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PANAMA CANAL
REVIEW



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About Our Cover

TWO OF the Panama Canal's regular customers are shown on the cover of this edition of THE PANAMA CANAL REVIEW. They are the New Zealand Shipping Company's *Huntingdon*, coming southbound in Miraflores Locks, and the Texaco Company tanker *Texaco New Mexico*, traveling northbound en route to Venezuela to pick up a cargo of crude oil.

The *Huntingdon* was built in 1948 and has a gross tonnage of 11,281 tons. She carries refrigerated and general cargo, with refrigerated taking predominance on her voyages from New Zealand to England. She has been making regular trips through the Panama Canal since 1948 and is one of 41 cargo and 3 passenger ships maintained by the New Zealand Shipping Company on the United Kingdom to New Zealand run via the Panama Canal.

The *Texaco New Mexico*, despite her name, flies the Panama flag and is 10 years younger than the *Huntingdon*. She was built in 1958 and has spent most of the years in service between Venezuela and the United States west coast.



Crane Hercules lifts a 64-ton "knuckle" section of prefabricated softnose from Dock No. 7. This was placed aboard the crane boat and floated to Miraflores Locks center wall where it was put into place as part of an entire softnose that was replaced this spring. The project was carried out after the wall was damaged in November when it was struck by a ship. The purpose of the softnose is to protect ships from damage if they veer toward the wall.

MARU Seeks Cause, Cure Of Disease

THE BAT is a symbol of darkness and eerie mystery in most western civilizations and denotes happiness, good fortune, and longevity in Far Eastern societies.

But to scientists, the bat represents a health menace of unknown magnitude to human beings, one about which relatively little is known in an age of heart implants and artificial kidneys. Efforts to fill this informational void are being made at Building 265 of the Canal Zone, the headquarters for the U.S. Middle America Research Unit.

Bats are receiving considerable attention at MARU because frequently they are infected with and spread histoplasmosis, a fungus disease that the unit is doing extensive research on. A staff member of Dr. William C. Gorgas, who led the hard-won fight against yellow fever and malaria when the Canal was being built, described the disease during Canal construction days. He thought it was a parasitic disease but later it was learned to be a fungus.

Though usually not fatal, it mimics tuberculosis by causing pulmonary infections and leaving lesions that for years radiologists reading X-rays mistook for tuberculosis. In the 1930's, it became a serious problem in the Ohio



Federico Valencia Jr., supervisor of serology, and Dr. Karl M. Johnson, director of MARU, view towns in Guatemala showing high prevalence of arthropod virus antibodies. Other maps show villages studied in regions of Central America.

and Mississippi River basins and today is very common in Panama. The fungus can grow in soil under certain conditions and in dry season turns to spores that are blown about by the wind.

Areas in Panama having limestone caves inhabited by bats are "crawling" with histoplasmosis, according to MARU's director, Dr. Karl M. Johnson.

"Man must know more about the habits of bats," Dr. Johnson emphasized in a recent interview. "Scientifically, not much has been done about bats since the 1940's when their built-in radar and sonar systems were studied. They are difficult to catch and to colonize. Some eat nearly their own weight in insects every night. They are difficult to keep alive, hard to feed; some eat only when flying."

MARU has succeeded in keeping fruit

eating bats alive but to date has been unable to colonize the insect-eating varieties. Some knowledgeable people contend that bats are the most common mammals in the tropics. Also they possess a greater life span than rodents, occasionally living up to 20 years. It has been confirmed in the United States and elsewhere that bats excrete viruses. Added to these items is a strong suspicion among medical men that some bats may be migratory from the tropics to the temperate zone.

Why has this area of study been neglected or avoided?

"Bats are not conspicuous like birds and not as much is known about them," Dr. Johnson points out. "There are no batwatchers as there are birdwatchers."

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MARU Studying The Elusive Bat

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The investigation of bats is but one segment of work done by the 60 MARU staff members, including 8 to 10 professional scientists.

The unit was established in 1958 under the joint sponsorship of the National Institutes of Health, which is the research branch of the U.S. Public Health Service, and the Walter Reed Army Institute of Research. The two organizations work together on many projects and collaborate with other agencies such as Gorgas Hospital, Gorgas Memorial Laboratory, the Panama Canal organization, Paramedics and other branches of the Armed Forces in the Canal Zone or affiliated with the U.S. Southern Command.

The reason for its establishment was a sharp rise in yellow fever which traveled up Central America, reaching Mexico in the 1940's and 1950's. Monkeys died by the thousands, human cases numbered in the hundreds with a few deaths, touching off fears of another yellow fever epidemic that actually never materialized. MARU has never worked on the disease it was originally set up to fight but this does not mean that it will not be called on to combat it later. Urban yellow fever was wiped out here but the jungle vectors—mosquitoes which transmit the illness—are still present.

Contrary to what some Isthmian residents may believe, MARU's well-equipped laboratories are not being used for cancer research or to find a cure for heart disease. These and similar projects are handled by the U.S. Health Service and other organizations within the United States.

One of the major fields of work at MARU is the study of arthropods—spiders, ticks, ants, etc.—and arthropod transmitted viruses. Yellow fever and encephalitis are examples of these. Members of the MARU team have discovered new viruses and are continuing their investigations with much of their effort devoted to blood samples. For it is in these blood samples that the scientist finds the antibodies, "footprints" of disease.

Questions unit doctors and technicians hope to answer involve the role of wild creatures in the transmission of viruses. Some viruses, for example, can infect birds without making them ill. "Since birds migrate and many of them pass through this part of the world, what is learned here can show and predict how we have epidemics in the United States and other parts of the world," Dr. Johnson related.

A classic, and probably the most dramatic, example of the accomplishments of MARU concerns the hemorrhagic fever epidemic that ravaged a rural province in Bolivia. The first death occurred in the village of San Joaquin in 1959 and the MARU investigation began in 1962, after it was found not to be a form of typhus fever as originally suspected. It almost cost the lives of Dr. Johnson and two associates.

MARU epidemiologist Dr. Ronald MacKenzie was in La Paz making a

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Robert Sawyer with Panamanian marmoset, one of many wild animals used for work in laboratory experiments at the Middle America Research Unit. The availability of the great variety of wildlife is one of the advantages of the unit's location in Panama.



Mrs. Martha H. Shacklette, assisted by Raymond Cameron, checks culture tubes for histoplasma in bat tissues. Map in background is that of Fort Clayton, one of several Isthmian communities surveyed for fungus infection in bats.

A Ship That Brings Hope To Millions

(EDITORS NOTE: The following article appeared in the Spring, 1967, issue of *Tow Line*, which is published by the Moran Towing & Transportation Co., Inc. It deals with the SS *Hope*, a ship that has transited the Canal.)

by Jeff Blinn

Her name is an abbreviation for "Health Opportunity for People Everywhere". Wherever she voyages she brings knowledge, compassion and a hope for a better tomorrow through better health. She is the SS *Hope*.

More than 1 million people in seven countries of Asia, South America and West Africa have benefitted directly through immunization, medical treatment (including some 8,300 major surgical operations) and instruction since her maiden voyage for the People-to-People Health Foundation in 1960.

The story of this amazing hospital ship and her more amazing complement of doctors, nurses and paramedics began in 1958 with President Dwight D. Eisenhower's desire to promote international goodwill and understanding through personal contact. Asked by the President to initiate such a project, Dr. William B. Walsh submitted his plan to provide the world with its first peacetime hospital ship. He was given the go-ahead.

The chosen ship was the Navy's *Consolation*, commissioned in 1945 as a station hospital ship for the Fifteenth Fleet and launched a year earlier as the Marine *Walrus*. She was the first hospital ship to serve with the United Nations forces in Korea, was awarded the Republic of Korea's Presidential Unit Citation and all of the 10 authorized engagement stars for her service in that conflict. She later distinguished herself in evacuating civilians from North Vietnam in "Operation Passage to Freedom".

In 1960 the *Consolation* was refitted, chartered to the People-to-People Health Foundation and renamed *Hope*. Jammed to the gunwales, she boasts 230 hospital beds, 3 operating rooms, a milk plant equal to a herd of 2,500 cows, an electric generating plant sufficient to

light a city of 12,000 and a galley serving 400,000 or more meals on each voyage.

At the warm invitation of Indonesia, the *Hope* began her first mission of mercy. Crewed by the American President Lines, she sailed from San Francisco September 22, 1960.

"The East forgets many things," editorialized the *Times* of Indonesia, "but never, never loses its reverence for a teacher. Those on the *Hope* will live long in our memory."

Teaching is the primary aim of *Hope's* permanent staff of 95 doctors, nurses and medical technologists. (She carries a crew of 94 men, including officers.) To aid the permanent staff, volunteer teams of specialists are flown to the *Hope* for 2-month tours of duty. They bring the newest skills, techniques and knowledge developed by the American medical, dental and paramedical professions and serve without pay. Selected from applicants across North America who are outstanding in their specialties, many have taken time out of their practices to serve on several voyages.

From Indonesia, after training some 500 Indonesian doctors and nurses,

treating some 18,000 patients and completing the first mass chest X-ray program in that country's history, the *Hope* moved on to Saigon, South Vietnam. There, oral surgery was introduced and a mass immunization of a quarter of a million children was completed before her return to the United States.

