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PANAMA CANAL REVIEW

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About Our Cover

THE FACE OF the man on the cover is familiar to thousands of residents of the Isthmus.

Canal Zone Gov. Robert J. Fleming, Jr., has just closed out his career as chief executive for the Panama Canal organization after a 5-year stay, longer than that of any predecessor. Before departing Panama to take a highly responsible position in Florida, Governor Fleming also rang down the curtain on his outstanding military career.

Governor and Mrs. Fleming, both of whom were decorated with Panama's Order of Vasco Núñez de Balboa, will be missed by their friends and acquaintances.

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Among the many prominent visitors to the Governor's office was this charming young miss who was presented a gold charm in 1962 for winning the contest to name the two popular burros at Summit Gardens. The young lady is Suzanne Bomford, daughter of Mr. and Mrs. Douglas Bomford of Panama City.

It was early in Governor Fleming's term when he made this inspection trip of the Canal, which was changing in appearance at the Pacific terminal with the construction of the $20 million Thatcher Ferry Bridge, seen near its completion in the background.

Governor Leaves Job Well Done To Take Up New Challenge

FIVE YEARS of action and accomplishment—that describes in a phrase the administration of Canal Zone Governor Robert J. Fleming, Jr., who on January 19 left behind him an outstanding record as Governor of the Canal Zone.

The Governor goes on to another challenge, this one in Miami, Fla., where he will take a $30,000 a year post with Interama, the Inter-American Cultural and Commercial Center being built in Miami. He was appointed by Florida Governor Claude Kirk on January 12 and will direct construction, operations, and maintenance of the enterprise.

The 14th man to hold the governorship of the Canal Zone was a man who promised first to learn—thoroughly, quickly, and firsthand—what was going on in the organization. He kept that promise and soon things were in high gear. His office was the only one in the tropics where "snowflakes" could be seen—these were the many memos that kept people hopping to get things done, to clean up, improve, innovate, plan, explain, and change.

Governor Fleming was supposed to retire from the U.S. Army as a Major General on the 28th of February, 1966. With the lowest serial number in the line of active Army at that time, he had given a lifetime of service to his country. But when President Lyndon B. Johnson requested him to continue as Governor, he stayed an additional year.

He was awarded the Distinguished Service Medal, the nation's highest military award for meritorious service, during a joint honor and retirement ceremony at Albrook AFB. Maj. Gen. Fleming was presented the award by Gen. Robert W. Porter, Jr., Commander-in-Chief, United States Southern Command.

"When you serve your country abroad, you should know the people and the language of the country in which you work," Governor Fleming had said. His interest in Panama and Panamanians was intense, and when he left, his knowledge of the country matched that of scholars who had studied it for years. And he could carry on a conversation in Spanish.

The esteem in which he was held by Panama was demonstrated when he was decorated with Grand Cross of the Order of Vasco Núñez de Balboa. President Marco A. Robles made the award at the Presidential Palace. At the same ceremony the First Lady, Mrs. Petita Saa de Robles, decorated Mrs. Fleming with the Order of Vasco Núñez de Balboa in the Grade of Grand Officer.

He wanted better understanding, and this theme was carried out in his uncounted trips into Panama City and towns in the Interior. He went to fairs, special events, conferences, and carnival functions. He spoke to numerous groups and unless duty interfered, he was always available to the press.

Panama Canal employees, a major responsibility of the Governor, were always close to his thoughts. He was

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Accomplishment Is Legacy of Governor Fleming

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insistent that they should not suffer because of political relations between the two nations—matters over which they have no direction.

To insure continued Canal operation, the Governor said, "requires the loyal work of dedicated people who now operate the Canal. These people will be needed for many years to come." He particularly emphasized this to all officials involved in negotiations with the Republic of Panama, and as a result guarantees were issued in a joint statement by the President of the United States and the President of Panama on September 24, 1965.

Governor Fleming spelled out his theme early. There would be changes, he said. A wide viewpoint and an open mind, he counseled, are important. He discussed the duty of every American to raise his sights and mind to meet the future, and laid the emphasis on human values. "They are the important ones," he said.

Within 2 years of taking office, he was faced with a major crisis in the January 1964 events. He maintained Canal operations, and when calm was restored he spared no effort in stimulating cooperation in official life, social events, and community events where progress could be made. He thanked both Panamanian and U.S. employees for their restraint and forbearance.

Governor Fleming helped direct organization of the sea-level canal studies. He also brought to a conclusion several programs already in progress, including the $20 million Thatcher Ferry Bridge over the Canal at Balboa, construction of Gorgas Hospital Annex, and placing into operation new towing locomotives and a new traffic control system. One of his last official acts was the awarding of the contract for widening from 300 to 500 feet the last 3 miles of Gaillard Cut.

He initiated many projects and nearly every area of Canal operation was affected. By 1966 the average ship was spending 13.8 hours in Canal waters, compared to 15.5 in 1962. This saves shipping interests money, and they saved much more when draft was increased by 2 feet by removal of batters from locks, removal of unused emergency dams, and other technical improvements.

A good will embrace. Panama's President Marco A. Robles congratulates Governor Fleming after decorating him with the Order of Vasco Núñez de Balboa during a ceremony at the Presidential Palace. At the right is Panama's First Lady, Sra. Petita Saa de Robles, who decorated Mrs. Fleming.

Deep draft experiments continued, and recently the *San Juan Merchant* broke a record when it moved through the locks at 40 feet, the deepest draft on record in the Canal. Fiscal year 1962 saw 12,106 ships use the Canal; by 1966 that had risen to 13,304, with the increased traffic handled by fewer employees.

The Personnel Bureau was reorganized. Employment and promotion opportunities for qualified Panamanians were increased. The Learnership and expanded Apprentice programs are proving very successful, and an office trainee program operates for high school and business school students in Panama. Students from the University of Panama are gaining work experience in their professions in another program which allows them to continue at the University. The Panamanian Student Assistant program was launched, and has been expanded.

Civic Councils were supported by Governor Fleming, who met with them regularly. He also appointed a Community Relations Assistant from the Latin American communities to serve on his staff.

A social worker program was launch-

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Bullring Exalts Art, Valor, Glory

SOME CALL bullfighting a sport, others compare it with the ballet and many consider it a compelling spectacle which, at its best, combines stirring music, almost hypnotic grace, brilliant costumes and undeniable courage and daring.

It is not simply an armed man, with superior intelligence, pitted against a hapless beast, aficionados (fans) contend; rather it is the torero (bullfighter) matched against himself, testing just how close he will work to the bull's horns to please the crowd.

In all probability, bullfighting is not the exclusive claim of Spain but in the Spanish speaking countries it has received those embellishments and support that make it the attraction it is today.

The history of bullfighting can be traced as far back as prehistoric Crete, and imperial Rome, where Julius Caesar imported men from the Iberian peninsula. Today the bullfight, or corrida, is found not only in Madrid, and other major cities of Spain but also the capitals of Spanish America. During patron saint days one can see primitive—frequently hilarious—bullfights in remote villages of Panama and nations to the north and south.

Southern France and parts of Italy have bullfights. Portugal also is famous for the corrida but law prohibits killing the bull in the Portuguese rings. In southern California and Texas sizable audiences have turned out to watch bloodless bullfighting.

Six bulls are dispatched by three toreros during a corrida which officially begins with the colorful grand entrance of the procession of participants. The torero, picadores, peons and others, each with his own appropiate uniform, is called the paseillo.

The resplendent torero, or matador, is the most striking with short jacket, waistcoat, knee length, skin tight trousers of silk and satin elaborately embroidered with gold and silver, dress cape also beautifully embroidered, coral pink stockings, black, kneeless slippers and black, semispherical hat, the montera. The banderilleros wear similar uniforms but without the gold embroidery.

The procession goes across the arena

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With the sword in his right hand, torero uses muleta to lead the charging bull inches past his body during the execution of a "natural."

