. Lines	Mobile, Ala.	Manila, P.I.	General	6,384
Trojan Star	13	14	Brit.	Blue Star Line	Liverpool, Eng.	Vancouver, B.C.	Ballast	
Silversand ¹²	14	14	Brit.	Kerr S.S. Co.	Philadelphia, Pa.	Hongkong, China	Gen., lub. oil	1,857
Pennsylvania	14	14	Amer.	Panama-Pacific Line	New York, N.Y.	S. Francisco, Cal.	General	2,107

¹ Tanker. ² Motor ship. ³ Motor schooner. ⁴ Submarine. ⁵ Destroyer. ⁶ Mine sweeper. ⁷ Cruiser.
⁸ Crane. ⁹ Scrap steel, cotton, spelter. ¹⁰ Coffee, fertilizer, canned meats. ¹¹ Iron, steel, general. ¹² Paper, autos, general.

ATLANTIC TO PACIFIC—Continued

Ship	Date arrived	Date cleared	Nationality	Line * (Charterer or operator)	Port		Cargo	
					From—	For—	Nature	Tons
Piako	14	14	Brit...	N.Z. Shipping Co.	Cardiff, Wales...	Auckland, N.Z.	Gen., case oil	2,832
Sveadrott ²	14	14	Swed.	W. L. Comyn & Sons.	Goth'burg, Swed.	Vancouver, B.C.	Ballast	
Sollund	11	14	Nor.	Panama Mail S.S. Co.	Cristobal, C.Z.	(¹³)	Ballast	
Pacific Ranger ²	13	15	Brit...	Furness Withy & Co.	Glasgow, Scot.	Vancouver, B.C.	Gen., oils	1,035
Sambu ²	13		Pan.	Hans Elliot.	Cristobal, C.Z.	Balboa, C.Z.	Ballast	
Santa Rosa	14	15	Amer.	Panama Mail S.S. Co.	New York, N.Y.	Seattle, Wash.	General	5,095
Salvador	1	15	Brit.	Pacific Steam Nav. Co.	Cristobal, C.Z.	Champ'co, Guat.	General	600
Sunoil ²	14	15	Amer.	Sun Oil Co.	Chester, Pa.	Los Angeles, Cal.	Ballast	
New Westminster City.	15	15	Brit.	Reardon Smith Line.	Houston, Texas.	Shanghai, China.	Cotton	6,166
Calgarolite ²	15	15	Brit...	Imperial Oil Co.	Montreal, Canada	Talara, Peru	Ballast	
Orville Harden ²	15	15	Danz.	W. Tankschiff Rhed'i.	Hamburg, Ger.	Talara, Peru	Ballast	
Hawaiian	15	15	Amer.	Amer.-Hawaiian Line.	Boston, Mass.	Portland, Oreg.	General	1,941
San Vincente	15	15	Amer.	Quaker S.S. Line	New York, N.Y.	Seattle, Wash.	General	3,026
Mahana	15	15	Brit.	Shaw, Savill & Albion	London, Eng.	Bluff, N.Z.	General	2,648
Santa Olivia	15	15	Amer.	Grace Line.	New York, N.Y.	Valparaiso, Chile.	General	202
Point Salinas	15	15	Amer.	Swayne & Hoyt	Houston, Texas.	Seattle, Wash.	General	4,955
Birmingham City.	15	15	Amer.	Isthmian S.S. Lines.	Baltimore, Md.	Seattle, Wash.	General	4,890