The *Hope* was refurbished in San Francisco after having been gone a year on her first voyage.

Grace Line then acted as her agent for the next two voyages—crewing the vessel, handling her freight and helping in all matters marine. She sailed from San Francisco to Salaverry, Peru, May 9, 1962, at the invitation of the Peruvian-North American Medical Association. When she left that country ten months later, 40,000 grateful Peruvians lined the shore to see her off.

Voyage 3 was to Guayaquil, Ecuador, from New York where she established another ship-and-shore teaching service in cooperation with the medical and nursing professions and the faculty of the University of Guayaquil.

Farrell Lines, thoroughly familiar with African countries, handled her next voy-

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SS *Hope* passes under Thatcher Ferry Bridge after transiting the Canal en route to another mission of mercy. This vessel has helped more than a million persons in seven nations by providing medical care and instruction.

CONTRIBUTIONS HELP SUSTAIN HOSPITAL SHIP

(Continued from p. 5)

age from New York to Conakry, Guinea, September 30, 1964. Before her arrival in that emerging nation, 10 physicians and 1 dentist were ministering to 3.5 million people; she left behind 600 trained physicians, dentists, nurses and auxiliary personnel.

Voyage 5, was completed when she returned to New York, November 30, 1966 from Corinto, Nicaragua, and Voyage 6, on which she embarked February 7 from Philadelphia for Cartagena, Colombia, were again under the nautical aegis of the Grace Line.

At the request of every country visited, teams of teachers have remained behind to conduct continuing programs in hospitals, medical schools and local health departments. Thus, the good work of those modern medical pioneers continues to grow.

To sustain the *Hope* and the Foundation's land-based programs, contributions are the primary support. Time, talent, cash and the product of American industry, help from organized labor and the generous support of individuals, plus financial assistance from the Government in lieu of a maritime subsidy have thus far managed to balance the program's \$5 million annual operating budget.

Some steamship lines operating luxurious passenger liners have discovered an excellent "end use" for their slightly worn towels, washcloths, sheets, pillowcases and silverware. These are the most consumable items aboard the *Hope*, and they are gratefully accepted.

Dr. Walsh, founder, president and Medical Director of Project HOPE, has documented some of the *Hope's* work in two books: "A Ship Called Hope," and "Yanqui Come Back," both published by E. P. Dutton & Co.

In 6 voyages in 7 years, the good ship *Hope* has lived up to the dreams of Dr. Walsh. It has been suggested that another naval vessel be sponsored to augment the SS *Hope*. We vote, AYE!



These Nicaraguan youngsters listen attentively to a bedtime story in the pediatric ward of the SS *Hope*. The wall murals are the type that can lighten the hearts of the young patients.



Doctors at work in the ship's well-stocked library used to serve the vessel's 95 doctors, nurses and medical technologists.

A New Center Of Learning On the Move

THE FUTURE of Panama is in its youth; and the future of the youth is in its education.

This is the motivating theme behind dynamic Santa María La Antigua University of Panama City, a university that is striving to achieve a high goal in the years ahead, while actively engaged today in living up to the standards that will make the university's goal a reality.

Everything about Santa María La Antigua University, the first private institute of higher learning in the Republic of Panama, is unusual. The building in which some 20 classes are meeting temporarily is the Archbishop's Palace, one of the stately old buildings in Cathedral Plaza, Panama City, not far from the Presidential Palace. The Most Rev. Tomas A. Clavel, Archbishop of Panama, in March 1965, donated the four-story building, his official residence, as temporary quarters for the university.

Classrooms now honeycomb the Palace and the graceful marble stairs that once knew only measured, dignified tread today are used by youth in a hurry, boys and girls who are studying and training to take their place in Panama's economic development.

Typical of the startling contrast afforded by classrooms in the Archbishop's Palace is the library, where functional book stacks are arranged in business-like order under a handsome crystal chandelier, reminiscent of other days. The room where dignitaries once gathered for receptions now is filled with tables at which students silently sit and study.

The students and professors of Panama's new university represent many races, nationalities, and creeds, and are accepted solely on the basis of academic record and character recommendation.

The faculty roster underscores the international aspect of Santa María La Antigua University.

Fifteen members of the present faculty of forty-three received degrees in the United States. Through the coop-



A small scale model of the projected \$25-million new campus is closely examined by the Rev. Benjamín Ayechu, O.A.R., Rector, at right, and Philip Curley of New York City, who has been at Santa María La Antigua University during the past year raising funds.

eration of the U.S. Department of State, Prof. Richard Landborg of Sioux Falls, Iowa, has been a member of the faculty for about 2 years. A professor of chemistry, he received a master's degree from the University of Iowa in 1957 and a doctor of philosophy degree from the same university in 1959. Three members of the U.S. Peace Corps, Stephen Coyne, Fred Lazarus, and Anne Louise Verbrugge, each holding a master's degree, are faculty members, as are two nuns from the United States. Sister Mary Edith of the Maryknoll Sisters has a doctor of philosophy degree and Sister Rosa Anita of the Sisters of Charity of New Jersey has a master's degree in languages.

Six members of the faculty received their degrees from the University of Panama and five received degrees from universities in Spain. Other faculty members are graduates of universities in Canada, Austria, Italy, Sweden, Peru, Chile, Argentina, Brazil, Ecuador, Colombia, Mexico, and Cuba.

At present, due to lack of dormitory facilities, all the students are from the Panama area, but future plans for the new university buildings include dormitories for men and women to accommodate students from all the Provinces of the Republic.

Until the founding of Santa María La Antigua University in 1965, there was but one institution of higher learn-

ing in the entire Republic of Panama, the National University located in Panama City, which had extension courses in other cities. The enrollment at this university over the past 20 years has far surpassed the increase in facilities and from 1945 to 1965 the enrollment increased from 752 to 6,705. Moreover, there is a projected university population of 14,000 by 1970.

Since the rate at which the Panama Government could provide funds for additional educational facilities was not adequate, a group of educators and parents of students became concerned over prohibitive costs of sending students abroad for their education and the idea of establishing a private university in Panama was born.

The donation of the Archbishop's Palace gave the new University a temporary location for classes.

The Rev. Benjamín Ayechu, O.R.A., was appointed Rector of the university and on April 27, 1965, the establishment of the Santa María La Antigua University was officially approved by the Panama Government. The direction of the university is under the Archbishop of Panama as High Chancellor, an Episcopal Council consisting of six Bishops of Panama, a Board of Directors for academic matters and a Board of Trustees for financial matters.

Santa María La Antigua University

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Enrollment Is Soaring

(Continued from p. 7)

has set as one of its primary goals the task of providing training businessmen, administrators, and industrial technologists and teachers for these fields. The undergraduate degree program is 5 years, or 10 semesters, and bachelor of science and bachelor of arts degrees will be awarded.

The university began its first year of operation in 1965 with a freshman class of only 230 students. The first year faculty numbered 17 professors.

The student population explosion sent the enrollment up to 350 for the second year, and this year the university has a capacity enrollment of 418 in freshmen, sophomore, and junior classes. The Archbishop's Palace cannot accommodate all classes, and lab students have to travel, usually by bus, to Panama's St. Augustine School for this phase of their studies.

"The university's most pressing need is bricks and mortar," said the Rev. Benjamín Ayechu, O.R.A., Rector. But a good part of the present fund-raising efforts are geared to obtaining scholarships and establishing scholarship funds. The present tuition is \$350, and additional expenses for lab fees and books send the yearly cost to \$450 or \$500. The university must be made available to all qualified Panama youths, the Rector pointed out, and even to those who find the \$450 cost prohibitive. The pace of Panama's economic development will be determined by how steadily qualified personnel can be supplied for every type of job from skilled laborers to administrators, he pointed out, and added that while human resources to fill these positions are plentiful in Panama, the facilities and personnel for teaching have not met the demand. One of the university's primary immediate goals is the task of providing trained businessmen, administrators, industrial technologists and teachers for these fields.

The university has drawn up a master plan and inaugurated a 10-year, \$25-million development program for a complete new campus, to be located at Villa Cáceres and Miraflores, bordering the Canal Zone. With construction of the new highway in that area, Santa María La Antigua University will be less than 5 minutes by car from Panama National University, so that the immediate area will be an educational center. Gifts of



Santa María La Antigua University is housed, temporarily, in the former Archbishop's Palace in busy Cathedral Plaza, not far from the Presidential Palace.



Alert faces on youth eager to learn, a trademark of the student body at Santa María La Antigua, listen intently during a lecture delivered by one of the university's teachers.

adjacent property have been received from the Most Rev. Clavel and from the Government of Panama. U.S. Army tractors graded the land and work has started on construction of the first classroom and humanities building.

It is hoped the first new building will be ready by April 1968.

The master plan calls for construction of a science building, classroom building, library, student union building, exact sciences building, administration building, business administration building, auditorium, medical science building, fine arts building, law and political building, laboratory building, men's dormitories, women's dormitories, open air theatre, men's gymnasium, women's gymnasium, and playing fields for baseball, soccer, track, tennis, etc. There will be even a lake for boating.