Grimacing, Spanish torero Victoriano Valencia appears to have his eyes on the horns of his adversary during a corrida in Panama City.

Panama Canal Pilots: They Take Command

Going up . . . or down . . . a ship's ladder is all part of a day's work for Panama Canal pilot. The Panama Canal is the only place in the world where, in accordance with applicable regulations, the pilot who boards a vessel in Canal waters assumes full responsibility for the movement and navigation of the vessel.

THERE'S NOTHING provincial about a Panama Canal pilot. He is able to give steering orders in Greek, French, Spanish, and Italian, and some can give these instructions in 10 languages.

He meets Masters and crews of thousands of foreign-flag vessels which transit the Panama Canal annually, and Panama Canal pilots take in their stride compliments on their diplomacy, tact, and skill.

Ten pilots were on the Panama Canal roster in August 1914 and the Captain of the Port, Balboa, said he believed "it will not be practicable to put more than three ships through daily, northbound. And if it takes a pilot 48 hours to complete this duty, it would require six pilots as a minimum to perform this work."

A thousand ships a month broke transit records the past year. Today's pilot roster lists 138, the peak figure in pilot force in Canal history. Transits of vessels of sizes unheard of a decade ago have more than doubled, and continued efficient operation in the Canal requires constant efforts to develop better means and more effective procedures for transiting vessels expeditiously from deep water to deep water. Transit time in fiscal year 1966 has been cut to about 10 hours, and the Canal now is in operation 'round the clock. The pilot force, besides providing enough pilots to handle current traffic, must allow, too, for anticipated retirements and take care of traffic increases foreseen in the future. The Panama Canal is now planning to increase its staff to 156 pilots.

The Panama Canal pilot shares a time-honored heritage with pilots of other maritime nations, and fills a role unparalleled in the world. The pilot's role in world shipping, and the necessity for pilot services, are recognized and appreciated by all who know the hazards of navigating ships in confined waters. The pilot has responsibility for insuring the safety of the vessel.

The Panama Canal is the only place in the world where, in accordance with applicable regulations, the pilot who boards a vessel in Panama Canal waters assumes full responsibility for the movement and navigation of the vessel. With the increase in size of vessels since World War II, the work of the Panama Canal pilot has become an even more demanding art.

Panama Canal pilots have a tremendous sense of pride in their job, know they have to perform at peak, and have a deep interest in the Canal operation.

One of the proud possessions of the Panama Canal is a scroll dated 1943, at a prisoner of war camp at Marlag and Milag Nord, Germany, which states that the Master Mariners who affixed their signatures to the scroll have, "during enforced leisure in Germany, held many discussions on the subject of the world's greatest engineering achievements and unanimously agree that the Panama Canal . . . is one of the greatest." In addition, the scroll says, the Master Mariners agreed that this is the most efficient organization of its kind and they placed on record their appreciation and gratitude to the Panama Canal pilots for their efficiency, courtesy, and reliability in providing a safe and swift passage through this strategic waterway.

Panama Canal pilots represent many areas of the United States and their wives, one pilot pointed out, could make up a small United Nations. Four of the pilots brought Japanese wives to the Zone and many, in his or her own way, make a significant contribution to community life.

Nearly all the Panama Canal pilots are family men. One of the advantages of holding a pilot position in the Canal Zone is that they are able to live ashore with their families and see their children reared.

Schooling, although thousands of miles from continental United States, is no problem. The Canal Zone has an excellent school system, from kindergarten through Canal Zone College.

Pilots may live in Panama City if they wish, and there they may choose from any number of attractive single homes or apartments. In the Canal Zone newly arriving employees may expect to start their residence in the older type houses, because assignment to housing is made on the basis of seniority of service with the Canal organization. New employees generally are assigned off-the-ground frame houses built between 1935 and 1943. Some of these contain four apartments and others 12 apartments.

Most Panama Canal pilots are professional sea-going men. Some attended academies directly after completing high school, and then went to sea. Others went to sea, in the fo'c'sle, as

seamen and progressed to deck officer ranks.

The Canal Zone is particularly conducive to developing hobbies, or to carrying out a pet hobby. Usually when a pilot takes up a hobby he excels in it. Panama Canal pilots hold trophies as champion marksmen. There are pilots who have studied art and are engravers; pilots who are qualified as divers; pilots who were salvage masters before they came to work as apprentice pilots; pilots who have distinguished themselves for community service as ham radio operators; and pilots who have piloted planes, and still do. Of the latter, Capt. Irving G. Hay treasures his plane pilot license as signed by Orville Wright. Captain Hay was a commercial pilot in the pioneering days and at one time was with an airline in Peru. Pilots in the early Canal days even gave auto drivers' tests. The theory then was, apparently, that if a man could operate a ship, he certainly could drive a car. Pilots on a busman's holiday build boats. They may be seen on the beautiful golf courses of the Isthmus, when their work schedules permit, and they are expert at refinishing furniture and helping add the special touches that make their living quarters more attractive. A number of pilots are authorities as collectors, from antique guns to coins, and are active in fraternal and community life. For 9 years the Panama Canal pilots sponsored two Sea Scout ships but for lack of time, when the Panama Canal transit operation went on a 24-hour day, turned ships and treasury over to the Navy.

The Panama Canal pilots have their own Canal Zone Pilots Association, Local 30 of the International Organization of Masters, Mates and Pilots, chartered in 1920. The original Panama Canal Pilots Association was organized 50 years ago in 1916. The purpose of the association is the improvement of economic status of members, and elevation of their professional standing. The association supports all measures that have for their objective the upbuilding of the profession, promotes advantageous legislation and work rules and regulations favorable to the pilots.

The Canal pilots have their own blood bank, own legal assistance for the association, and their consideration extends even to having a portable television set at each terminal of the Isthmus for use of the pilot or member of his family who may be hospitalized.

The Panama Canal pilots, highly skilled, well-trained intensely professional men, have a record of safety unsurpassed anywhere in the maritime world. The basic reasons for this are

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A Panama Canal pilot at home: Capt. Theodore F. Jablonski (center) holds Kathleen, who was 2 years of age on September 18. At left is Mrs. Jablonski and at right is Mary Lou, 5. Seated, in front, from left: Stephen Douglas, 6; Michael, 4; and Brian who was 3 on July 22. Stephen is enrolled in the second grade at St. Mary's Parochial School and Mary Lou started classes there when school opened in September.

Qualifications Are High for PC Pilots

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the high qualifications and excellent caliber of men selected for pilots-in-training.

Qualifications for the job of Panama Canal pilot always have been high. From the day the Panama Canal was opened in 1914, qualifieations were rigidly set. A pilot candidate was required to hold a U.S. Coast Guard master's license as "Master of any ship, any tonnage, on any ocean," have 7½ years' deck officer duty prior to his 35th birthday and experience aboard a maritime ship for 1 year as master. In recent years the Panama Canal organization amended these qualifications. Today a U.S. Coast Guard master's license is required, but only 1 year of service on ship as chief mate and no experience as master, although master's experience is still desirable. The minimum requirements for a Panama Canal pilot today are that he will not have reached his 40th birthday at the time of employment as pilot-in-training by the Canal organization. He must hold a license issued by the U.S. Coast Guard as master of steam or motor vessels, any gross tons, any ocean, and have served at least 6 months as chief mate (or master) of ocean, steam or motor vessels of 1,000 gross tons or over. Prior to receiving his license as pilot, he must pass prescribed examinations. Upon successful completion of a 19-month formal training period and examinations, he is presented an unrestricted license as pilot, Panama Canal, and promotion to the pay grade of Pilot, Qualified, Step 1. The most significant change is the establishment of two limited license levels of experience between pilot-in-training and pilot-qualified.

A pilot-in-training is paid approximately $12,000 annually for a minimum of 4 months.

A pilot is paid $15,617. After 3 years' service, through periodic step increases he receives $17,915.70. Top salary is $20,980.60.