PACIFIC TO ATLANTIC

Northern Sun ²	25	25	Amer.	Sun Oil Co.	Los Angeles, Cal.	Perth A'boy, N.J.	Gasoline	13,560
Hegira	24	25	Amer.	Hegira S.S. Co.	Everett, Wash.	Philadelphia, Pa.	Lumber	9,279
Sollund	24	26	Nor.	Panama Mail S.S. Co.	San Jose, Guat.	Cristobal, C.Z.	Coffee, gen.	454
San Gil	25	25	Pan.	United Fruit Co.	Pto. Arm'les, R.P.	Boston, Mass.	Bananas	1,104
Montanan	25	25	Amer.	Amer.-Hawaiian Line.	Portland, Oreg.	Boston, Mass.	Gen., lumber	6,518
Pres. McKinley	25	25	Amer.	Dollar Line.	S. Francisco, Cal.	New York, N.Y.	General	3,848
San Bernardino	26	26	Amer.	Quaker Line	Portland, Oreg.	Philadelphia, Pa.	Gen., lumber	7,617
Fernbrook ²	26	27	Nor.	Fearnley & Eger	Manila, P. I.	East coast U.S.A.	Sugar	8,055
Pennsylvania	26	27	Amer.	Panama-Pacific Line.	S. Francisco, Cal.	New York, N.Y.	General	6,389
California	27	27	Ital.	Nav. Lib. Triestina.	Vancouver, B.C.	Genoa, Italy	General	9,269
Sunoil ²	26	27	Amer.	Sun Oil Co.	Los Angeles, Cal.	Chester, Pa.	Gasoline	13,523
Pacific Commerce ²	27	27	Brit.	Canadian Transp. Co.	Vancouver, B.C.	Avonmouth, Eng.	(¹³)	8,032
Real ²	27	28	Pan.	Hans Elliot.	Darien, R.P.	Cristobal, C.Z.	Bananas	40
Lillian Luckenbach	27	27	Amer.	Luckenbach Line	Seattle, Wash.	Boston, Mass.	Gen., lumber	6,846
Chateau Thierry	24	28	Amer.	U.S. Army.	Balboa, C.Z.		Supplies	
Harpalion	27	27	Brit.	J. & C. Harrison	Vancouver, B.C.	London, Eng.	(¹⁴)	8,436
Point Brava	27	27	Amer.	Swayne & Hoyt	S. Francisco, Cal.	New Orleans, La.	Gen., lumber	5,691
Winslow			Amer.	U.S. Army.	Balboa, C.Z.	Ped. Miguel, C.Z.		
Eastern Sun ²	27	28	Amer.	Sun Oil Co.	Los Angeles, Cal.	Chester, Pa.	Gasoline	13,285
Minnesota	28	28	Amer.	Amer.-Hawaiian Line.	Seattle, Wash.	Boston, Mass.	Gen., lumber	6,585
Wind Rush	28	28	Amer.	Shepard S.S. Co.	Seattle, Wash.	Boston, Mass.	Lumber, gen.	7,500
Seattle ²	28	28	Ger.	Hamburg-Amer. Line.	Vancouver, B.C.	Hamburg, Ger.	General	8,198
S-17 ²			Amer.	U.S. Navy	Balboa, C.Z.	Cristobal, C.Z.		
Ionic	28	28	Brit.	Shaw, Savill & Albion	Auckland, N.Z.	London, Eng.	Frozen, gen.	4,368
Bolivar ²			Amer.	J.J. Hardigan	Balboa, C.Z.	Cristobal, C.Z.	Ballast	
Balboa ²	28	30	Swed.	Johnson Line.	Honolulu, T.H.	Goth'burg, Swed.	General	8,313
E.T. Bedford ²	29	29	Amer.	Standard Ship Co.	Talara, Peru	Halifax, N.S.	Crude oil	15,000
Phoenix ²	29	29	Amer.	Hartol Products Corp.	Los Angeles, Cal.	New York, N.Y.	Gasoline	8,182
Sutherland	29	29	Amer.	Chas. Nelson Co.	Pt. Angeles, Wash.	New York, N.Y.	Lumber, pulp	6,457
Hindanger ²	29	29	Nor.	Westfal Larsen Co.	Vancouver, B.C.	Rotterdam, Holl.	Wheat, gen.	6,940
Langiebrook	29	30	Brit.	F. Carrick & Co.	Ant'fagasta, Chile	Azores ¹⁴	Nitrates	7,600
Santa Elisa	29	30	Amer.	Grace Line.	S. Francisco, Cal.	New York, N.Y.	General	1,640
Portmar	29	30	Amer.	Calmar S.S. Corp.	Portland, Oreg.	Boston, Mass.	Lumber	7,000
F.H. Bedford, Jr. ²	30	30	Danz.	Agwi-Petroleum Corp.	Talara, Peru	Fawley, Eng.	Crude oil	16,446
District of Columbia ²	29	30	Amer.	The Texas Co.	Los Angeles, Cal.	Providence, R.I.	Fuel oil	11,130
Takaoka Maru	30	30	Jap.	Nippon Yusen Kaisha	Manila, P.I.	New York, N.Y.	Sugar, gen.	9,198
Manizales	30	2	Ger.	Grace Line.	Guayaquil, Ec'd'r	Cristobal, C.Z.	General	983
Nuevo Panama ²	30	2	Pan.	Hans Elliot.	B'ventura, Col.	Cristobal, C.Z.	Coffee, drums	207
Salvador	30		Brit.	Pacific Steam Nav. Co.	Cham'co, Guat.	Cristobal, C.Z.	General	569
Mauna Ala	30	1	Amer.	Matson Nav. Co.	Honolulu, T.H.	New Orleans, La.	Sugar	8,320
Winnipeg	30	2	Fr.	French Line	Vancouver, B.C.	Le Havre, France	General	7,076
West Camargo	30	1	Amer.	McCormick S.S. Co.	Powell Riv., B.C.	Rosario, Arg.	Gen., lumber	4,983
Janeta	1	1	Brit.	Maclay & McIntyre.	Vancouver, B.C.	Glasgow, Scot.	General	8,634
Durazzo	1	2	Ger.	Hamburg-Amer. Line.	Guayaquil, Ec'd'r	Cristobal, C.Z.	General	1,192
Hokuroku Maru	30	2	Jap.	Osaka Shosen Kaisha.	Cebu, P.I.	New York, N.Y.	General	7,297
Santa Inez ²	1	1	Amer.	Grace Line.	Valparaiso, Chile.	New York, N.Y.	(¹⁷)	3,769
Remuera	1	1	Brit.	N.Z. Shipping Co.	Auckland, N.Z.	London, Eng.	Frozen, gen.	5,079
Ward ²	2	2	Amer.	Roosevelt S.S. Co.	Manila, P.I.	New York, N.Y.	Sugar, hump.	8,194
San Lucas	2	2	Amer.	Pacific-Atlantic Corp.	Longview, Wash.	New York, N.Y.	Lumber, gen.	7,054
San Benito	2	2	Pan.	United Fruit Co.	Pto. Arm'les, R.P.	Boston, Mass.	Bananas	1,275
Alaskan	2	2	Amer.	Amer.-Hawaiian Line.	Portland, Oreg.	Boston, Mass.	Gen., lumber	6,578
Titania ²	2	2	Nor.	W.L. Comyn & Sons.	Brit. Beach, B.C.	Antwerp, Belg'm.	General	6,945
Sveve ²	2	2	Nor.	Wilh. Jebsen.	Los Angeles, Cal.	London, Eng.	Gasoline	8,956
Vestvard ²	2	2	Nor.	Lauritz Kloster	Iiquique, Chile.	Azores ¹⁴	Nitrates	7,120

² Tanker. ³ Motor ship. ⁴ Motor schooner. ⁵ Launch. ⁷ Submarine. ¹³ San Juan del Sur, Nicaragua.¹⁴ For orders. ¹⁵ Wheat, lumber, lead. ¹⁶ Lumber, wheat, salmon. ¹⁷ General, nitrates, cotton.