When finished, Santa María La Antigua University will be able to accommodate 3,000 students.

Philip Curley of New York City, representing Martin J. Morgan Co. of New York, professional fund raisers and development consultants came May 27, 1966, and has spent a year in Panama, organizing an intensive fund-raising

campaign for construction of the science building, classroom building and library under Phase 1 of the development program.

The appeal for funds is being conducted primarily in Panama. All Panamanians, individuals, organizations, businesses, and industries are being contacted, as well as those who have vested interests in Panama and who are interested in the progress of Latin America. Many friends of Santa María La Antigua University, working on behalf of the new school, are making appeals in North America and in Western Europe.

At present, of the 418 students enrolled, 82 are on scholarships provided primarily by Panama businessmen. Santa María La Antigua University also has received 12 full 5-year scholarships from the U.S. Bishops Committee for Latin America.

Under a contract with the U.S. Agency for International Development, the university will receive technical assistance for its overall development including organization, administration, curriculum, instruction, and academic facilities of the new campus.

Any boy or girl may apply directly

to Santa María La Antigua University, but a letter from the high school attended is required. Scholarships are awarded on the basis of the economic need of the student.

Classes start at 7:30 in the morning and the last night class is over about 9:30. The evening classes are attended by men and women between 25 and 35 who hold responsible positions during the day. The most popular courses with these latter students are English and business administration.

The regular classes follow the basic curriculum of Panama National University, but one big advantage at Santa María La Antigua is that classes are small with a ratio of 10 students to a teacher.

When Panama schools open in April 1968, it is hoped to have the university's first new building ready for day classes. Night classes will continue to meet in the Archbishop's Palace until more of the university's buildings are completed.

There's a red circle on Santa María La Antigua's calendar for December 1969—that is when the first graduation of the new university will be held.



One coed opens her book to the chapter and verse to make a point during a discussion with fellow students in the university's cafeteria.



Hundreds of Central American human serums are being tested for antibodies to arthropod transmitted viruses. Left to right are Mería Teresa Delgado, Gloria de Cisneros and Gricelda Licona.

Two MARU Scientists Stricken Fighting Bolivian Epidemic

(Continued from p. 4)

nutritional study when the Bolivian Ministry of Health notified him of the outbreak of a strange disease and asked his assistance. To MacKenzie it resembled hemorrhagic fever contracted by many U.S. servicemen during the Korean conflict.

As hundreds of persons became infected and scores died, fear bordering on panic swept the population of Beni province, where San Joaquin is situated. The Bolivian government asked for help from the United Nations. It was decided that a team of MARU people would go to Bolivia following a meeting of officials of the National Institute of Allergy and Infectious Diseases, the World

Health Organization, the U.S. State Department, and the Bolivian Embassy. MARU was given a blank check in terms of support for the project.

A team of doctors went in; a laboratory was set up to study the natural history of the disease, its means of transmission, and ways to break the chain of the epidemic. Laboratory equipment had to be transported to San Joaquin which had no telephones, no plumbing, no autos, and a meagre source of electricity barely sufficient to light the village's small hospital for a few hours each evening.

Early suspicions of the MARU physicians were that the great number of rodents and the lack of cats in the village

had a relationship with the epidemic. Before this or any other hypothesis could be proved, however, MacKenzie and Johnson had to be flown back to the Canal Zone when they became stricken with the disease. After treatment in Gorgas Hospital and convalescence, they recovered and returned to their work in Bolivia.

The MARU scientists ultimately traced the disease to mice which were spreading hemorrhagic fever virus by contaminating food left in the open. A rodent control program all but eliminated the disease from the areas around San Joaquin. Smaller outbreaks were reported months later as the vigilance on sanitation apparently relaxed.

San Joaquin and similar villages do not have unlimited funds for elaborate sanitary and rodent control programs. The disease could break out again in even greater intensity in another village, province or nation. With this in mind, MARU is working to produce a vaccine as permanent protection against the disease.

The entire project in Bolivia could not have been carried out without the MARU laboratory in Panama and without the cooperation of other groups, such as the U.S. Air Force providing the planes.

Parasitic diseases is another broad category in which research is being carried out at MARU. Most of this work is handled by the Army group under the Walter Reed Army Institute of Research while the anti-virus projects are the responsibility of the Public Health Service.

The parasitic diseases being studied include toxoplasmosis, Chagas disease, and leishmaniasis. Their common denominator is that all are protozoans, the smallest parasite. Malaria, for example, also is a protozoan.

Toxoplasmosis causes congenital malfunctions, such as blindness, stillborns, and heart defects when the mother is apparently healthy. It can infect both wild and domestic animals but it is not known how the disease is transmitted. The American tropics seems to be the real home for this sickness which has an infection rate of up to 50 percent in some regions.

"By studying the patterns of light and heavy areas of infection, how an area of high incidence differs from an area of low rate of infection and by studying the natural history of the disease, doctors hope eventually to find some clues," Dr. Johnson explained.

More is known about Chagas disease and leishmaniasis, both of which are transmitted by arthropods. The culprit in the case of Chagas is a large blood sucking insect, the "kissing bug," that lives in roofs and walls of primitive houses and bites humans while they sleep. Domestic animals play a part in keeping the cycle of infection going. Chagas can affect the intestinal tract; it can produce enlarged hearts. An expensive disease to study and one requiring sustained investment, Chagas disease may cause very serious illness in one locale of infection and only a minor fever in another.

The Army people at work on this are



Capt. James Ryan, 8th Special Forces, U.S. Army, and Sgt. Miguel Villalobo, Bolivian Air Force, vaccinating children near San Joaquin, Bolivia.

attempting to standardize tests to determine what people have been infected, how many and where. Their study is being carried on in five Central American nations and in cooperation with the Pan-American Health Organization in Guatemala. Many blood specimens are being collected, more than 15,000 to date, so that an accurate map of the areas of infection may be drawn. The samples are catalogued and indexed on IBM cards for future use. By using standardized bases, more detailed investigations can be carried out to determine the relationship between infection and disease.

The third type of parasitic disease, leishmaniasis, can be fatal. Transmitted by sand flies, it begins as an ulcer and sometimes progresses to hideous dis-

figurement, attacking mucous membrane areas of the body. No test yet has been devised for antibodies in the blood to give needed information. It is believed that this disease also produces antibodies, however.

Research going on at MARU is unique in that it would be difficult if not impossible to duplicate in the United States. For example, the unit has access to tropical wild and domestic creatures necessary for the work. Some diseases have environmental characteristics and conditions that cannot be found in the United States. Agencies in Washington may not even be aware of such diseases as hemorrhagic fever let alone do anything about them.

"Therefore," Dr. Johnson noted, "the scientists must go where the action is."

CANAL COMMERCIAL TRAFFIC BY NATIONALITY OF VESSELS

Nationality	Fourth quarter, fiscal year—					
	1967		1966		1961-65	
	Number of transits	Tons of cargo	Number of transits	Tons of cargo	Average number transits	Average tons of cargo
Belgian	16	38,888	14	53,187	12	39,306
British	349	2,330,543	315	2,305,229	331	2,086,651
Chilean	31	174,695	25	188,424	30	213,847
Chinese (Natl.)	25	188,215	30	246,148	23	178,357
Colombian	55	104,994	54	88,644	65	108,257
Cypriot	10	53,908	4	36,945		
Danish	120	675,520	93	500,612	82	454,208
Ecuadorean	15	17,625	10	18,039	10	11,889
French	68	222,103	80	245,609	41	219,953
German	326	1,071,617	305	953,628	285	875,621
Greek	98	1,096,013	129	1,241,700	161	1,609,353
Honduran	46	28,562	44	19,736	41	32,678
Indian	12	181,008	3	42,623		
Israeli	27	172,745	25	167,164	16	61,923
Italian	65	478,613	52	320,727	49	297,801
Japanese	220	1,712,348	220	1,829,099	210	1,227,652
Liberian	390	4,724,943	324	4,163,622	259	2,567,640
Netherlands	125	527,364	133	596,907	165	717,449
Nicaraguan	15	21,639	18	28,354	13	23,332
Norwegian	378	3,964,673	377	3,485,750	371	2,970,087
Panamanian	135	844,854	120	530,415	125	515,494
Peruvian	41	182,488	27	128,330	32	138,291
Philippine	28	193,632	22	124,091	19	90,273
South Korean	11	50,249	1		3	7,928
Soviet	13	96,215	7	35,047	6	41,850
Swedish	104	728,943	86	598,269	88	549,041
Swiss	21	60,289	22	18,634	10	10,086
United States	495	2,412,625	417	2,457,293	435	2,594,084
All Others	71	399,952	86	336,354	37	252,309
Total	3,310	22,755,263	3,043	20,760,580	2,919	17,895,360

MONTHLY COMMERCIAL TRAFFIC AND TOLLS

Vessels of 300 tons net or over
(Fiscal years)

Month	Transits			Gross tolls* (In thousands of dollars)		
	1967	1966	Avg. No. Transits 1961-65	1967	1966	Average Tolls 1961-65
July	1,039	993	960	6,205	5,604	4,929
August	1,008	983	949	6,392	5,488	4,920
September	988	977	908	6,057	5,457	4,697
October	1,005	1,034	946	6,157	6,068	4,838
November	985	990	922	6,028	5,878	4,748
December	987	949	946	6,084	5,614	4,955
January	1,043	1,001	903	6,318	5,903	4,635
February	968	896	868	6,049	5,239	4,506
March	1,079	1,060	1,014	6,831	6,044	5,325
April	1,094	989	966	6,823	5,887	5,067
May	1,128	1,043	999	7,005	5,935	5,232
June	1,088	1,010	954	6,820	5,978	5,013
Totals for fiscal year	12,412	11,925	11,335	76,769	69,095	58,865

* Before deduction of any operating expenses.