For piloting in excess of 40 hours a week, they receive time and one-half as overtime and additional compensation for work at night, on Sundays and holidays.

Many years of training and tradition are behind the Panama Canal pilots. In four families in the Canal Zone a son followed in his pilot father's footsteps. The Panama Canal's second generation pilots are Capt. Sidney W. Peterson, son of Capt. W. Z. H. Peterson; Capt. T. C. Makibbin, son of Capt. H. S. Makibbin; Capt. J. L. McDaniel, son of Capt. A. R. McDaniel; and Capt. John J. Connard, Jr., son of Capt. John J. Connard. In the latter family, an uncle, Thomas Connard, also was a Panama Canal pilot.

Besides the father-son pilot combinations, the Canal roster also has identical twin pilots, Capt. Albert L. Wilder and Capt. Arthur T. Wilder.

CAPT. R. J. WESLEY

President of the International Organization of Masters, Mates, and Pilots, Local 30.

CAPT. IRVING G. HAY

Whose license as plane pilot was signed by Orville Wright, was a commercial pilot in the pioneer days of aviation.

CANAL HISTORY

50 Years Ago

NEW RECORDS for passage through the Canal were set in December, 1916, when the steamship *Balboa* made the transit in a total of 6 hours and 25 minutes. The vessel entered from the Pacific at 11:35 a.m. Sunday, December 3, and reached Cristobal at 6 p.m. On the same day the vessel *Cauca* made the transit in 7 hours and 9 minutes and the *San Juan* in 8 hours and 5 minutes. The *Panama Canal Record* remarked, however, that all these ships were relatively small and were the only vessels going northbound on that day.

The largest motorship to use the Panama Canal made the transit southbound December 22, 1916. She was the *George Washington* of the Norway-Pacific Line, operated by Fred Olsen, which was under charter to the U.S. Government to carry coal from Norfolk to Tiburon. With a length of 445 feet and a 55-foot beam, she was the largest motorship to use the Canal up to that time. She was carrying, on her first trip, 9,121 tons of coal.

As a result of the improved condition of the channel in the Cut, dredging on Sundays and holidays was discontinued beginning December 3, 1916, according to the *Panama Canal Record*. Continuous work, Sundays and holidays included, three shifts a day, had been carried on steadily since June 1, 1915, when trouble with the east and west Culebra slides became imminent.

25 Years Ago

FOLLOWING THE attack on Pearl Harbor by the Japanese Navy on December 7 and the U.S. declaration of war, the Canal Zone went on a war footing 25 years ago. In one of his first press conferences, Lt. Gen. Frank M. Andrews said that immediate evacuation from the Canal Zone of women, children and non-essential males was not being contemplated at present, since it was felt generally that the war situation did not warrant it.

The following day there was a report that a Japanese fleet was sailing for the Panama area and the first genuine air raid warning was sounded. This proved to be a case of mistaken identity. Zone and Panama blackouts were pronounced a partial success. Citizens in the Canal Zone began a series of civil defense meetings to discuss air raids, blackouts, volunteer work, and air raid shelters. The U.S. Army issued rules for censorship affecting letters, telephone calls and conversation in public places. The Superintendent of Storehouse and Oil Handling Plants issued instructions to discontinue the sale of tire casings and tubes for private automobiles.

By December 13, the Governor of the Canal Zone, Glen E. Edgerton, said that there was no good reason to fear an immediate attack on the Canal Zone. The opportunity for a surprise attack on the Panama Canal was gone, he said.

10 Years Ago

BOTH TOLLS and traffic through the Panama Canal during November 1956 were lower than for the previous month but higher than the corresponding month a year ago. The total of 654 oceangoing ships was 45 less than the previous month and the decline was blamed on the shipping strike which paralyzed east coast and gulf ports in the United States.

The billionth ton of cargo rode through the Panama Canal December 12, 1956, stowed in the holds of the U.S. flag steamship *Edward Luckenbach*. The milestone was marked by one of the most festive transits in the history of Canal operations. During the 9 hours and 2 minutes the ship was in Canal waters, the "billionth ton" vessel received official tribute, salutes, and cheers. It was one of the few occasions in the waterway's history in which all ships in Canal waters were invited to dress ship.

Two 60-cycle generating units, the first major powerplant units to be completed under the Panama Canal power conversion project, were placed in regular operation at the Gatun Hydroelectric Station early in October 1956. A third and fourth were to follow in 3 months. The completion of these first generating units under three separate contracts, in addition to work by the Panama Canal forces, was another milestone in the extensive power conversion program then in progress.

One Year Ago

WEATHER WAS being discussed as usual 1 year ago in the Canal Zone. For the first time in 13 months of unprecedented dry weather, the Meteorological and Hydrographic Branch issued a warning on November 12, that spillway operations at Gatun and Madden Lakes might become necessary at any time. Heavy rains during the first part of November brought the elevations of Gatun and Madden Lake to a point where it might become necessary to open the spillway gates.

As late as October 22, 1965, the level of the two lakes was a matter of concern to Panama Canal engineers. Gatun Lake hovered around the 84.50 foot mark, approximately 2 feet below its level at the same time the year before and nearly 3 feet below maximum. Madden Lake stood at 232 feet, or more than 11 feet below the previous year and 20 feet below maximum.

It may look old fashioned now, but in 1936 it was the latest thing in home economics. It went by the title of "Foods Laboratory" and the girls pictured here were students at Balboa High School, learning the domestic arts that they are practicing today as mothers, or maybe even as grandmothers.

Mosquito Hunters Stalk Disease on the Wing

"HUNTERS" ARMED with weapons resembling a Buck Rogers ray gun recently began making twilight trips to a rural Canal Zone area where game is abundant and there's no bag limit.

The "hunters" are associated with what is called the Club 22-14, taken from the serial number of the railroad utility pole marking the area, about 22 miles south of Colon near Darien.

Actually, they are not sportsmen but serious-minded scientists collecting specimens of mosquitoes, both the disease vectors and the less harmful but annoying pest varieties.

James P. MacLaren, chief of the Sanitation Division, organizes the trips to orient new personnel, military associates and interested individuals. They arrive at the chosen site about dusk carrying vacuum suction guns that collect mosquitoes as efficiently as a vacuum cleaner picks lint from a carpet.

Some use the old mouth-held mosquito aspirators, glass tubes with rubber pipes for snapping up the mosquitoes. A screen protects the collector from inhaling the mosquitoes into his mouth.

MacLaren explains that these trips allow him and his companions to observe and evaluate the jungle surroundings, especially the mosquito situation by studying the density and species of mosquitoes present. "At 6:30 there are no mosquitoes," MacLaren says. "But in 5 or 10 minutes they seem to rise out of the jungle" in great quantities.

"Any individual who remains in a mosquito-free townsite inside the Canal Zone can't really know the mosquito situation or be able to combat them unless he goes outside, into the jungle," MacLaren contends.

Club "members" wear heavy clothing and use insect repellent to protect themselves against bites. Because of these precautions, MacLaren discounts the danger of contracting malaria as a result of these field trips.

Mosquitoes are collected by the Sanitation Division also by means of light traps and horse traps set in townsite locations throughout the Canal Zone. The insects are attracted to the traps by the light or by a live horse, but once inside they can't find their way out.

Information derived from the various collections is correlated with the time of the year, temperature, humidity, rainfall and other factors. This data is plotted on mosquito indice graphs so that corrective action, such as stepped up spraying or issuing alerts, may be taken promptly.

The most striking pattern illustrated by these graphs is that a greater mosquito density is noted during the rainy season, May to December, when more watery breeding grounds are available.

For example, the Northern Sanitation Area, using light traps four nights weekly reported catching a record high of 23,601 mosquitoes in April 1963. Normally a weekly catch is about 100. This record was set at a time when the Canal Zone, particularly the Atlantic side, was invaded by *Aedes taeniorhynchus,* a pest insect sometimes referred to as the 25-mile mosquito because of its flight range. Most mosquitoes are not nearly as mobile and usually travel less than a mile.