PACIFIC TO ATLANTIC—Continued

Ship	Date arrived	Date cleared	Nationality	Line (Charterer or operator)	Port		Cargo	
					From—	For—	Nature	Tons
Astrolabe.....	2	3	Fr.....	Messageries Marit'es.	Noumea, N. Caled.	Marseilles, France	General.....	2,521
Calif.....	2	3	Ger.....	North German Lloyd.	B'ventura, Col.	Cristobal, C.Z.	General.....	502
Ryoyo Maru ²	2	3	Jap.....	Kawasaki K. Kaisha.	Kobe, Japan.....	Norfolk, Va.....	General.....	2,657
Santa Clara Valley ²	3	3	Brit.....	Reardon-Smith Line.	Vancouver, B.C.	Liverpool, Eng.	General.....	7,820
Orduna.....	3	3	Brit.....	Pacific Steam Nav.Co.	Talcahuano, Chile	Liverpool, Eng.	General.....	6,530
Santa Elena.....	3	3	Amer.....	Grace Line.....	Seattle, Wash.....	New York, N.Y.	Coffee, gen.....	3,124
Sesostri.....	3	4	Ger.....	Hamburg-Amer. Line.	Valparaiso, Chile.	Hamburg, Ger.....	General.....	5,175
Covena.....	3	4	Amer.....	Hammond Lumber Co.	Los Angeles, Cal.	Tampa, Fla.....	Piling, steel.....	3,225
Dorothy Cahill.....	4	4	Amer.....	Arrow Line.....	Grays Har., W'sh.	Baltimore, Md.....	Lumber.....	7,350
Jane Christenson.....	4	4	Amer.....	McCormick S.S. Co.	Pt. Town'd, W'sh.	Wilmington, Del.	Lumber.....	6,760
Soloy ²	4	4	Nor.....	Fern Line.....	Manila, P.I.....	East coast U.S.A.	Sugar.....	7,500
Niel Maersk ²	3	4	Dan.....	A. P. Moller.....	Manila, P.I.....	Savannah, Ga.....	General.....	7,526
Horace Luckenbach ²	4	4	Amer.....	Luckenbach Line.....	Seattle, Wash.....	Boston, Mass.....	Lumber, gen.....	7,652
Jeff Davis ²	3	4	Amer.....	Amer.-Pioneer Line.	Davao, P.I.....	New York, N.Y.	General.....	7,020
Real ²	4	4	Pan.....	Hans Elliot.....	Darien, R.P.....	Cristobal, C.Z.	Bananas.....	42
Endurance ²	4	4	Pan.....	Esteban Garcia.....	Panama, R.P.....	Colon, R.P.....	(¹).....	5
Santa Clara.....	4	5	Amer.....	Grace Line.....	San Antonio, Chile	New York, N.Y.	General.....	2,650
California Standard ²	4	5	Amer.....	Standard Oil of Calif.	Los Angeles, Cal.	London, Eng.....	Gasoline.....	15,383
Mexican.....	4	5	Amer.....	Amer.-Hawaiian Line.	Tacoma, Wash.....	Boston, Mass.....	Gen., lumber	8,393
Lochgoil ²	5	5	Brit.....	Royal Mail Lines.....	Vancouver, B.C.	Rotterdam, Holl.	General.....	9,350
Susan Maersk.....	5	5	Dan.....	A. P. Moller.....	Mazatlan, Mexico	Santander, Spain.	Chick peas.....	3,518
Fernhill ²	5	6	Nor.....	Fern Line.....	Manila, P.I.....	East coast U.S.A.	Sugar.....	7,000
Cerigo.....	5	6	Ger.....	Hamburg-Amer. Line.	Guayaquil, Ec'd'r	Cristobal, C.Z.	General.....	1,093
Henderson.....	4	7	Amer.....	U.S. Navy.....	Mare Island, Cal.	Norfolk, Va.....	Supplies.....	544
Norman Star.....	5	6	Brit.....	Blue Star Line.....	Seattle, Wash.....	Newcastle, Eng.	Fruit, gen.....	5,101
Atlantic.....	5	6	Amer.....	Argonaut S.S. Line.	Seattle, Wash.....	New York, N.Y.	Lumber, gen.....	7,267
San Clemente.....	6	6	Amer.....	Quaker Line.....	Portland, Oreg.....	Philadelphia, Pa.	Lumber, gen.....	6,768
Antietam ²	6	7	Amer.....	Shell Petroleum Co.	Los Angeles, Cal.	Baltimore, Md.....	Naphtha.....	9,310
Steel Inventor.....	7	7	Amer.....	Isthmian S.S. Co.	Kanapali, T.H.....	Baltimore, Md.....	Sugar, fruit.....	7,784
Forbes Hauptman.....	7	7	Amer.....	McCormick S.S. Co.	Pt. Town'd, W'sh.	New York, N.Y.	Lumber, gen.....	7,898
Herman Frasch.....	7	7	Amer.....	Dutton Lumber Corp.	Los Angeles, Cal.	Po'keepsie, N.Y.	Lumber.....	5,500
Benjamin Franklin ²	7	8	Nor.....	Fred Olsen & Co.....	Vancouver, B.C.	Oslo, Norway.....	Wheat, gen.....	7,250
Bennekom.....	8	8	Dutch.	Royal Neth. S.S. Co.	Lebu, Chile.....	Hamburg, Ger.....	General.....	8,150
Orazio ²	8	9	Ital.....	Italian Line.....	Valparaiso, Chile.	Genoa, Italy.....	General.....	3,063
Orla II ²	7	8	Nor.....	Bergvalls Redert.	Manila, P.I.....	East coast U.S.A.	Sugar.....	5,000
Schwaben.....	8	9	Ger.....	North German Lloyd.	Vancouver, B.C.	Bremen, Ger.....	Lumber, gen.....	8,786
Ullstad.....	8	9	Nor.....	Prebensen & Blakstad	Cebu, P.I.....	New York, N.Y.	Copra.....	4,450
Nuevo Panama ²	8	9	Pan.....	Hans Elliot.....	B'ventura, Col.....	Cristobal, C.Z.	Coffee.....	193
Cape Comorin.....	8	9	Brit.....	Lyle Shipping Co.	Taltal, Chile.....	Azores ¹³	Nitrates.....	8,100
Point Gorda.....	8	8	Amer.....	Swayne & Hoyt.....	B'ventura, Col.....	New Orleans, La.	Ballast.....	.....
Comerie.....	8	8	Brit.....	Andrew Weir & Co.	Iloilo, P.I.....	East coast U.S.	Sugar.....	9,000
Southern Sun ²	8	9	Amer.....	Sun Oil Co.....	Los Angeles, Cal.	Marcus Hook, Pa.	Gasoline.....	13,631
Antares ²	6	25	9 Amer.	Edwin M. Chance.....	Balboa, C.Z.....	Philadelphia, Pa.	Ballast.....	.....
President Wilson.....	9	9	Amer.....	Dollar Line.....	S. Francisco, Cal.	New York, N.Y.	General.....	4,964
Silvermaple ²	8	9	Brit.....	Silver Line.....	Portland, Oreg.....	Calcutta, India.	General.....	4,623
San Bruno.....	9	9	Pan.....	United Fruit Co.	Pto. Arm'les, R.P.	Boston, Mass.....	Bananas.....	850
Dorothy Luckenbach ²	8	9	Amer.....	Luckenbach Line.....	Seattle, Wash.....	Boston, Mass.....	Lumber, gen.....	8,823
Cape Ortelag.....	9	9	Brit.....	Duncan Fox & Co.....	Salaverry, Peru.....	Liverpool, Eng.	Sugar.....	7,765
Democracy.....	9	9	Amer.....	Nelson S.S. Co.....	Seattle, Wash.....	New York, N.Y.	Lumber, gen.....	6,300
Romey.....	10	10	Brit.....	Anglo-San. Ship. Co.	N. West'er, B.C.	Liverpool, Eng.	Lumber, gen.....	9,500
Durazzo.....	10	11	Ger.....	Hamburg-Amer. Line.	Tumaco, Col.....	Cristobal, C.Z.	General.....	604
Pennsylvania.....	10	10	Amer.....	Amer.-Hawaiian Line.	Portland, Oreg.....	Boston, Mass.....	Gen., lumber	6,797
Constance Chandler.....	10	10	Amer.....	Arrow Line.....	Seattle, Wash.....	Baltimore, Md.....	Lumber, gen.....	6,764
California.....	10	11	Amer.....	Panama-Pacific Line.	S. Francisco, Cal.	New York, N.Y.	General.....	6,431
Willfarlo.....	11	11	Amer.....	Amer.-Hawaiian Line.	Eureka, Calif.....	New York, N.Y.	Lumber, gen.....	5,542
Real ²	11	12	Pan.....	Hans Elliot.....	Darien, R.P.....	Cristobal, C.Z.	Bananas.....	32
Point Sur.....	10	12	Amer.....	Gulf-Pac. Mail Line.	Portland, Oreg.....	Lake Charles, La.	(¹⁴).....	3,166
Cortona.....	11	11	Brit.....	Donaldson Line.....	Victoria, B.C.....	Glasgow, Scot.....	General.....	5,011
Bonington Court ²	11	11	Brit.....	Canadian Transp. Co.	Vancouver, B. C.	London, Eng.....	General.....	8,668
Hakubasan Maru ²	11	12	Jap.....	Mitsui & Co.....	Iloilo, P.I.....	New York, N.Y.	General.....	7,433
Point Palmas.....	11	12	Amer.....	Swayne & Hoyt.....	Portland, Oreg.....	Mobile, Ala.....	General.....	5,425
Sollund.....	11	12	Nor.....	Panama Mail S.S. Co.	Acajutla, Sal'dor.	Cristobal, C.Z.	Coffee, bal'm	408
Yuri Maru.....	11	12	Jap.....	Kokusai Kisen Kaisha	Iloilo, P.I.....	New Orleans, La.	Sugar.....	9,000
Florence Luckenbach ²	11	12	Amer.....	Luckenbach Line.....	Portland, Oreg.....	Mobile, Ala.....	Lumber, gen.....	5,531
Hudiksvall.....	12	12	Swed.....	Baku Rederi.....	Corinto, Nica'gua	Baltimore, Md.....	Log wood.....	475
Tamaroa.....	12	13	Brit.....	Shew, Savell & Albion	Wellington, N.Z.	London, Eng.....	General.....	4,724
Amerika ²	12	13	Dan.....	East Asiatic Co.	N. West'er, B.C.	Copenhagen, Den.	General.....	8,447
Pacific Shipper ²	13	13	Brit.....	Furness Withy & Co.	Vancouver, B.C.	Manchester, Eng.	General.....	7,658
Sambu ²	13	14	Pan.....	Hans Elliot.....	Panama, R.P.....	Cristobal, C.Z.....	Drums.....	10
Atlanta City.....	13	13	Amer.....	Isthmian S.S. Lines.	Port Allen, T.H.	Boston, Mass.....	Sugar.....	8,550