TRAFFIC MOVEMENT OVER MAIN TRADE ROUTES

The following table shows the number of transits of large, commercial vessels (300 net tons or over) segregated into 8 main trade routes:

Trade routes	Fourth quarter, fiscal year—		
	1967	1966	Avg. No. Transits 1961-65
United States Intercoastal	134	132	115
East coast United States and South America	398	466	583
East coast United States and Central America	175	135	128
East coast United States and Far East	756	628	565
East coast United States/Canada and Australasia	112	98	80
Europe and West coast United States/Canada	229	257	235
Europe and South America	474	374	328
Europe and Australasia	99	108	112
All other routes	932	845	773
Total traffic	3,309	3,043	2,919

Montreal Has Major Port, Exposition

MENTION THE word Montreal to the man on the street and what does he think of first? Expo '67—the spectacular exposition that is attracting millions of visitors from every continent.

But it's the Port of Montreal that comes to mind for persons engaged in shipping, international commerce, and related matters. Expo '67 is appropriately located on St. Helen's Island within Montreal Harbour.

The Port of Montreal lies on the southern portion of Montreal Island on the St. Lawrence River about 1,000 statute miles from the Atlantic coast. Here the St. Lawrence Seaway begins, providing a vital link 1,200 miles further inland to the very heart of North America.

Montreal has a colorful history dating back almost five centuries. It was from the present port area that such men as Frontenac, La Salle, and Le Moyne launched their birch canoes to explore the continent.

Swirling current waters inhibited development of the port and vessels could not negotiate the waters without the help of oxen to draw them through on a long rope from the river's edge. After deepening of the channel, Montreal came into being as a world port with the 1853 inauguration of the first steamship service direct to Liverpool. It matured rapidly and in some respects overtook other ports that had earlier starts. For example, the Port of Montreal was the world's first port to be lighted by electricity.

The growth pace quickened and its traffic and facilities grew. In 1912, some 736 vessels carried slightly more than 2 million tons of cargo into the harbor. In 1966, a record year, almost 25 million tons were received and shipped from Montreal. A ship arrives or departs on an average of every 19 minutes during a busy day.

Like other Canadian ports, the Port of Montreal is administered by the National Harbours Board, a permanent Crown Corporation responsible to the Minister of Transport. The port has its own railway system which maintains

61 miles of track. It distributes electrical power, purchased from Hydro-Quebec. Its own water distribution system supplies water to ships and for fire protection. It also has harbor police and an emergency telephone network linking 56 strategically located call boxes directly with the harbor's police headquarters.

Among the leading commodities passing through the Port of Montreal are grain, petroleum and petroleum products, iron ore, gypsum, raw sugar, cement, flour, motor vehicles, chemicals, coal, phosphate rock, salt, iron and steel, nickel, glass, machinery, sulphur, molasses, copper, and lumber.

Total berthing length is more than 13 miles, with 96 berths having minimum depths of 30 to 35 feet, while 50 berths are shedded. Several berths are equipped with specially designed material handling equipment for bulk commodities such as grain, coal, sugar, cement, and petroleum products. Transit sheds have a combined floor area of more than 4 million square feet.

The port's five grain elevators have storage space for more than 22 million bushels and receiving or shipping capacity of 3 million bushels per 13-hour day. There are 25 grain berths, 18 of which are shedded, permitting a ship to take on general cargo and grain without moving. In addition, there is a cold storage warehouse of 3 million cubic feet.

The terminal railway boasts 8 diesel electric locomotives, a switching capability of 1,500 cars to and from berths per day and rail connections with the two main national railways, Canadian National and Canadian Pacific. Cranes found at the port include a floating, self-propelled crane rated at a 275 short ton capacity, another floating crane that can lift 90 short tons, a 120-ton capacity stiff leg derrick and smaller locomotive and diesel crawler cranes.

As for repair facilities, there are three floating drydocks with maximum lifting capacity of 300,000 long tons that can accommodate ships up to 750 feet long and with beams of 106 feet. The port's bunkering equipment is capable of delivering oil direct to vessels at a number of berths and also deliver by tanker to ships at any berth in the harbor. Tugs and marine salvage vessels also are available.

Montreal's harbor is operating fully 8½ to 9 months of the year and during the winter months, roughly from December 15 to April 15, the harbor is open. But due to winter conditions on the St. Lawrence River, navigation in these waters is restricted to ships reinforced for navigation in ice.

PRINCIPAL COMMODITIES SHIPPED THROUGH THE CANAL

(All cargo figures in long tons)

Pacific to Atlantic

Commodity	Fourth quarter, fiscal year—		
	1967	1966	5-Yr. Avg. 1961-65
Lumber.....	1,210,469	1,265,269	1,157,729
Ores, various.....	1,077,762	1,721,905	246,962
Iron and steel manufactures.....	756,662	992,518	316,335
Sugar.....	700,662	565,499	593,689
Fishmeal.....	391,831	335,453	---
Bananas.....	380,903	339,168	302,024
Metals, various.....	310,406	306,739	316,863
Food in refrigeration (excluding bananas).....	268,024	263,053	239,518
Pulpwood.....	200,254	157,982	141,437
Nitrate of soda.....	158,569	197,320	209,401
Canned food products.....	153,596	149,293	217,725
Barley.....	130,233	108,267	170,222
Wheat.....	122,698	154,533	210,546
Coffee.....	113,131	97,056	105,927
Potash.....	98,589	89,959	1,956
All others.....	1,887,200	2,249,407	3,769,589
Total.....	7,960,989	8,993,421	7,999,923

Atlantic to Pacific

Commodity	Fourth quarter, fiscal year—		
	1967	1966	5-Yr. Avg. 1961-65
Petroleum and products (excluding asphalt).....	4,412,152	3,970,186	3,032,710
Coal and coke.....	2,527,935	1,669,584	1,630,663
Metal, scrap.....	1,291,156	427,549	669,565
Phosphate.....	865,414	804,044	553,806
Corn.....	545,273	694,977	368,977
Iron and steel manufactures.....	535,184	477,852	407,951
Soybeans.....	427,349	461,513	332,040
Ores, various.....	331,333	346,781	86,020
Sugar.....	319,352	208,058	320,063
Chemicals, unclassified.....	277,268	230,397	179,517
Metal, iron.....	276,196	19,945	52,629
Rice.....	248,327	40,026	63,341
Sulphur.....	196,822	154,414	107,026
Sorghum.....	192,117	104,329	---
Fertilizers, unclassified.....	155,850	75,017	104,308
All others.....	2,192,546	2,217,734	1,986,821
Total.....	14,794,274	11,902,406	9,895,437

CANAL TRANSITS — COMMERCIAL AND U.S. GOVERNMENT

	Fourth quarter, fiscal year				
	1967			1966	Avg. No. Transits 1961-65
	Atlantic to Pacific	Pacific to Atlantic	Total	Total	Total
Commercial vessels:					
Oceangoing.....	1,650	1,660	3,310	3,042	2,919
Small °.....	94	81	175	170	134
Total commercial.....	1,744	1,741	3,485	3,212	3,053
U.S. Government vessels: °°					
Oceangoing.....	189	80	269	141	64
Small °.....	17	16	33	34	37
Total, commercial and U.S. Gov- ernment.....	1,950	1,837	3,787	3,387	3,154

° Vessels under 300 net tons or 500 displacement tons.

°° Vessels on which tolls are credited. Prior to July 1, 1951, Government-operated ships transited free.

CANAL HISTORY

50 Years Ago

AS PART of the local war effort 50 years ago, the local Panama Canal Zone residents were encouraged to grow fruits and vegetables. The stewards of the Canal restaurants were instructed to save the seeds of papayas consumed at the hotels and forward them to the district Quartermaster for distribution to employees who desired them for planting. Commissaries were carrying a line of garden vegetable seeds and fertilizer could be purchased through the Quartermaster at 10 cents a sack plus the charge for a team of horses if delivered at the point designated by the employee. Boy Scouts of the Canal Zone undertook gardening with the slogan "Every Scout to Feed a Soldier."

Graduation exercises for the class of 1917 of the Canal Zone High School were held at the National Theater in Panama June 22, 1917 for the graduating class of 11 members, 6 of whom were boys and 5 girls. Free train service was arranged for those who wished to attend from stations along the line of the Panama Railroad with special coaches attached to some trains and a special train returning graduates and friends from Panama to the Atlantic side.