The Canal Zone's vast mosquito eradication program was originated by Dr. William C. Gorgas whose first hand experience with yellow fever and malaria in Cuba prepared him for his term of duty during Canal construction days. The ravages of these two diseases had cost thousands of lives to the French in their unsuccessful attempt to build the Canal and later to the Americans. Until Gorgas had absolute authority to launch his all-out war against mosquitoes, the death rate continued to mount.

Melvin Boreham, Division of Sanitation medical entomologist, picks off mosquitoes with his gun, from the arm of Claude Allen, Division of Sanitation Inspector, during Club 22–14 meeting.

The results of his tremendous campaign to wipe out the insects and their breeding places stand as testimony to his skill and determination. In 1906 there were 821 cases of malaria per 1,000 employees; in 1913, thanks to Gorgas, there were only 76 per 1,000.

The scope of the Sanitation Division program is broad and the cost is high ($450,000 in 1966), almost 90 percent of which goes for personnel. The Canal Zone's remarkably low level of mosquito and general insect population despite the ideal natural conditions has earned recognition from afar.

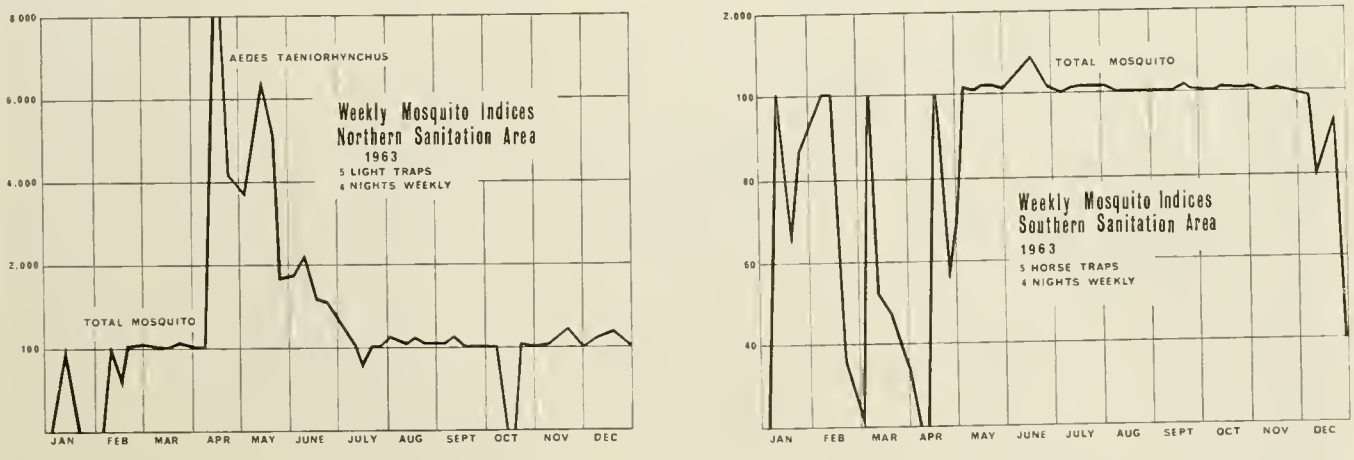
City managers and other officials of local governments in the United States frequently request the Division of Sanitation to send informational help to solve their mosquito problems. The concise, factual replies do not include broad information covering what must be done continuously here to inhibit the growth of the insect population.

Drainage ditches must be maintained, swamps sprayed with larvicide, DDT and keresone, harboring places cleared of underbrush, insecticidal fogging and insecticidal residual applications carried out. Blood smears are taken regularly from all land licensees in the Canal Zone. Countless other tasks must be repeated.

If these were neglected or curtailed, the menace of yellow fever and malaria would again sweep the Canal Zone. Without the appropriate maintenance measures, in and around Canal Zone townsites, the jungle populations would move in.

These populations would include disease vectors and such pests as mosquitoes, cockroaches, bats, snakes and other unwanted creatures from the nearby tropical environment.

Medical entomologist Melvin Boreham of the Division of Sanitation demonstrates the highly efficient mosquito gun used to collect specimens. Developed in California by Richard C. Husbands and Jim Holten of the Bureau of Vector Control, California Department of Public Health, the gun is a portable vacuum device that sucks the insects into a detachable tube. Using this method, the scientist can pick mosquitoes off himself as he would pieces of lint from his clothing.



Two simplified versions of mosquito indices charted by the Sanitation Division. The graph on the left covering the Northern Sanitation Area on the Atlantic side of the Isthmus shows a sharp rise in the total mosquito count in April 1963 when there was a record high influx of Aedes taeniorhynchus, a pest insect nicknamed the 25-mile mosquito because of its flight range. The graph to the right shows the Southern Sanitation Area, on the Pacific side, during the same year. The high in the Southern District was in June when the weekly count rose to 1,000 compared with the Northern District's April high of 23,601. The more comprehensive charts of the Sanitation Division include such items as humidity, temperature and disease vectors as well as total mosquito count.

Tokyo's Port Undergoing Facelifting

WITH A burgeoning national merchant fleet that is already one of the world's largest, it follows that Japan must provide vast, up-to-date port facilities to accommodate the vessels and their accompanying needs.

Tokyo, having a population of 10 million and a multitude of growing industries, is the country's leading producing and consuming center. And as an "import excess" port handles more than 25 million tons of cargo each year, the larger part of which is consumer goods.

To meet the challenge of the future, the Port of Tokyo is in the midst of an immense, 10-year construction plan that began in 1961 and will cost approximately a third of a billion dollars. Financed chiefly from bond issues, the Revised Port of Tokyo has two major objectives:

to create 22,400,000 square meters of land reclaimed from the sea in order to construct an international port provided with facilities capable of functions three times those of the present ones; and to realize a "redevelopment" of the city in order to eliminate a traffic jam and various other obstacles arising from the city.

The Port of Tokyo will handle up to 47.5 million tons of cargo annually after the ambitious plan is completed.

Overall responsibility of the Port of Tokyo is that of the Tokyo Metropolitan Government but the Bureau of Port and Harbor is the organization that administers these affairs through its 1,100-member staff serving 5 divisions, 2 branches and 22 separate sections.

Some of the functions of the administrators of the port are: designation of berths; provision of tugboats and water supply; cleaning the port area; administration and management of mooring facilities, cranes, public sheds, stevedoring offices and stevedoring equipment installations and of welfare facilities.

The port is located at the farthest end of Tokyo Bay in about the central part of the Japanese archipelago at the eastern tip of the Pacific belt zone.

A view of just one part of the Port of Tokyo. Note procession of ships at top of photograph.

The steamer lane runs for more than 3.75 miles with a waterway 665 feet wide and 32 feet deep, extending into the port from the Tokyo light boat stationed some 12 nautical miles off the Port of Yokohama. Shore facilities consist of 6 wharves equipped to accommodate two 20,000-GT class passenger ships and 10,000 DWT-class ships with modern stevedoring facilities, port sheds, port railway freight lines, roads, timber basins and shipyards. Towing, water supply, piloting, ship passage and communication services are carried on by the Port of Tokyo.

Five minutes by car from the Ginza, Tokyo's leading shopping center, is Harumi Wharf, a foreign trade wharf capable of handling two 20,000-GT class cargo-passenger ships, eight 10,000-DWT class ships and one 2,000-DWT class vessel.

The wharf is divided into public sundries and exclusive purpose special goods. The sundry goods berth boasts eight 5-ton traveling cranes, sheds and warehouses while the exclusive purpose berth is used for unloading wheat, marine products and cement. Behind the berths are modern factories where wheat is made into flour and processed marine products are frozen and stored.