¹ Tanker. ² Motor ship. ³ Motor schooner. ⁶ Yacht. ¹³ For orders. ¹⁴ Cocoa, plantains. ¹⁵ Wheat, flour, copra.

PACIFIC TO ATLANTIC—Continued

Ship	Date arrived	Date cleared	Nationality	Line (Charterer or operator)	Port		Cargo	
					From—	For—	Nature	Tons
Baron Herries....	13	13	Brit...	H. Hogarth & Sons...	Guanape Is., Peru	Jacksonville, Fla.	Guano.....	3,500
Titanian.....	13	13	Brit...	W. L. Comyn & Sons.	Vancouver, B.C.	Rotterdam, Holl.	Lumber, gen.	8,031
West Ivis.....	13	13	Amer...	McCormick S.S. Co.	S. Francisco, Cal.	Rosario, Arg....	Gen., lumber	4,578
Santa Teresa....	13	14	Amer...	Grace Line.....	S. Francisco, Cal.	New York, N.Y.	Coffee, gen...	1,755
Mabriton.....	13	13	Brit...	R. Dale & Co.....	Vancouver, B.C.	London, Eng....	Wheat, gen...	9,747
Dakoton.....	13	13	Amer...	Amer.-Hawaiian Line.	Seattle, Wash...	Boston, Mass....	General.....	7,125
Teal ¹.....	.....	.....	Amer...	P.A. White.....	Balboa, C.Z....	Cristobal, C.Z...	Ballast.....	.....
Sanyo Maru ²	13	14	Jap...	Osaka Shosen Kaisha.	Hongkong, China	Baltimore, Md...	General.....	4,493
Manizales.....	13	16	Ger...	Grace Line.....	Guayaquil, Ec'd'r	Cristobal, C.Z...	Coffee, tagua.	713
W. S. Miller ¹	13	14	Amer...	Shell Oil Co.....	Los Angeles, Cal.	Fall River, Mass.	(³)	9,426
Christy Payne ¹	13	14	Amer...	Standard Ship. Co.	Talara, Peru....	Halifax, N.S....	Crude oil....	11,852
Daylight ¹	14	14	Amer...	Stand. Vacuum Tr'g.	Los Angeles, Cal.	New York, N.Y.	Gasoline.....	12,953
Mercury Sun ²	14	14	Amer...	Shell Oil Co.....	Los Angeles, Cal.	Perth Amb'y, N.J.	Gasoline.....	13,520
Edward Luckenbach.	14	14	Amer...	Luckenbach Line...	Seattle, Wash...	Boston, Mass....	Lumber, gen.	7,164
Alda.....	14	15	Ger...	North German Lloyd.	Valparaiso, Chile.	Bremen, Ger....	General.....	5,850
W. S. Rheem ¹	14	14	Amer...	Sun Oil Co.....	Los Angeles, Cal.	Philadelphia....	Gasoline.....	13,868
Benwyvis.....	14	15	Brit...	Ben Line.....	Victoria, B.C....	Hull, Eng....	Lumber, gen.	8,260
Hofuku Maru....	14	15	Jap...	Kokusai Kisen Kaisha	Osaka, Japan....	East coast U.S..	Sugar.....	7,550
Memphis City....	15	15	Amer...	Isthmian S.S. Lines.	Vancouver, B.C.	Avonmouth, Eng.	Lumber, gen.	7,794
Parinas.....	15	16	Peru...	Peruvian Navy....	Callao, Peru....	Plymouth, Eng..	(³)	4,000
El Aleto ¹	15	15	Brit...	Anglo Ecuad. Oil Co.	La Libertad, Ecu.	Philadelphia, Pa.	Crude oil....	10,281
Cali.....	15	.....	Ger...	North German Lloyd.	Guayaquil, Ec'd'r	Cristobal, C.Z...	General.....	572
Nuevo Panama ¹	15	16	Pan...	Hans Elliot.....	B'ventura, Col...	Cristobal, C.Z...	Coffee, gen...	214
Leader ¹.....	.....	.....	Amer...	Payne & Wardlaw...	Balboa, C.Z....	Cristobal, C.Z...	Ballast.....	.....