The USS *Shaw*, a new U.S. Navy destroyer, made a record breaking passage through the Panama Canal in early June 1917 in 5 hours and 45 minutes. The best previous time was 6 hours and

20 minutes. The *Shaw* also made a record run from the Pacific coast to the Atlantic, distance of approximately 5,850 miles in 14 days and 10 hours and 20 minutes. The *Panama Canal Record* said that if the *Shaw* had gone by way of Magellan, the distance would have been 13,500 nautical miles and the time required would have been more than 36 days.

25 Years Ago

EARLY JUNE of 1942 saw a tightened military alert in Panama as the Japanese war effort was felt on this hemisphere's Pacific coast. After the June 3d bombing raid on Dutch Harbor, Alaska, U.S. Secretary of War Henry L. Stinson warned that further blows might be felt anywhere between there and the Panama Canal. In the Zone, soldiers' and sailors' leaves were being canceled and all personnel were sticking close to their posts. Despite wins over the Japanese, warnings continued to be frequent through that summer.

During the summer of 1942, a U.S. conservation order was requiring Americans to save and return all empty toothpaste, shaving cream, and other collapsible tubes to places of purchase. In the Canal Zone, containers were provided in all commissaries for patrons to return tubes coated with tin or other alloys. During the war, such collapsible containers were being re-used as

containers for medicinal or pharmaceutical preparations.

A Defense Wardens' Basic Training Course opened in June to coordinate the various civilian defense services in the Canal Zone. The course was held at Cristobal High School twice a week after working hours. It was announced that this was the only further step necessary for complete readiness against emergency on the Atlantic side. By July, Zone-wide success in the conduct of alert tests was bringing praise from the Civilian Defense organization.

10 Years Ago

THE FIRST experimental lighting system for the banks of Gaillard Cut was planned during the summer of 1957. It was to call for installation of lights for a distance of 3,400 feet, providing good visibility of both banks and mild illumination of the waterway without glare. A section of the Cut between Culebra and Empire Reaches was selected for the experiment. It included a curve and a part of the channel measuring from 300 to 500 feet in width.

Early summer, 1957, found Canal Zonians favorably discussing the formation of a United Fund organization. Articles and bylaws for the fund raising campaign were soon adopted.

The first air shipment of fresh fruits and vegetables, not available on the Isthmus, was placed on sale in Panama Canal Retail stores in late June, 1957. The produce, handled through Tocumen Airport from Florida produce brokers, was to arrive each week and be placed on sale immediately.

The work of converting Panama Canal power from 25 to 60 cycles was begun that summer, to be completed within 3 years.

One Year Ago

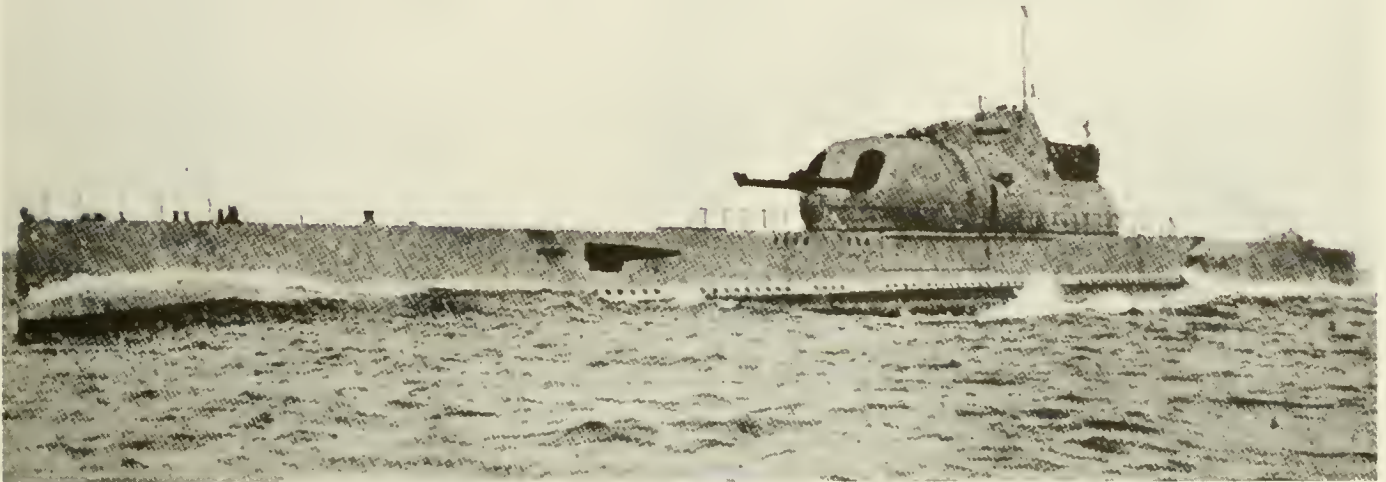
LAST YEAR Cristobal had the driest June in 96 years. A record-breaking low of 3.38 inches of rainfall fell during that month, 9.71 inches below normal. This year Cristobal had 18.06 inches during June and Gatun reported 19.36 inches of rain.

At the end of July, 1966, plans for the final phase of the Gaillard Cut-widening project were given the go-ahead. This was the last and largest contract advertised for bids in the long-range widening project which began in 1959. The new phase of the \$44 million effort called for the excavation of 9.5 million yards of earth in the 3-mile Bas Obispo-Cascadas Reaches.



Ready to roll. Gasoline driven motor cars at the Canal's Balboa garage in 1915. These were used by Canal officials during construction days and for a period thereafter to visit worksites. At the right is Motor Car No. 1, nicknamed The Yellow Peril and The Brain Wagon, which was the car used by Col. George W. Goethals, chief engineer and first governor of the Canal Zone. Col. Goethals frequently rode the car on his inspection trips.

World War II Sea Tragedy That Made No Headlines



The *Surcouf* is underway with her armament bristling. She was one of the few important French naval vessels still working with the Allies when the end came for her in 1942. Aboard were 207 men when she went down in the Caribbean en route to the Canal.

LONDON, April 18, 1942—The giant submarine “*Surcouf*,” the largest in the world, “is considerably overdue and must be considered lost,” Free French headquarters announced today. There was no indication of where the vessel went down, when it happened, or whether it was the result of enemy action or an accident.

—New York Times.

At 5 o'clock on the night of February 18, 1942, the SS *Thompson Lykes*, a hard working merchant ship owned by the U.S. flag Lykes Line of New Orleans, sailed from Cristobal with wartime cargo for Guantanamo, Cuba.

It was a typical dry season evening with sunset followed by the swift darkness of a tropical night. There was no moon and, as the vessel moved out into the Caribbean, officers and men reported later that the night became exceptionally dark, in fact one of the blackest they had seen at that time of the year.

Visibility, even aboard ship, was a near zero since, according to wartime restrictions, the ship was traveling without lights and with all portholes blacked out.

Capt. Henry Johnson, master of the

vessel, made a mental note of the poor visibility when he made a routine check of the ship about 10 p.m. He was not concerned since he felt that the night provided some measure of security. In those early days of World War II, the Caribbean was a happy hunting ground for German submarines that sometimes sank ships within a few miles of Cristobal.

He noticed before he turned back to his cabin that the ship was on course at a speed of about 15 knots. He then sat down at his desk to decode a message just received which would change his

Research for this story was done by Julius Grigore, Assistant Chief of the Industrial Division, from records provided by the U.S. Departments of Defense, State, and Treasury; the National Archives; the British Imperial War Museum; and the French Admiralty. He also interviewed Capt. Henry Johnson, former master of the *Thompson Lykes* who is now retired and living in New Orleans. Pictures were provided by Captain Johnson, The Lykes Company Public Information Office and the U.S. Navy.

course from Guantanamo to Cienfuegos, Cuba.