The Toyosu Wharf, diagonally opposite the Harumi Wharf, handles the landing of coal, iron-steel products, heavy oil, liquefied gas and similar materials. Here there are modern stevedoring facilities, including four bridge type cranes for landing coal, four other cranes exclusively for landing iron and steel and special cranes and movable conveyors for the gas and power plants.

The nucleous of domestic trade in sundry goods is formed by Takeshiba,

Hinode and Shibaura, the first wharves built in the Port of Tokyo. Takeshiba Wharf is used also as a berth for steamers plying between Tokyo, Oshima, Miyake and Hachijo Island. These wharves can accommodate 15 3,000-6,000 ton ships simultaneously for stevedoring operations.

More than 40 percent of Japan's imports of timber and lumber—from the Philippines, North Borneo, the United States and other countries—passes through the Port of Tokyo and is the fourth largest of all goods handled here.

At the Shinagawa Wharf a foreign trade pier is being built following the construction of a domestic trade quay. The plans call for 3 berths of 6,000 tons of domestic trade goods and 6 berths for 15,000 tons of foreign trade goods.

Japan's oldest shipyard, also at the Port of Tokyo, has a capacity for repairing more than a million GT of ships and for building 130,000 GT of ships a year.

Japan leads the world both in the registry and building of the new giant ships—those of 100,000-DWT and above. One of these is the *Tokyo Maru*, a huge tanker of 150,000-DWT which is so highly automated that she needs a crew of only 29 men. Another new giant to slide down the ways recently was the *Idemitsu Maru*, an even larger tanker of 205,000 deadweight tons.

The wheat wharf where stevedoring operations are being carried out. Wheat is sucked up by pipe and sent into the silo at the extreme left.

The Central Wholesale Market and the shipyard where work is being carried out on the construction of a ship.

Balboa YMCA Offers Key to Silent World

CANAL ZONE residents are joining the international migration to the dreamy, dazzling world of underwater.

Skin diving, the passport to exploring the deep, has come a long way from the days when the only equipment consisted of poorly fitting goggles. Aided by fins, face mask and snorkel or air tank, the diver can safely explore the ocean in search of fish to spear, shells to collect or just to sightsee in one of man's beautiful last frontiers.

Documentary films and books, particularly those by French underwater expert J. Y. Cousteau, and newly-acquired technical knowledge have touched off an explosion of underwater interest. Periodicals dealing exclusively with skindiving are read widely and vast new industries are busy developing better paraphernalia for a growing market.

In the United States alone, there are an estimated 8 million skin divers. South and Central America, Asia, Africa and Europe all have their great flocks of faithful.

Here in Panama, with its two inviting coastlines, skindiving has logically "caught on." In the Canal Zone, where many residents are for the first time living in the tropics, all water sports are immensely popular.

Innumerable accidents, some of them fatal, marred the early emergence of skindiving as a sport. Imprudent beginners cast caution aside and reached out for every exhilaration the sport could offer, regardless of the risk.

A mounting accident toll pointed up the need for a responsible group to take over teaching SCUBA (self contained underwater breathing apparatus) diving and free diving, which involves use of fins and face mask with, or without, a snorkel attachment for breathing while the swimmer is just inches under the surface.

In 1956, the YMCA was selected as the group to teach the sport and all the safety precautions. The "Y," with its pools and lake dotted camps, teaches hundreds of persons a year to enjoy diving with the utmost pleasure but with a minimum of hazards. YMCA SCUBA certificates are issued to those who attend classes and complete courses set up by the organization.

Because skindiving is popular year round here, both teenagers and adults can earn SCUBA certificates at Balboa, unlike the usual practice of restricting this to the adults while admitting the young set only to free diving classes.

Instruction at the Balboa YMCA is giving by Abelardo "Chico" de la Lastra, a nationally qualified instructor and himself an alumnus of the "Y." The 25-hour course costs $30 and includes provision of all needed equipment, a trip to open water at the conclusion of the course and cost of certification.

This program is a sport diving course and does not include salvage work, underwater welding and similar commercial type activities. The novice diver is taught diving physiology, chemistry of oxygen and how to avoid oxygen

Aspiring SCUBA divers listen intently to a lecture by instructor Chico de la Lastra, who himself is a graduate of the course offered at the Balboa YMCA. Classroom instruction precedes practical experience in the swimming pool.

and carbon dioxide poisoning and nitrogen narcosis.

The latter, also known as "rapture of the deep," is highly dangerous because it gives the diver a drunken, lightheaded feeling that may prompt him to discard his face mask and be on the brink of drowning without knowing or, in his condition, even caring.

A trained diver free from acute sinus, respiratory, ear or heart problems and who complies with established safety standards is unlikely to encounter difficulties he can't handle. New students must get physical check-ups before enrolling in the course.

"They also have to know how to swim . . . not like an expert but well enough to be able to handle themselves in deep water without SCUBA equipment," Chico points out.

Much of the SCUBA training is devoted to learning the characteristics of underwater pressure. Some physicians recommend a depth limit of 30 feet for beginning skin divers, 100 feet for SCUBA divers after adequate training and a maximum of 130 feet for expert SCUBA divers. The duration of submersion and the speed of ascent as well as depth are factors that must be taken into consideration. Pressure increases by one atmosphere every 33 feet of descent.

Buddy breathing—two persons using only one air tank—hand signals, recovery work, search patterns and considerable theory are covered in this safety-emphasized course. Use of various types of spear guns, masks and other equipment is explained. Chico says he also teaches his charges "what to avoid when diving; fire coral, for example, can give you a painful sting if you should brush against it."

Mobile marine life—sharks, barracuda and moray eels—is of a great, perhaps undue, concern to novice divers. In his book, "Basic SCUBA," Fred M. Roberts says: "All potentially dangerous marine life should be kept under surveillance when you find yourself with them. Look for trouble and you may find it.'" Many experienced SCUBA divers contend that most marine life is not dangerous unless provoked.

The course entails considerable swimming to acquaint the student with proper kick techniques using fins. De la Lastra throws in self-devised drills to develop well qualified SCUBA divers.

For example, to instill confidence in themselves, he sends them to the bottom of the training pool and has them

(See p. 16)

Underwater photographer Tony Mann, chief of the Panama Canal's Civil Engineering Branch, looks at the birdie while another SCUBA diver snaps his picture.

Mrs. Anna Mann reaches down for a brain coral to add to her extensive collection.

Club Outings Part Of Local Diving Fun

(Continued from p. 15)

take off their fins, air tank, face mask and air hose. They surface for a gulp of air and return to the bottom to don the equipment underwater.

In a "black water diving" exercise, he gives them face masks with black painted, opaque glass to discourage diving in murky waters which can create dangers not present when visibility is good.

Some students are slower than others adapting to breathing underwater. The regulator, the heart of any SCUBA outfit, provides air only on demand, when the user inhales through the rubber mouthpiece. An occasional beginner must pinch his nose to force himself to breathe through the mouth until he becomes acclimated to the system.

Upon successful completion of the course, the newly-qualified SCUBA diver can join the Balboa Diving Club which is registered with the National Council of YMCA's, Skin Diver Magazine and Universal-International Skin Divers Association.

Members of the club carry on more advanced phases of open water diving from the Sea Scout ship Argonaut, a 56-footer that club members use for about three trips a month, two for local diving excursions within 25 miles of Balboa. Once a month they go further out to such places as the Las Perlas Islands for overnight trips, returning with baskets of fish and lobster.

The past April, the Balboa Diving Club and the Club de Pesca Submarina of Panama City co-sponsored a spear fishing tournament that attracted a large turnout. Participants landed some outstanding gamesters but the competitors were limited to free diving. Another tourney is scheduled for this year.

The basic equipment for the SCUBA diver including face mask, regulator, air tank, fins and knife can be purchased for about $115. Wet suits, more elaborate gear and such accessories as underwater cameras can run into several hundreds of dollars for the diver with the funds and inclination.