¹ Tanker.² Motor ship.³ Launch.⁴ Gasoline and kerosene.⁵ Fuel and Diesel oil.

Navigation Regulations—Preference for Passenger Vessels in Transiting Canal

Regulation 5.1 of the "Rules and Regulations Governing Navigation of the Panama Canal and Adjacent Waters" has been amended, through supplement No. 3, issued July 7, 1933, to read as follows:

Regulation 5.1. *Passenger steamers.*—Regular passenger steamers with accommodations for 50 or more passengers, when carrying mail and running on fixed published schedules, will be given preference over other vessels in transiting regardless of the number of passengers actually on board. However, as between vessels of this class, special consideration will be given to those vessels which are actually ready for transit at regular fixed hours.

Changes in the Prices of Coal

In accordance with supplement No. 2 to Tariff No. 11, dated July 8, 1933, the prices for coal and rates for services in connection with its delivery at Canal ports are to be as follows, effective August 1, 1933:

	Per ton of 2,240 pounds	
	Cristobal-Colon.	Balboa
Coal delivered to vessel at coaling plant, trimmed in bunkers:		
Run-of-mine.....	\$7.25	\$10.25
Nut and slack.....	6.75	.....
Coal delivered to vessel by lighter from Cristobal coaling plant, trimmed in bunkers:		
Run-of-mine.....	7.75	.....
Nut and slack.....	7.25	.....
A flat charge of \$52.50 for lighterage on any quantity delivered will be made in addition to the basic price per ton.		
For sacking lump coal for galley use, or other grades of coal, in addition to the basic price per ton:		
Labor, etc.....	3.00	3.00
Sacks, when furnished by coaling plant.....	2.00	2.00
If delivery is made at points other than the coaling plant, an extra charge covering the cost of delivery will be made.		

Traffic Through the Panama Canal During Fiscal Year 1933 by Nationality

Nationality	No. of ships	TONNAGE				Tolls	Tons of cargo
		Panama Canal net	United States equivalent	Registered gross	Registered net		
Belgian.....	12	66,602	49,241	76,969	52,570	\$54,334.36	50,951
Brazilian.....	2	7,312	5,594	9,938	6,124	6,992.50	2,277
British.....	1,039	5,660,301	4,069,952	6,764,512	4,122,375	4,814,485.52	4,170,995
Chilean.....	7	26,708	21,758	34,960	20,764	25,256.41	28,218
Colombian.....	7	1,900	1,868	2,510	1,904	1,968.60	2,163
Danish.....	113	530,515	353,328	592,521	365,769	423,316.66	448,863
Danzig.....	44	343,554	285,377	493,026	280,815	304,505.76	347,934
Finnish.....	1	3,329	2,964	4,850	2,872	3,693.75	6,308
French.....	266	381,870	241,673	441,637	252,656	305,257.65	249,395
German.....	325	1,010,756	665,137	1,149,518	681,413	822,009.33	813,231
Italian.....	52	394,889	257,241	482,813	291,007	316,525.27	189,371
Japanese.....	217	1,178,514	938,675	1,470,648	924,352	1,154,288.82	1,159,733
Netherlands.....	80	500,474	344,610	576,652	348,184	413,970.48	381,071
Norwegian.....	407	2,013,881	1,337,878	2,242,513	1,344,099	1,570,866.36	1,773,161
Panamanian.....	324	120,695	79,589	142,894	80,008	92,980.87	78,513
Peruvian.....	34	336	367	654	444	2,479.10	669
Russian.....	4	3,987	2,814	5,835	2,713	3,517.50	.....
Swedish.....	88	423,441	268,915	465,798	337,685	321,470.43	403,169
United States.....	1,686	10,099,102	7,401,789	12,162,582	7,378,522	8,933,850.79	7,937,739
Venezuelan.....	6	5,852	5,472	8,410	8,048	5,526.72	5,110
Yugoslav.....	10	46,858	34,688	56,092	34,754	42,561.65	78,857
Total:							
Fiscal year 1933	4,494	22,821,876	16,368,930	27,185,332	16,537,108	19,620,458.53	18,177,728
Fiscal year 1932	4,506	23,625,419	17,207,789	28,770,941	17,386,148	20,707,377.05	19,807,998
Fiscal year 1931	5,529	27,792,146	20,595,189	34,232,824	20,768,461	24,645,456.57	25,082,800

¹ Includes 6 naval vessels totaling 32,705 tons displacement (tolls \$16,352.50) in transits and tolls but not in tonnage.