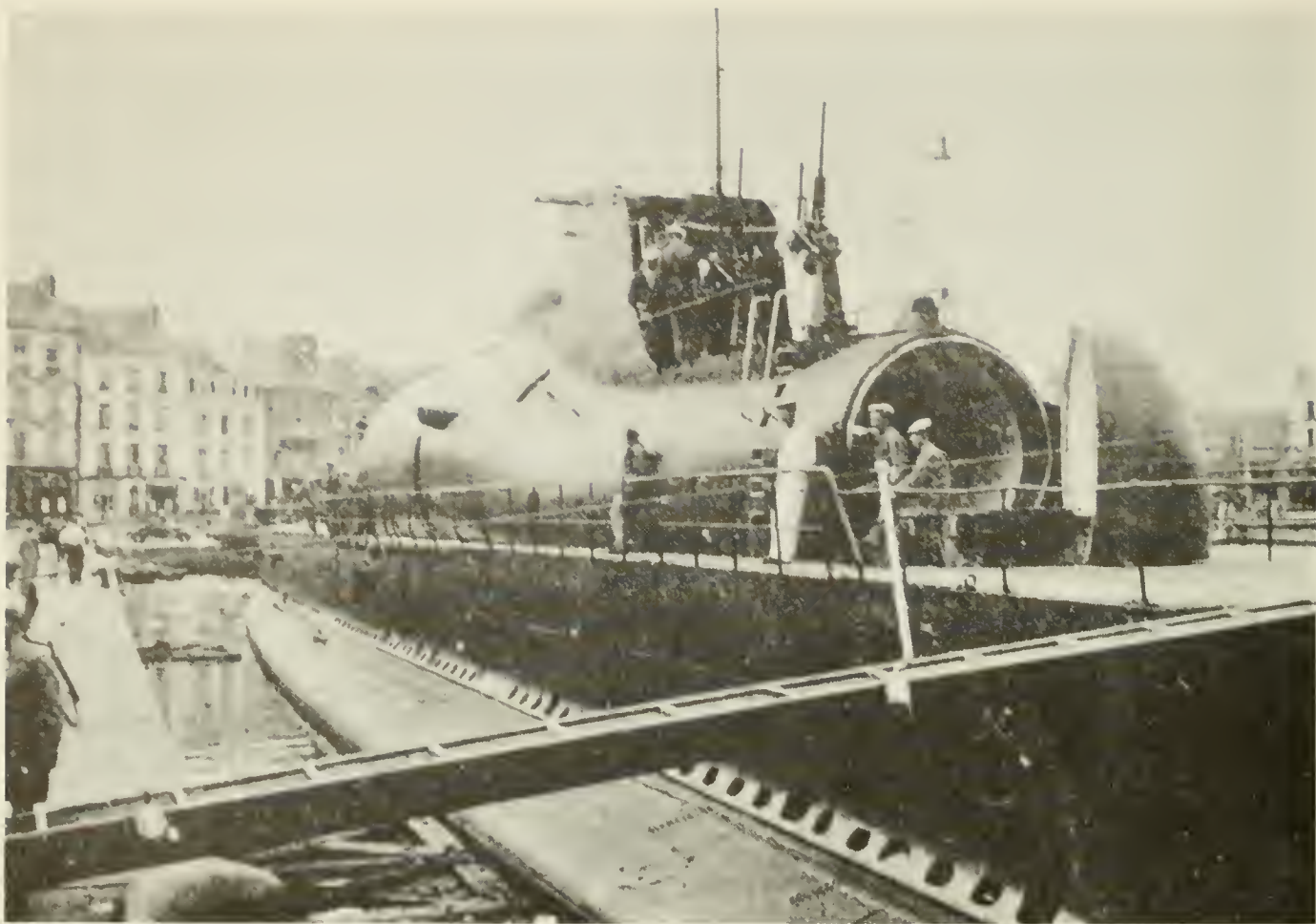
But Capt. Johnson was fated never to reach Cienfuegos or any other port in Cuba—not this trip anyway.

While he was busy with his message, he heard a tremendous crash. The ship shuddered. Capt. Johnson got to the bridge in time to see what he thought was the bow of a ship standing straight up in the air and going down fast. Later there were reports that faint cries for help had been heard and that the third mate believed he saw a blinking light, which might have been a flashlight, moments before the collision.

Capt. Johnson immediately notified port authorities in Cristobal and, despite the danger involved, ordered the *Thompson Lykes* to circle the area. The search continued until daylight but no survivors and no signs of wreckage were found. A search later by air and surface craft from the Canal Zone also was fruitless.

Captain Johnson thought his ship had hit a German submarine. When the vessel returned to Cristobal, there was no doubt that from the size of the dent

(See p. 16)



Called a submarine cruiser, the *Surcouf* was the largest submarine of her time. She was designed to sail for as long as 3 months without refueling and her armament included 2 eight-inch guns and 10 torpedo tubes. In addition, she carried a scouting plane in the watertight hangar shown in the photo.

Surcouf Was Pride of Free French

(Continued from p. 15)

in her bow, that she had hit something large. Naval authorities on the Isthmus said, however, there were no German submarines in the west Caribbean at the time. But the French submarine *Surcouf*, expected in Cristobal February 19 on her way from Bermuda to Tahiti via the Panama Canal, was overdue.

The *Surcouf*, with 207 officers and men aboard, was one of the few important French naval vessels still working with the Allies. She was one of the aces in the hands of the Free French group and came to symbolize the French naval forces, the greater part of which had remained with Vichy after the fall of France.

The massive submarine, nearly twice the tonnage of the average World War II destroyer, even carried a reconnaissance seaplane. Shortly after the

outbreak of war, she had captured a German merchantman 1,000 miles out at sea.

The *Surcouf* was one of three French naval vessels named after a famous French privateer who made his fortune by raiding British merchant vessels at the end of the 18th century.

The first ship to bear his name was a 628-ton vessel that was built in 1858 and served with the French Navy until 1878. The second *Surcouf* was one of six torpedo cruisers. Launched in 1888, she saw service in Morocco in 1907-08 and in the English channel during World War I.

The 352-foot submarine *Surcouf* was launched in November 1929 in Cherbourg.

Her armament consisted of 2 watertight gun turrets, 2 8-inch cannon, 2 machine guns and 10 torpedo tubes.

She carried 22 torpedoes and a seaplane. Her surface displacement was 3,304 tons.

At the time of her launching, naval experts considered she represented too many eggs in one basket and that her loss would be a great blow to the French Navy. She was too large and too cumbersome for fleet work and to act single-handed on the ocean was her purpose.

At the time of the Oran ultimatum to the French fleet, the *Surcouf* was lying in the English port of Portsmouth. Through a misunderstanding, there was a scuffle incidental to her seizure by the British and a French officer and a British seaman were killed. The vessel was turned over later to the Fighting French.

Under the command of Capt. Louis Blaison, the *Surcouf* took part in the seizure of St. Pierre and Miquelon in

December 1941. She previously had been reconditioned at Portsmouth, N.H., after cruising more than 22,000 miles.

In early February, 1942, she was ordered to sail from Bermuda to Tahiti through the Panama Canal. She was routed to Panama via Caicos Passage and the Windward Passage, adjusting speed to arrive in Cristobal at 0900 February 19.

According to a U.S. Navy report issued after the disappearance of the French submarine, the *Thompson Lykes* "accidentally rammed and sank a craft believed to be a submarine in latitude 10° 40" north and longitude 79° 31" west at 0330 GCT, February 19."

The report further stated that if the *Surcouf* had been 55 miles behind the position last reported by the British Admiralty on February 18, she would have been in the area where the merchant ship reported her ramming and sinking of a craft believed to have been a submarine.

But the U.S. Navy considered evidence as to the manner of the sinking of the *Surcouf* as circumstantial. In a letter to the U.S. Secretary of State, the U.S. Navy Department said that "although the Commandant of the 15th Naval District in Balboa apparently believes that the evidence shows the *Surcouf* was sunk by collision with the *Thompson Lykes*, there is a possibility that the *Surcouf* may have been sunk in some other way."

It was requested that the Secretary of the Navy's sympathy in the loss of the *Surcouf* and her crew be expressed to the Free French authorities. This was done.

The remains of the world's largest

and most unusual pre-nuclear submarine and members of her crew, apparently lie some 1,800 fathoms or 10,800 feet below the surface of the Caribbean along with any clue as to what actually happened before she sank.

Even today, after 25 years, the files of three major naval powers remain incomplete and there is no one who can add anything to the information given by the men actually involved in the affair at the time.

Her sinking with 207 men aboard makes it one of the major sea tragedies of World War II. But because of security reasons no publicity was given at the time of her disappearance and the crew of the *Thompson Lykes* were warned not to talk. Wartime restrictions prevented anyone from keeping personal records or a diary. Thus news of her loss became buried and quickly forgotten after the war.

The *Thompson Lykes* was absolved of all blame in the accident, received temporary repairs in Cristobal and permanent repairs in New Orleans. She continued service during the war as a cargo carrier and in 1945 was reported to have collided with a U.S. Navy destroyer in Boston harbor during a heavy snowstorm.

She was retired from service in 1960 and traded in to the U. S. Maritime Administration which has the ship in the U.S. Government reserve fleet in Mobile, Ala.

A new *Thompson Lykes*, which is the name of one of the original seven founding brothers of the Lykes Line, replaced the old ship and is now making regular trips from Gulf ports through the Panama Canal.



Master of the SS *Thompson Lykes* at the time of the collision was Capt. Henry Johnson. Moments after the impact, he rushed to the bridge in time to see what appeared to be a ship's bow standing straight up in the air and going down fast. Capt. Johnson notified the Cristobal port authorities and ordered his ship to circle the area, disregarding the danger involved. But this and later searches were fruitless.



Steaming to another port is the *Thompson Lykes* which was absolved of all blame in the collision with the giant submarine. She continued service after the accident and was retired in 1960. A new *Thompson Lykes* is now making trips through the Canal.