Down and under. A diver goes below with his face mask, air tank strapped to his back and fins on his feet. It looks like he left his spear gun behind . . . but maybe this time he just wanted to explore.

Between dives, spearfishermen ready their gear for the next plunge below.

A satisfied SCUBA diver emerges from the water after spearing himself a fair sized catch.

He Opened Canal to Visitors

(Continued from p. 4)

ed and old age assistance increased. There were 4,000 non-U.S. citizens who left Canal service before there were laws to give them retirement benefits. In 1962, CARE food allotments were started for this group.

The Governor set up a recreation council and appointed a special services officer to manage new boat ramps and picnic areas, and he brought Summit Gardens into its own as a Canal Zone attraction.

Out of concern for workers' health, the Industrial Health Program was started under the Division of Preventive Medicine and Quarantine. It works through inspections, tests, conferences, and meetings with employees. The Governor also established the Division of Mental Health under the Health Bureau, bringing together for maximum use the services and resources of both Gorgas and Corozal Hospitals.

Under Governor Fleming, the Police Force was expanded, gained in mobility, and improved communications. Panamanian policemen were hired under a new program and there are many now on the force. Fire protection increased, too, as more companies were formed and nearly all the old equipment replaced.

To meet the increase in school enrollment, new teachers were hired and a school plant expansion program carried out to provide more classrooms.

"When I got here the Canal discouraged visitors," Governor Fleming had said. His imprint is strong here—he initiated the Guide Service and the pavilions for visitors at Miraflores and Gatun, and he introduced the popular cruise boats *Las Cruces* and *Reina Manuelita*. Mancha and Gato, the burritos that small fry love to ride, were given to the children of the Isthmus by the Governor and former Ambassador Joseph Farland.

When the Panama Canal observed its 50th Anniversary in 1964, Governor Fleming hosted a luncheon for former governors, Panama and Canal Zone officials. He canceled the first stamps of a special issue commemorating the event and presented to dignitaries copies of the 50th Anniversary book published to coincide with the occasion. A silver 50th Anniversary medallion was struck to mark the historic date. Oldtimers were invited, and honored with the dedication of a plaque imbedded in a rock monument unveiled in front of the Administration Building.

Mrs. Fleming accepts a bouquet of roses from a member of the Canal Zone Girl Scouts of which she was Honorary President. The Canal Zone's First Lady took an active part in various projects and gave her patronage to several others during her 5 years here.

Governor Fleming cast the mold for the present Information Office organization. He guided establishment of the weekly *Spillway*, and news output was accelerated. Public relations functions were expanded and to aid visitors there are even points of interest signs posted throughout the Canal Zone, another of his ideas.

During his 5-year administration, the payroll jumped from $60 to $83 million. Labor cost increases pushed up the bill for housing maintenance but much of this was absorbed, causing only moderate rent increases. Food prices, close to everyone's thoughts, were put on a base that ties Canal Zone prices to those charged in New Orleans supermarkets. Under this arrangement, the housewife was assured of some price stability.

And over the years, Governor Fleming welcomed hundreds of officials, diplomats, journalists, and VIPs from a hundred countries. He participated in numerous ceremonies, gave countless talks and speeches, and traveled to and from the States many times. Still, he kept pace with a heavy schedule of official functions.

Governor Fleming has been both inquisitive and well informed. He looked problems in the eye and was most pleased when. he was getting them solved, because most of all, he was a man who got results, a man of action.

CANAL COMMERCIAL TRAFFIC BY NATIONALITY OF VESSELS

Nationality	Second quarter, fiscal year— 1967 Number of transits	1967 Tons of cargo	1966 Number of transits	1966 Tons of cargo	1961-65 Average number transits	1961-65 Average tons of cargo
Belgian	12	66,634	20	22,376	10	39,739
British	311	2,057,509	311	2,193,171	322	2,076,559
Chilean	34	210,418	33	210,316	33	238,745
Chinese (Natl.)	25	163,192	39	311,261	21	160,144
Colombian	63	121,622	63	98,779	65	101,350
Danish	103	680,050	98	600,822	76	365,997
Ecuadorean	24	24,235	10	21,333	12	13,171
French	63	183,469	61	181,610	31	165,422
German	277	968,599	294	902,656	280	838,322
Greek	124	1,300,840	113	1,169,574	152	1,465,172
Honduran	51	32,768	24	22,828	56	43,119
Israeli	24	111,971	17	84,632	20	68,075
Italian	57	338,534	48	286,501	46	260,703
Japanese	216	1,720,154	196	1,312,329	212	1,276,185
Liberian	315	3,887,428	320	4,318,948	233	2,229,252
Netherlands	115	471,917	148	695,485	147	644,878
Nicaraguan	18	25,791	22	25,605	13	16,479
Norwegian	394	3,661,013	357	3,277,037	348	2,557,721
Panamanian	92	359,976	147	755,928	109	491,622
Peruvian	35	160,330	33	192,901	28	151,165
Philippine	24	118,089	24	124,067	18	76,378
South Korean	12	64,037	1	------	------	------
Soviet	10	78,350	14	142,761	------	------
Swedish	125	819,505	114	705,638	90	496,979
Swiss	16	29,748	19	9,845	------	------
United States	395	2,304,565	393	2,529,139	438	2,635,936
All Others	42	294,776	54	401,392	54	234,982
Total	2,977	20,255,520	2,973	20,596,934	2,814	16,648,095

MONTHLY COMMERCIAL TRAFFIC AND TOLLS

Vessels of 300 tons net or over

(Fiscal years)

Month	Transits 1967	Transits 1966	Transits Avg. No. Transits 1961-65	Gross tolls* (In thousands of dollars) 1967	Gross tolls* 1966	Gross tolls* 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	------	1,001	903	------	5,903	4,635
February	------	896	868	------	5,239	4,506
March	------	1,060	1,014	------	6,044	5,325
April	------	989	966	------	5,887	5,067
May	------	1,043	999	------	5,935	5,232
June	------	1,011	954	------	5,983	5,013
Totals for fiscal year	6,012	11,926	11,335	36,923	69,100	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	Second quarter, fiscal year— 1967	1966	Avg. No. Transits 1961-65
United States Intercoastal	125	125	115
East coast of United States and South America	437	487	618
East coast of United States and Central America	137	141	117
East coast of United States and Far East	699	626	567
East coast United States/Canada and Australasia	132	104	84
Europe and west coast of United States/Canada	245	257	244
Europe and South America	323	331	289
Europe and Australasia	92	108	91
All other routes	787	794	689
Total traffic	2,977	2,973	2,814

Japan Builds New Type of Bulk Carrier

RECENTLY THE Japanese shipbuilding firm of Nippon Kokan Kabushiki Kaisha (the Japan Steel & Tube Company) announced completion of a new standard cargo ship design which it says will take advantage of the Panama Canal size limits.

The latest design in standard bulk carriers is to be known as the *Panamax* and will be a 65,000 to 69,000 deadweight-ton vessel with a maximum beam of 106 feet. Actually, the *Panamax* will have a 105.9 foot beam and a length of 774 feet, a size which the shipbuilding company thinks will permit the lowest ton-mile costs of any ship allowed to pass through the Canal.

Other design statistics announced by the company are 7 cargo holds, as compared with 5 or 6 for the more conventional bulk carriers. This arrangement, the company said, was selected because it offered improved trim and stability conditions, the more even distribution of cargo making less demand on the longitudinal strength of the vessel.

Automation systems have been widely adopted to permit its operation by 11 officers and 23 other personnel. The minimum crew is made possible by use of mooring appliances, automatic bilge and ballast water handling, temperature controls, oil purification, and air compressors. All the living quarters are to be air-conditioned.

The *Panamax* is designed to carry bulk cargoes of coal, grain or iron ore. To provide self-trimming characteristics, the ship has continuous topside ballast tanks or void spaces throughout the cargo spaces under the upper deck, port, and starboard. Topside tanks are so constructed as to eliminate the need for grain shifting boards when the holds are filled to capacity with loose grain in bulk.