² Includes 2 naval vessels totaling 9,778 tons displacement (tolls \$4,889) in transits and tolls but not in tonnage.

³ Includes 3 naval vessels totaling 4,111 tons displacement (tolls \$2,055.50) in transits and tolls but not in tonnage.

Combined Coal and Oil Plant at Cristobal

The Panama Canal has completed the installation of additional pipe lines, outlets, etc., to establish on the wharves of the coaling plant at Cristobal complete facilities for the discharge of tankers and the bunkering of vessels using oil for fuel. This arrangement consolidates the bunkering facilities at one plant which is readily accessible, takes advantage of the large steel and concrete wharves constructed for the coaling plant, and increases the space at which vessels may dock for the discharge or receipt of oil.

The coaling plant consists of an unloader wharf and reloader wharf, each 1,065 feet long, extending from the land, parallel to each other, and an end wharf, about 370 feet long, connecting the outer ends of the two side wharves. Alongside these wharves the docks have been dredged to a depth of 41 feet at mean tide. The tide at Cristobal has a slight range, not over 2 feet, so deep draft vessels can be accommodated at any stage of the tide. Thus the plant provides approximately 2,500 feet of berthing space. Coaling operations go on as before, except in quantity, and in addition the plant is used for the handling of fuel oil, Diesel oil, gasoline, and kerosene. The structure is referred to as Pier 16, with Berths A and B on one side, C and D on the other, and E at the end.

For some time past there have been oil line connections to the coaling plant but the installation now completed amplifies the facilities and makes possible the abandonment of the wooden wharves, across the French Canal from the coaling plant, which had previously been used for the discharge of tankers.

The lines connecting the combined coal and oil bunkering station with the manifold at the oil pumping plant at Mount Hope are as follows: Two 16-inch lines for crude fuel oil; one 10-inch and one 12-inch line for Diesel oil; one 6-inch line for gasoline; and one 6-inch line for kerosene.

It is not necessary, however, for ships taking oil bunkers at Cristobal to go to the coal and oil plant. If they tie up at the cargo-handling piers they can receive bunkers while there. Two 12-inch fuel oil lines extend to Piers 6, 7, and 8, the three principal piers at the Cristobal terminal. Diesel oil is delivered through one 10-inch line extending to Piers 7 and 8. The lines are so arranged that ships berthed at Dock 9 or on the north side of Pier 8 or on the south side of Pier 6 can be warped across the slip and brought into contact with Diesel lines without employing tug service.

In practice the improved facilities have been shown to be adequate and convenient, effecting the handling of oil with a minimum of delay, or of cost for tugs in case of moving from one berth to another.

LINES AT BALBOA

At Balboa, the Pacific terminus, Dock 4, the old French wharf, with its deck reconstructed, is the station for the discharge of tankers and, on occasion, vessels may be bunkered there. It is served by two 12-inch fuel oil lines, one 10-inch Diesel line, one 8-inch gasoline line, and one 6-inch line for kerosene.

Lines to the cargo and passenger wharves and pier are as follows: One 12-inch fuel oil line and one 10-inch Diesel line to Docks 6 and 7; one 10-inch and one 12-inch fuel line to Docks 15 and 16 and Pier 18.

The lines are so connected that deliveries can be made as follows, to cargo docks: Diesel oil to Docks 6 and 7 through two 10-inch lines; fuel oil to Docks 6, 7, 15, and 16, and Pier 18, through one 10-inch and two 12-inch lines.

Construction of Crane Boat "Atlas"

The Mechanical Division of The Panama Canal, which operates the marine and railway shops and drydocks at the Canal terminals, is engaged on the construction of a self-propelling crane boat, 186 feet long by 41 feet beam, with a molded depth of 16 feet. This vessel is to be primarily a crane boat for load handling and wrecking in Canal waters but also may be available for towing, for the excavation and transportation of sand, and for dredging in very soft material. It will have a mean draft of 8 feet 10 inches with a displacement of 1,300 tons in loaded condition.

The new vessel, which has been named *Atlas*, is to replace the present crane boat *Alex. LaValley*, which has served since the French Canal days. The *LaValley* was built in Renfrew, Scotland, in 1887 for the First French Canal company and was rebuilt by the Isthmian Canal Commission in 1905, at the drydock shops at Cristobal. During the construction of the Canal the *LaValley* served on the Atlantic side; subsequently the vessel has been employed principally in Gaillard Cut and the Pacific sea level section of the Canal, with the dredging fleet, and for about 10 years past has also been intermittently employed to secure sand from Chame Beach, in Panama.

The hull of the *Atlas* was constructed on the south sidewall of the 1,000-foot drydock at Balboa Shops and was launched sidewise into the dock on April 12, 1933, using the so-called "butter-board" side launching arrangements developed on the Great Lakes. The hull dropped 7 feet from the wall into the water. Since the launching, work has proceeded on the installation of equipment and building of the deckhouse, quarters, etc. The propelling engines have been installed and the main crane is largely assembled and in place. The steel work for the deck house is about completed and the woodwork has been begun. It is expected that the vessel will be completed and in active service under the Dredging Division about November 1, 1933.

The vessel is constructed to conform to the American Bureau of Shipping classification for transverse framed vessels. There are four transverse watertight bulkheads forming five large hull compartments, namely, forepeak tank, cargo hold, sand pump motor and air compressor room, engine room and afterpeak tank. The center line keel is watertight and extends from forepeak to aft peak bulkheads, thus forming a center line division for port and starboard double-bottom tanks. The double-bottom tanks will be used for water ballast and fuel oil.

The forepeak tank has a capacity of 97 tons and will be used for trimming purposes. A watertight flat is installed 13 feet above the base line, and the space between this flat and the deck will be utilized for anchor windlass machinery and stowage of paints, hawsers, and deck gear in general. The chain lockers are installed in a tank below watertight flat. Access to flat or lower deck is through a flush hatch on main deck and companion ladder.

The cargo hold is 54 feet long by the full width of vessel, with the forepeak bulkhead forming the forward end and the pump motor and air compressor room bulkhead forming the after end.