ANNIVERSARIES

(On the basis of total Federal Service)

ENGINEERING AND CONSTRUCTION BUREAU

William H. Gordon
Motor Launch Captain
Carlton C. James
Motor Launch Operator

Angel J. Peña
Supply Clerk
Everett E. Dudley
Accounting Clerk

MARINE BUREAU

Herbert W. McKenzie
Oiler-Floating Plant

TRANSPORTATION AND TERMINALS BUREAU

Damián Sánchez
Leader Laborer (Heavy)

CIVIL AFFAIRS BUREAU

Francis A. Brown
Contraband Control Officer
Carmen de Phillips
Teacher-Elementary (Latin American
Schools)

OFFICE OF THE COMPTROLLER
Horace B. Headley
Accounting Technician

ADMINISTRATIVE SERVICES DIVISION

Raymond W. Matson
Mail Supervisor

PERSONNEL BUREAU

Philip T. Green
Supervisory Training Instructor

MARINE BUREAU

Walter Ince
Oiler (Floating Plant)
Robert L. Knapp
Towing Locomotive Operator (Locks)
Wilson B. Lawrence
Furnaceman
Henry J. McElhone, Jr.
Planner and Estimator (Marine Machinist)
Leslie A. McLean
Helper Lock Operator
David E. Coffey
General Foreman (Metal Working)
Edwin G. Gayle
Carpenter
Halstead C. Hodgson
Leader Linehandler (Deckhand
Boatswain)
Guido Marcola
Guard
Teddy A. Marti
Leader Lock Operator (Machinist)
R. H. McConaughy
Lock Operator (Pipefitter)
Grafton M. Boyce
Seaman
James E. Farrell
Oiler
Alfred Lashley
Carpenter (Maintenance)
Lamar M. Lavender
Towing Locomotive Operator (Locks)
Sydney T. Lindh
Lead Foreman Machinist (Marine)
Joseph W. Riley
Leader Linehandler (Deckhand
Boatswain)
Martin E. White
Rigger
Wilfred Williams
Leader Seaman

TRANSPORTATION AND TERMINALS BUREAU

Frank Dyer
Chauffeur
George L. Lowe
Truck Driver (Heavy)
William McKenzie
Toolroom Attendant
John A. McLain, Jr.
Liquid Fuels Dispatcher
Clement C. Phillips
Railroad Trackman (Mainline)
Leonel S. Boyce
Truck Driver (Heavy)
Edward S. W. Méndez
Freight Clerk

Noel Belgrave
Water Service Man
Harry G. Crawford
Truck Driver (Heavy)
Luke M. Levy
Cargo Checker

SUPPLY AND COMMUNITY SERVICE BUREAU

Clyde M. Francis
Supply Clerk
James A. Phillips
High Lift Truck Operator
Ethelbert C. Roach
Laborer (Cleaner)
Lewis Charles
Meat Cutter
Wilford R. Dixon, Jr.
Commissary Store Manager
Earle G. Moore
Mail Supervisor
William L. Benny
Sales Store Manager
Clifford T. Chandler
Messenger (Motor Vehicle Operator)
Albot Cyrille
Supply Clerk
Elliott L. Morris
Laborer (Cleaner)
Pedro P. Peralta
Scrap Baling Machine Operator
Joseph Roberts
Teller

ENGINEERING AND CONSTRUCTION BUREAU

Donald Dabriel
Leader Electrician (Lineman)
Rudolfo C. Dawson
Information Receptionist
Oather T. Brownlee
Lead Foreman (Public Works,
Construction and Maintenance)
S. J. Campbell
Clerk (Work Order)
Jacinto Castro
Helper Machinist (Marine)
Harlan P. Crouch
Leader Central Office Repairman
Robert B. Grier
Leader Machinist (Maintenance)
Howard W. Osborn
Supervisory Maintenance Engineer
Simon VanHorn
Maintenance (Distribution Systems)
Clifford U. Williams
Helper Electrician
Woodford M. Babbitt
Leader Core Drill Operator
(Sub-Aqueous)
Adolphus I. Beckles
(Maintenance)
John W. Muller
Supervisory General Engineer (Estimates)
Luther Walker
Clerk Typist
CIVIL AFFAIRS BUREAU
Richard C. Hogan
Assistant Foreman (Mailing Division)
John S. Pettingill
Education Specialist (Administrative)





Horses round the bend on a typical race day at President Remon Racetrack while the crowd in the stands cheer on their favorites. The near capacity crowd in the stands is an indication of the popularity of horseracing in Panama where many outstanding jockeys began.

They're Off and Running At President Remon Track

THE THUNDER of hoofbeats and the roar of the crowd punctures the afternoon calm at Panama's President Remon Racetrack every weekend of the year and on most holidays.

The Sport of Kings, accompanied by the thrills of parimutuel wagering, boasts as intense a following in Panama as it does in North America, Europe and in other Latin American nations.

Horseracing in Panama dates back to 1922 when Dr. Belisario Porras, during his third term as President of the Republic, officially opened the Juan Franco Hippodrome, located in what today is the Obarrio section of Via España. On hand for the inauguration of the track were, besides President Porras, the U.S. Minister to Panama, Dr. John C. South, president of the first Jockey Club of Panama, Raul Espinosa, and other personalities of the social, political and official circles of Panama.

Records show the first race had seven entries with a total of \$775 in prize money. It was won by the mare Lead Us and another mare, Sonrisa, captured the first "Classic" stake race.

One of the nation's first jockeys was Raul Arango Navarro, who is now

Second Vice President of the Republic and Panama's Ambassador to Spain. Remembered as some of Panama's first racehorses are Manua, Factor Ruso, Reina Mora, Copiapo, Burlesco, Pierrot, Abel and King Sceptre.

Horseracing faced many financial

problems during those early days in Panama and could have died out as a sport had it not received the enthusiastic support of businessmen Raul Espinosa, Ernesto de la Guardia, Francisco Arias Paredes and other men. Espinosa served as manager of the track from 1935 to 1943.

When the National Horseracing Company took charge in 1943, horseracing received another needed boost through several capital improvements that were initiated. Old fashioned starting barriers were replaced by automatic starting gates; an electric totalizator supplanted the existing simple tote boards; there were changes in the methods of betting.

The daily double was initiated as was the 1-2 and being considered for the future is the 5 and 6 betting, the latter two of which are unfamiliar to most U.S. turf fans. To win a 1-2 wager, the bettor must select the winner and place, or runnerup horse, in the proper order in a race. He tries to pick the winners of six pre-named races in the 5 and 6 betting.

Panama's Constitution of 1946 established
(See p. 20)



The late Francisco Arias Paredes who helped pioneer horseracing in Panama.

Panama Jockeys Are Among Best Riders in World

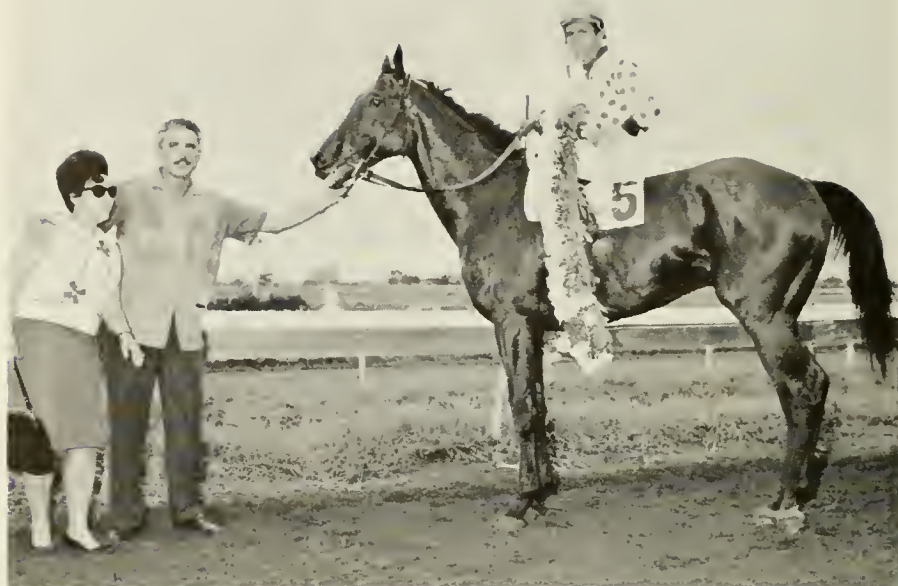
(Continued from p. 19)

lished that all games of chance involving betting would be operated by the Government. The National Horseracing Company was obliged to sell its interests to the Government which, in turn, became responsible for all the obligations of the selling firm, particularly in relation to paying the rental of the land used by the racetrack.

Another important change was the establishment of the Board of Trustees for Games of Chance. The operations of the racetrack became one of the responsibilities of the new group.

In 1956, the President Remon Racetrack was opened. It was named after the late President José Antonio Remón Cantera, a great horseracing enthusiast who was responsible for the construction of the new hippodrome. This facility is located on the outskirts of Panama City at the site where Charles A. Lindberg landed the *Spirit of St. Louis* during a goodwill tour one year after his memorable flight across the Atlantic in 1927.

This monument to horseracing has



Tojo, the first native horse to win the President of the Republic Classic, is shown with jockey Guillermo Milord and the owners William Ross and his wife, Reina. Tojo's victory was worth \$15,650 to Mr. and Mrs. Ross. The purse was \$15,150, plus \$500 for being a native.

two courses, one for the races themselves and an inner track for practice. In the center is an artificial lake that has been used for boat racing. The track's automatic totalizator is as modern as any in the world and the grandstand can accommodate 15,000 spectators. A family parking area has space

for 200 cars for families to watch the races from their autos.

The President Remon Racetrack has produced a number of fine jockeys, many who are prominent on race courses of the United States, Mexico, Puerto Rico, Colombia and other nations. Most famous of all are Manuel Ycaza and



A view of the old Juan Franco Racetrack. On the left was the "clubhouse" and on the right, the "big pool," the grandstand.