No price has been quoted for the *Panamax*, according to the Fairplay Shipping Journal. But bulk carriers of about the same deadweight tonnage have been ordered in Japan in the past year at about $6 million.

No ship officially of the *Panamax* class has used the Panama Canal so far but a number of vessels this size and larger have passed through the waterway in the past few years. The largest was the Japanese-built *Melodic*, which made her first transit in November 1966. Her length of 845.8 feet and beam of 105.85 feet made her one of the largest customers, although the old German passenger vessel *Bremen*, with a length of 936.8 feet, still holds the record for the longest ship to transit the Canal.

During the calendar year 1966, 58 transits were made by ships with beams measuring 104 feet or more, compared with 15 for the previous year. There were 131 transits by ships with beams measuring from 100 to 103.9 feet, an increase of 16 over the previous year. All transits by ships in 1966 with beams of more than 80 feet totaled 1,130, compared with only 958 in 1965.

Despite the increase in traffic from 33.6 to 35.1 ships per day and the steady increase in the size of ships, official figures show that the time spent by vessels in Canal waters during calendar year 1966 was reduced to 13.8 hours, from the 15.6 hours of 1965.

The Panama Canal reported recently that the transit average is expected to increase by another ship a day or to 36 during the present calendar year, while time spent in Canal Zone waters will be reduced to about 13 hours. Large ship transits can be expected to continue increasing at the same rate since there are many more 104- and 106-foot beam ships coming off the ways this year and the number of transits in this category may well reach two a week.

Meanwhile, another broad-beam type of cargo vessel being designed for the U.S. gulf ports and European trade—one which will be able to use the Panama Canal—is being planned by Lykes Brothers Steamship Co. Inc. of New Orleans.

It is a giant oceangoing barge carrier, 875 feet long and with a beam of 106 feet. This type of vessel could revolutionize commercial freighter transportation and at the same time provide the United States with an adaptable cargo carrier for instant military use.

PRINCIPAL COMMODITIES SHIPPED THROUGH THE CANAL

(All cargo figures in long tons)

Pacific to Atlantic

Commodity	Second quarter, fiscal year—		
	1967	1966	5-Yr. Avg. 1961-65
Ores, various	1,422,663	1,896,804	1,827,470
Lumber	792,459	1,169,405	917,257
Petroleum and products (excludes asphalt)	208,968	432,585	533,748
Molasses	203,347	91,737	47,702
Sugar	463,471	573,956	541,267
Canned food products	217,819	226,980	263,845
Nitrate of soda	120,673	182,822	157,654
Coffee	90,694	99,213	103,149
Bananas	300,527	326,770	291,123
Metals, various	311,987	292,927	291,740
Food products in refrigeration (except fresh fruit)	232,633	230,002	198,438
Pulpwood	151,303	127,661	119,233
Chemicals, unclassified	81,860	64,950	44,617
Iron and steel manufactures	856,162	781,087	257,627
Fishmeal	290,632	111,535	N.A.
All others	1,695,922	2,311,693	1,944,968
Total	7,441,120	8,920,127	7,539,838

Atlantic to Pacific

Commodity	Second quarter, fiscal year—		
	1967	1966	5-Yr. Avg. 1961-65
Petroleum and products (excludes asphalt)	3,441,944	3,510,522	2,636,007
Coal and coke	2,093,692	1,610,018	1,403,636
Phosphates	940,131	986,684	548,653
Soybeans	665,690	724,866	455,708
Iron and steel manufactures	496,701	349,261	373,533
Corn	462,750	668,776	337,509
Ores, various	274,989	484,453	77,317
Metal (scrap)	880,515	260,845	715,256
Paper and paper products	201,929	131,217	117,455
Chemicals, unclassified	237,797	230,426	157,413
Wheat	523,593	270,067	156,103
Sugar	120,446	112,861	148,570
Sulphur	153,007	96,571	95,218
Machinery	119,370	116,182	109,548
Automobiles and accessories	137,534	118,523	87,721
All others	2,064,312	2,005,535	1,688,610
Total	12,814,400	11,676,807	9,108,257

CANAL TRANSITS — COMMERCIAL AND U.S. GOVERNMENT

	Second quarter, fiscal year—				
	1967			1966	Avg. No. Transits 1961-65
	Atlantic to Pacific	Pacific to Atlantic	Total	Total	Total
Commercial vessels:					
Oceangoing	1,513	1,464	2,977	2,973	2,814
Small *	57	63	120	126	140
Total commercial	1,570	1,527	3,097	3,099	2,954
U.S. Government vessels: **					
Oceangoing	159	50	209	139	67
Small *	14	13	27	35	44
Total, commercial and U.S. Government	1,743	1,590	3,333	3,273	3,065

* 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.

ANNIVERSARIES

(On the basis of total Federal Service)

ADMINISTRATIVE SERVICES DIVISION

Talbert S. Spence
Bindery and Finish Worker

Sydney D. Lovell
Lithographic Pressman, 22 x 29 and larger

MARINE BUREAU

Adolphus M. Ricketts
Teletypist

Edward V. Robinson
Shipwright-Maintenance

Alton E. Jones
Chief Engineer—Towboat

TRANSPORTATION AND TERMINALS BUREAU

Walter G. Laurie
Chief Foreman—Fuel Operations

Ramón C. Luna
Leader Tire Rebuilder

40

SUPPLY AND COMMUNITY SERVICE BUREAU

Anita A. Burke
Clerk

Luciano C. D. Sablo
Clerk

ENGINEERING AND CONSTRUCTION BUREAU

Walter A. Amantine
Oiler—Floating Plant

Reginald Lovell
Carpenter

Percival G. Piggott
Maintenanceman

HEALTH BUREAU

Judith Dalmage
Physical Therapy Assistant

OFFICE OF THE GOVERNOR

Floyd R. Johnson
Management Analysis Officer

OFFICE OF THE COMPTROLLER

Dudley Farrell
E. A. M. Operator

PERSONNEL BUREAU

Gordon M. Frick
Deputy Personnel Director (Operations)

MARINE BUREAU

Basanio Darkin
Painter

Huntley F. Mignott
Signalman

Howard L. Clarke, Jr.
General Foreman Rigger

Cardinal A. Powlett
Helper Lock Operator

Joseph A. Sargeant
Seaman, Launch

Fitz R. Spooner
Motor Launch Captain

George Hinds
Helper Lock Operator

Granville Hunte
Carpenter—Marine

George J. Kredell
Lock Operator—Machinist

Pascual Pérez
Helper Lock Operator

30

TRANSPORTATION AND TERMINALS BUREAU

Ezekiel Barker
Stevedore

Leopold V. Dutton
Stevedore

Herbert C. McKesey
Truck Driver

Samuel A. Palmer
Guard

Raymond M. Schneider
Electrician

Ezekiah Bradiel
Stevedore

José M. Hernández
Truck Driver

Raymond D. Parker
Accounting Clerk

Kenneth E. Sealey
School Bus Driver

Sidney G. Smith
Shipment Clerk

Abelino Díaz
Railroad Trackman

Sydney O. Smith
Helper General

SUPPLY AND COMMUNITY SERVICE BUREAU

Sydney O. Cook
Waiter

Alfred L. Grimes
Grounds Maintenance Equipment Operator

John R. Small
Service Center Manager

Ivy R. Ferguson
Clerk

Cecilio I. Griffin
Sales Section Head

Adina Mompoint
Sales Store Checker

ENGINEERING AND CONSTRUCTION BUREAU

Bernard J. Brown
Supervisory Civil Engineer

Franklin H. Donickle
Electronics Mechanic

Ralph J. Flemming
Carpenter

Thomas B. Idol
Dispatcher—Floating Equipment

Mortimer H. Jordan
Supervisory Procurement Clerk-Typing

Scott J. McKay
Chief Engineer—Towboat

Isidro Nogueira
Electrical Equipment Repairman

Clarence E. Holder
Painter

Whitfield E. Riley
Clerk

Pedro Estrada
Maintenanceman—Distribution Systems

Jasper H. Failey
Seaman

Frank A. McIntosh
Carpenter

Rex M. Sealey
Procurement Clerk

Hasall Speid
Oiler—Floating Plant

Alfred Tulle
Electroplater

CIVIL AFFAIRS BUREAU

Sidney Hayes
Police Private

A. H. Boxswill
Detention Guard

Thomas Morrell
Detention Guard

David C. Rose
Postmaster—First Class Office

Paul D. Richmond
Detective

HEALTH BUREAU

Paul W. Morgan
Supervisory Medical Radiology Technician—Diagnosis

Wilbert O. Gittens
Leader Exterminator

Harold W. Griffin
File Supervisor

Sugar cane, a product that gives the economy of the Republic of Panama a lift, is getting a lift into a grinder in one of the many areas where the product is processed. It is turned into sugar for tables over the Republic and in the United States, and it is also made into rum.