The main crane will be electrically operated and will be located amidship at after end of cargo hatch. It will have a capacity of 75 tons at 30-foot radius with hook 30 feet above deck and a maximum radius of 45 feet with reduced load. It will also be equipped with an auxiliary hoist of 25 tons and a boom topping lift. The crane will be of the rotating type and have a swing circle of 230 degrees. It will be operated by separate 75 horsepower motors for the main hoist, boom hoist, and rotating operations, and a 50 horsepower motor for the auxiliary hoist. This crane will be capable of handling the largest spuds of the Dredging Division and also of transferring the

towing locomotives and locomotive cranes at any of the locks from one wall to another, providing the operation is made within a lock chamber.

A smaller crane, also electrically operated, will be located forward on center line of ship and will have a capacity of 25 tons alongside with a reduced capacity at a maximum reach of 50 feet from center line. It will be the rotating type and swing through a full circle and will be equipped with a boom topping lift and 5-ton auxiliary hoist.

The ship will have twin screws, each driven by a direct reversible 6-cylinder 14-inch by 19-inch Diesel engine of 400 horsepower at 250 revolutions per minute. Electric power will be supplied for cranes and all auxiliaries by three 75-kilowatt 125/250-volt, 3-wire, Diesel-driven direct current generators. The switchboard will be located in forward end of engine room. The lighting circuits of vessel will be 110 volts.

Directory of The Panama Canal.

Executive Department.

Headquarters, Balboa Heights.

LIEUT. COL. J. L. SCHLEY, U. S. A., Governor.

L. A. Poltrino, Secretary.

C. A. McILVAINE, Executive Secretary.

JNO. H. SMITH, Chief Clerk, Executive Office.

GUY JOHANNES, Chief, Police and Fire Division.

C. H. CALHOUN, Chief, Division of Civil Affairs.

BEN M. WILLIAMS, Superintendent, Division of Schools.

E. F. ATTAWAY, General Secretary, Bureau of Clubs and Playgrounds.

J. J. McGUIGAN, District Attorney, Ancon.

N. A. BECKER, Land Agent and Assistant Counsel, Ancon.

Department of Operation and Maintenance.

(Under immediate direction of the Governor as head of the department.)

Headquarters, Balboa Heights.

LIEUT. COL. C. S. RIDLEY, U. S. A., Engineer of Maintenance.

J. G. CLAYBOURN, Superintendent, Dredging Division.

LEONARD FOOTE, Assistant Superintendent, Dredging Division, Paraiso.

E. S. RANDOLPH, Construction Engineer, Madden Dam Division.

MAJ. W. E. R. COVELL, U. S. A., Assistant Engineer of Maintenance.

A. C. GARLINGTON, Electrical Engineer, Electrical Division.

G. W. GREEN, Municipal Engineer, Division of Municipal Engineering.

L. W. LEWIS, Office Engineer.

E. D. STILLWELL, Superintendent, Locks Division, Pedro Miguel.

R. Z. KIRKPATRICK, Chief of Surveys, Section of Surveys.

J. J. WALSH, Supervisor, Gatun Dam, Gatun.

CAPT. WM. ANCRUM, U. S. N., Marine Superintendent, Marine Division.

COMMANDER THOMAS A. SYMINGTON, U. S. N., Captain of the Port, Cristobal.

LIEUT. COMMANDER LEON B. SCOTT, U. S. N., Captain of the Port, Balboa.

LIEUT. COMMANDER ASA V. WATSON, U. S. N., Assistant to Marine Superintendent.

BOARD OF LOCAL INSPECTORS, COMMANDER THOMAS A. SYMINGTON, U. S. N., *Chairman*, LIEUT. COMMANDER LEON B. SCOTT, U. S. N., and LIEUT. COMMANDER ASA V. WATSON, U. S. N., members.

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John J. Walker, Recorder for Board of Local Inspectors and Board of Admeasurement.

O. MAESSEN, Inspector of Hulls and Boilers.

F. KARIGER, Pilot in Charge, Lighthouse Subdivision, Gatun.

CAPT. R. W. RYDEN, Naval Constructor, U. S. N., Superintendent, Mechanical Division, Balboa.

H. H. EVANS, Assistant Superintendent, Mechanical Division, Balboa.

LIEUT. ROY T. COWDREY, U. S. N., Assistant to the Superintendent, Mechanical Division, Balboa.

W. H. STONE, Production Superintendent, Cristobal Shops, Cristobal.

Supply Department.

Headquarters, Balboa Heights.

ROY R. WATSON, Chief Quartermaster.

J. H. K. HUMPHREY, Assistant Chief Quartermaster.

SAMUEL GRIER, General Foreman, Transportation Division

J. E. HIGGINS, Director, Canal Zone Experiment Gardens, Balboa Heights.

B. C. POOLE, District Quartermaster, Ancon-Balboa, Balboa Heights.

J. M. KING, District Quartermaster, Cristobal-Gatun, Cristobal.

C. PETERS, District Quartermaster, Pedro Miguel.

WM. T. McCORMACK, Manager, Hotel Tivoli.

JAS. E. LEWIS, Manager, Hotel Washington.

A. W. GOULET, General Manager, Commissary Division, Mt. Hope (P. R. R.).

J. B. FIELDS, Constructing Quartermaster.

E. H. PARMELEE, General Storekeeper, Balboa.

A. P. E. DOYLE, Printer, The Panama Canal Press, Mount Hope.

Accounting Department.

Headquarters, Balboa Heights.

ELWYN GREENE, Auditor, The Panama Canal.

WILSON H. KROMER, Assistant Auditor on the Isthmus.

ROBERT W. GLAW, Paymaster.

ALFRED H. MOHR, Collector.

CARL F. CHASE, Chief Accountant.

T. M. DRAKE, Chief Examiner.

H. H. HUDSON, Claim Officer.

J. R. BOBBITT, Railroad Accountant.

Health Department.

Headquarters, Balboa Heights.

COL. J. F. SILER, U. S. A., Chief Health Officer.

DR. D. P. CURRY, Assistant Chief Health Officer.

DR. M. F. HARALSON, U. S. P. H. S., Chief Quarantine Officer.

COL. O. G. BROWN, U. S. A., Superintendent, Gorgas Hospital, Ancon.

MAJ. D. F. WINN, U. S. A., Superintendent, Colon Hospital, Cristobal.

MAJ. F. H. DIXON, U. S. A., Superintendent, Corozal Hospital, Corozal.

DR. J. L. BYRD, Health Officer of Panama City, Ancon.