Braulio Baeza, the latter of whom earned \$2.9 million in purses last year on U.S. racetracks.

Baeza has brought home the winners in two of the principal races in the United States, the Kentucky Derby and Belmont Stakes in 1963 with Chateaugay, and earlier in the 1961 Belmont Stakes aboard Sherluck.

Both in 1959 and 1960, Ycaza rode Bald Eagle to victory in the International Classic of Washington at Laurel, Md., and in 1964 took the Belmont Stakes with Quadrangle.

The first Panamanian jockey to ride in the U.S. was Gustavo "Chichi" Moore, today a prosperous horse trainer in Miami, Fla. Another of the first Panamanians to ride in the United States was Hernani Mora. Alfonso Carbonell was for many years outstanding in Lima, Peru.

Besides its importance as a sport in Panama, horseracing contributes to the material betterment of the country by providing hundreds of jobs to those directly or indirectly involved. More than \$148,000 in prizes to horse owners is distributed through a well organized annual program of Classics.

There are 18 horse breeding farms in the provinces of Panama, Chiriqui, Cocle, and Colon. Since 1963, only purebreds are registered in the Stud Book, according to law. Imported horses are used for breeding on the different farms and their offspring are later sent to the hippodrome to compete for purses.

But the quality of local horseflesh is rapidly improving through careful breeding. The main event of the year, the President of the Republic Classic, was won the past May by Tojo, the first native horse to win this event. Tojo outraced some highly-regarded imported animals.

Contributing greatly to the popularity of the sport is the fact that four radio stations in Panama transmit the races on Saturdays, Sundays and holidays and one television station carries the Sunday races. Radio transmission of the races dates back 24 years when only the main race of the day was announced on the air. Later, two races were broadcast and eventually, the entire program.

Well-known horseracing enthusiasts of the Juan Franco Racetrack days may be seen at the President Remon Racetrack. Among these are sportsman Carlos "El Indio" Campbell, businessmen Pedro Chaluja and Felipe Motta, turf writer Prospero Royo, sports columnist Ernesto Enrique Argote and announcers Pacho Ycaza, Arquimedes Fernandez and Chelo Gonzalez—all faithful bangtail fans.



Manuel Ycaza is today an outstanding jockey in the United States. He has ridden more than 2,000 winners, which earned some \$15 million, during his career.



A famous Panamanian jockey in the United States, Braulio Baeza, won the Kentucky Derby and Belmont Stakes in 1963. His mounts earned \$2.9 million last year.



Horses breaking from the electrically controlled starting gate at President Remon Hippodrome. The racers get off on even terms—a guarantee for the bettors.

SHIPPING

Barge Ships

AFTER SOME months of planning, the Lykes Bros. Steamship Company, Inc. of New Orleans announced recently that it expects to issue invitations to U.S. shipyards for bids on the construction of three new large, all-purpose barge-carrying ships for the U.S. gulf ports and European trade.

Novel features of the new Lykes vessels, according to the president of the line, are a stern elevator having a total lift capacity of more than 2,000 tons, a way of moving barges or other cargo, in wheeled hydraulic transporters from the elevator into cargo decks, and open decks allowing cargo to be rolled rather than lifted and stowed into its final resting place aboard ship.

The new ships, capable of transiting the Canal, will be 875 feet in length and have a beam of 106 feet. They would be capable of carrying either 38 fully loaded barges or a total of 1,500 to 1,600 8' by 8' by 20-foot cargo containers.

The cargo capacity of the vessels is to be about 1.5 million cubic feet. In addition to this the ships can accommodate about 15,000 tons of liquid cargo in deep tank spaces. With a speed of 21 knots, the ships could provide service at 10-day intervals between gulf ports and Europe. Each of the 38 barges carried by the ships would measure 97.5 in length and would have the cargo delivery capacity of 12 modern freighters of conventional design. Each of the

PANAMA CANAL TRAFFIC STATISTICS FOR FOURTH QUARTER FISCAL YEAR 1967 TRANSITS (Oceangoing Vessels)

	1967	1966
Commercial.....	3,310	3,042
U.S. Government.....	269	141
Free.....	24	22
Total.....	3,603	3,205

TOLLS*

Commercial.....	\$20,658,173	\$17,815,769
U.S. Government.....	1,676,191	805,372
Total.....	\$22,334,364	\$18,621,141

CARGO**

Commercial.....	22,757,829	20,756,671
U.S. Government.....	1,825,283	898,255
Free.....	171,570	122,280
Total.....	24,754,682	21,777,206

* Includes tolls on all vessels, oceangoing and small.

** Cargo figures are in long tons.

barges could be loaded or unloaded in as little as 25 minutes.

New Fast Freightier

THE STRATHCONON, newest of the P & O Lines fast cargo liners built recently in Japan, passed through the Canal late in July on her maiden voyage from the Far East to European ports. The ship was originally scheduled to make the voyage via the Suez Canal.

The new freighter is the second of three high speed cargo liners designed specially for carriage of general and refrigerated cargoes, oils, containers, explosives, cars, bullion and a variety

of other cargoes. Like her sister ships the *Strathbora* and *Strathardle*, she has a service speed of 21 knots. They form the Strath Express Service operating between Europe and the Far East with P & O's other two services, the Japan Express and Japan Mail.

In order to maintain peak efficiency, the ships are designed to run on a rigid schedule and are equipped with stabilizers so that this schedule can be maintained even under adverse weather conditions. Norton Lilly, local agent for the line, expects that the *Strathardle* will pass through the Canal in the near future.

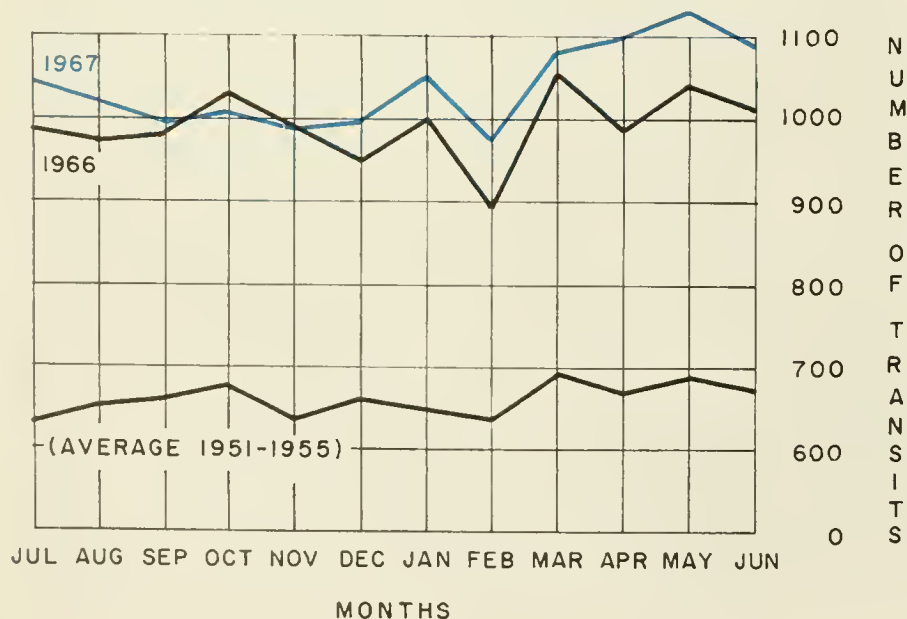
No Canal Customer

THE ORIENTAL PIONEER, a new combined ore-oil carrier built to carry oil from the Persian Gulf to Brazil and iron ore from Brazil to Japan, will make the round-the-world voyage without using either the Suez or Panama Canals. It is understood, according to an article in SHIPPING WORLD AND SHIPBUILDER, that this new vessel will travel around the world by way of the Cape of Good Hope and Cape Horn. Although each voyage will total almost 30,000 miles, the route taken will be shorter than if the two canals were used.

The ship was built by the Sasebo Heavy Industries Co. Ltd. of Japan for Eastern Bulk Carriers and Tankers Inc. of Liberia, a member of the C. Y. Tung Group. She is under a long time charter to Companhia Vale de Rio Doce, a Brazilian Government controlled concern handling mining, transportation, and trade in iron ore and associated products. If necessary, she could use the Panama Canal. Her length overall is 738 feet 2 inches and her beam is 105 feet, 7 inches.

New Queen to Use Canal

THE \$75 MILLION nameless flagship of the Cunard Line, which is now being constructed at Clydebank, Scotland, will be a regular customer of the Panama Canal during the winter cruise seasons, if present plans for her use are carried out. The successor to the *Queen Mary*, is to have a gross tonnage of 58,000 compared with the *Queen Mary's* 81,237 and the *Queen Elizabeth's* 82,997 and she will be short enough and narrow enough to fit in the Canal's locks. She will be one of the biggest ships to use the Canal.



MONUMENTAL FROLIC



A youth splashes in the pool at Goethals Monument while his dog and companion watch. The boy seems to be exhorting his canine friend: "Come on in . . . it's nice and cool." But the dog appears to be somewhat wary. Perhaps he knows the pool is for ornamentation and was not built as a swimming pool for poodles . . . or collies.



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