DR. J. C. ELLINGTON, Health Officer of Cristobal-Colon, Cristobal.

DR. C. A. HEARNE, Quarantine Officer, Cristobal.

DR. J. D. ODOM, Quarantine Officer, Balboa.

Courts.

HON. RICHARD C. P. THOMAS, District Judge, Ancon.

F. H. SHEIBLEY, Clerk of Court, Ancon.

J. S. CAMPBELL, Deputy Clerk of Court, Cristobal.

JOHN T. BARRETT, Canal Zone Marshal, Ancon.

P. E. MURRAY, Magistrate, Balboa.

E. I. P. TATELMAN, Magistrate, Cristobal.

Wage and Complaints Boards.

Balboa Heights.

Wage Board:

MAJ. W. E. R. COVELL, representing The Panama Canal.

H. A. McCONAUGHEY, representing employees.

Complaints Board:

MAJ. W. E. R. COVELL, and Head of Department or Division interested, representing The Panama Canal.

H. A. McCONAUGHEY and CHAS. F. WAHL, representing employees.

The Panama Canal in the United States.

Headquarters, Munitions Building, 19th St. and Constitution Ave., NW., Washington, D. C.

A. L. FLINT, General Purchasing Officer and Chief of Office.

E. E. WEISE, Assistant to the Chief of Office.

E. D. ANDERSON, Chief Clerk, Purchasing Department.

H. A. A. SMITH, Assistant Auditor.

W. J. SHERIDAN, Assistant Purchasing Agent, 24 State St., New York, N. Y.

W. A. E. DOYING, Inspecting Engineer, Washington, D. C.

(Continued on following page.)

Panama Railroad Company.

Headquarters, Balboa Heights.

LIEUT. COL. J. L. SCHLEY, U. S. A., President.

LIEUT. COL. C. S. RIDLEY, U. S. A., Second Vice President.

R. B. WALKER, General Manager.

CHAS. W. LEE, Assistant to the General Manager and Commercial Agent.

W. F. FOSTER, Superintendent and Master of Transportation.

E. MCTUCKER, Roadmaster.

C. T. LINDSAY, Receiving and Forwarding Agent, Cristobal.

JOHN O. COLLINS, Counsel, Ancon.

Office in the United States, 24 State Street, New York City.

T. H. ROSSBOTTOM, Vice President.

W. R. PFIZER, Assistant to Vice President and Secretary.

V. M. NEWTON, Treasurer.

G. L. SELKIRK, Auditor.

W. K. B. POTTS, Superintendent.

E. HATTON, Assistant Superintendent.

RICHARD REID ROGERS, General Counsel.

T. S. SPRAGUE, Freight Traffic Manager.

A. M. GIBSON, Passenger Agent.

F. H. BUSCHMANN, Claim Agent.

W. J. SHERIDAN, Commissary Purchasing Agent.

Provisions Required by Ships

The Panama Canal Commissary Division, with facilities at Balboa and Cristobal for delivery of supplies to steamships, carries a complete line of provisions, such as meats, fruits, vegetables, eggs, butter, canned goods, cigars, cigarettes, tobacco, etc., which are sold to ships at reasonable prices. Beef especially is available at low prices.

Orders may be placed in advance by radio for delivery on arrival, or at either terminal for prompt delivery or for delivery at the other terminal after transit.

Current Net Prices on Fuel Oil, Diesel Oil, and Coal

Bunker fuel oil is delivered to vessels at either Cristobal or Balboa, from tanks of The Panama Canal, for \$1.00 per barrel of 42 gallons; Diesel oil, at Balboa \$1.30, and at Cristobal \$1.45 per barrel of 42 gallons.

Bunker fuel oil and Diesel oil are also sold by private companies with tanks at the Canal terminals, at prices which will be quoted by them on application. The prices at present are as follows: Fuel oil, 90 cents per barrel at Cristobal and Balboa; Diesel oil, \$1.55 per barrel at Cristobal and Balboa.

Coal, bunker, Navy Standard Pool No. 1, Pocahontas or New River, is supplied to steamships, including warships of all nations, trimmed in bunkers at \$7.25 for run-of-mine and \$6.75 for nut and slack at Cristobal, in any proportion desired, and \$10.25 at Balboa for run-of-mine only, per ton of 2,240 pounds, effective August 1, 1933.

Extra charges are made in accordance with a published tariff for special trimming at the request of the officers of the ship, for galley, lump, or run-of-mine coal in sacks, and for delivery, when coal is furnished from lighters or launches away from the coaling piers.

Coal for cargo is sold under the same conditions and at prices quoted for sale of coal for bunkers.

Coal can be bunkered by bunkering machines at any rate up to 1,500 tons per hour, regulated by the amount of necessary trimming. Oil deliveries can be made up to 5,500 barrels per hour, rate depending on gravity of oil, location of shore tanks, and ship's facilities for handling.

Facilities for Shipping

The Panama Canal is equipped with all the facilities for the fueling, supply, and repair of ships which are found in modern ports.

The coaling plants, with an aggregate storage capacity of 700,000 tons, bunker ships up to 1,500 tons an hour, practically as fast as it can be handled in ships' bunkers. Oil can be delivered as fast as the ships can take it, from 46 tanks aggregating approximately 2,361,040 barrels of storage capacity. Crude fuel oil, Diesel oil, and gasoline are sold.

The ships' chandlery storehouses carry a wide variety of marine supplies and spare parts. The commissary stores sell foodstuffs, fresh meats, fruits and vegetables, as well as clothing and a general line of goods for supplying about 30,000 people resident on the Isthmus. Ice plants, a large laundry, hotels, hospitals, and restaurants serve the passengers and crews of ships.

A 1,000-foot dry dock, capable of receiving the largest ships built, a smaller dry dock, floating cranes, foundry, and amply equipped shops, employing about 1,100 men, provide the means of making practically any kind of marine repairs.

Ample space exists at either terminal of the Canal for the berthing of vessels, as well as large covered piers for the storage of cargo. These are modern structures, fireproof, ratproof, in splendid condition, well lighted and maintained in a clean and orderly condition.

In general, the services to shipping at the Canal are such as have been developed and found ample and effective, in the course of handling large traffic through the Canal in over 17 years of operation.

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