Splendor Ignites Corrida

(Continued from p. 5)

to the box of the municipal president to whom they pay their respects. He serves as a representative of the mayor and because he acts as a judge or referee usually is a person well versed in bullfighting. The participants then take their respective positions and prepare for the start of action.

A loud roar from the crowd can be heard as the first bull, with ribbons of his farm colors pinned to his back, bolts through the door into the arena. The spectators assay his size and ferocity. The bullfight is on. The moment he enters the ring, the torero's assistants cape the bull with one hand so the matador can observe charging style, tendencies to hook in any one direction and other immensely important characteristics.

This is all included in the first of three parts, tercios. In this first part—Tercio de Varas—the torero performs the initial passes, usually the basic veronicas which are the most popular moves. Swinging his cape slowly away from the bull while he keeps his feet in one position, the matador calls to him and by graceful hand movements, he draws the bull into the position he wants.

Entrance into the ring next is made by the picadores, wearing broad-rimmed, low crowned beige hats, simple jackets and waistcoats. Also, they have hip to ankle armor of steel on the right side and knee length on the left leg. Their mounts are padded heavily on the right side to protect them from charges by the bull. Using long piked poles the picadores fend off the attacking toro which may upend the horse and unseat the rider. By placing the pikes into the bull's back, they weaken the neck and shoulder muscles and put the bull into position for the matador.

The three matadores vie in the "quites" or passes, taking turns according to seniority to draw the bull away from the horses. These quites give the matador an opportunity to display his ability with the capote, the large red work cape. This color is used because it adds to the splendor of the occasion. All cattle are color blind.

The second tercio is the Tercio de Banderilla, when banderilleros, assistants on foot, plant three pairs of colorfully decorated and barbed staves—banderillas—into the bull's shoulders near the neck. The purpose is to correct defects of the charge or to observe the bull's charging style.

Placing the banderillas requires both dexterity and courage. The banderilleros attract the bull's attention with gestures and shouts from about 20 yards away. As the animal charges, the banderillero sprints toward him but slightly to one side, planting the staves and deftly spinning clear of the horns.

Next, the piercing sound of the cornet signals the final tercio, the Tercio de Muerte, the most important part of the program and the time when the matador proves himself. First, though, he ap-

(See p. 22)

This is the start of the "Tercio de Varas" during a corrida in la Plaza La Macarena in Panama City. Using his work cape, a torero approaches the bull while a picador, mounted on his padded horse, approaches from the left of the photo.

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pears before the president's box with montera held aloft in his right hand and muleta and sword in the left, asking for permission to dedicate the bull to a friend, sweetheart or dignitary in the audience.

He performs several close passes with the red muleta, a heart-shaped cloth folded lengthwise over a staff: the "derechazo," done with the muleta extended by the sword; the "natural," the matador thrusting the muleta with the left hand and holding the sword in the right. Some of the passes are graceful and dangerous while others are for show only and used sparingly to liven up what may be a lackluster corrida.

When the "hour of truth" arrives, the torero tries to make it swift. Urging the muleta forward with the left hand, causing the bull to lower his head, the matador plunges the sword between the shoulder blades.

If he has done well, the matador is given wild applause and showered with flowers as he circles the arena. He may be awarded an ear for a good performance, two ears for an outstanding one and if he has been magnificient, he may be presented with the ultimate prize, both ears and the tail, and sometimes even a leg for his trophy room.

What happens to the bull's carcass? It's usually given away to the poor or sold. Bulls never are used for a second corrida. Their memories are keen and should one be used for a later corrida he would not respond to the cloth but would go directly to the man.

A disappointed crowd will berate the matador without mercy. Cushions, fruit, bottles and other litter may rain down on him, particularly in cities where aficionados are notoriously intolerant of a mediocre or poor showing. Every matador, including the great Manolete and Belmonte, must accept this burden of the trade.

But this is a minor irritant compared with the danger of the horns which virtually every matador feels during his career. Belmonte, for example, was gored more than 50 times during his long span in the bullring.

Top flight matadores can retire young with vast sums of money to raise fighting bulls or to enter another business. But frequently they are drawn back into the ring, to recapture the spotlight or for other nebulous reasons.

César Girón, the famous Venezuelan matador, executes a "pase de pecho" in la Plaza La Macarena.

Girón lifts his cape as the bull charges past during the third and final portion of a bullfight in Panama City.

SHIPPING

New Express Service

A NEW express service between the U.S. east coast ports to the Far East via the Panama Canal was started last November by the American Export Isbrandtsen Lines, one of the largest steamship companies in the United States. These vessels, in addition to the line's regular round-the-world cargo ships, pass through the Canal eastbound on an average of once each month. They are the line's most modern, high-speed freighters and offer deep tanks, refrigerated space and heavy lift facilities. Scheduled transit time from the last east coast port to the first Japanese port is 3 weeks.

The *Export Ambassador*, which inaugurated the passenger service, sailed from New York November 27, and will be in monthly service with her sistership *Export Adventurer*. Both are modern, completely air-conditioned vessels built in 1960. They provide superior accommodations for 12 passengers in outside single and double cabins with private baths.

C. B. Fenton, local agent for American Export Isbrandtsen, says that the ports of call on the east coast in addition to New York include Baltimore, Norfolk, Philadelphia, Charleston, Savannah, and Boston. In the Far East the principal ports are Yokohama, Kobe, Pusan, Inchon, Manila, Hong Kong, and Keelung. Ships return from the Far East via the Panama Canal direct to U.S. east coast ports.

Record Locomotive Shipment

EIGHTEEN 70-TON diesel electric locomotives en route from Newark to Pusan, Korea, made up one of the unusual cargoes carried through the Panama Canal during recent months. The engines, produced at the Schenectady, N.Y., plant of Alco Products, Inc., were deck cargo aboard the Central Gulf Lines cargo vessel *Green Harbor*. Officials of the Alco Company said they thought the 18 locomotives composed the largest such shipment ever exported aboard a single U.S. flag vessel.

Valued at approximately $2.5 million, the engines were protected during their journey against salt water corrosion by a sprayed-on cocoon of vinyl material. According to the *Shipping Digest* article, they are the first of 49 locomotives to be supplied by Alco to the Korean National Railroad under a $6.5 million contract financed by AID.

PANAMA CANAL TRAFFIC STATISTICS FOR SECOND QUARTER FISCAL YEAR 1967

TRANSITS (Oceangoing Vessels)

	1967	1966
Commercial	2,977	2,973
U.S. Government	209	139
Free	21	28
Total	3,207	3,140
TOLLS°		
Commercial	$18,278,318	$17,572,569
U.S. Commercial	1,300,912	843,480
Total	$19,579,230	$18,416,049
CARGO°°		
Commercial	20,258,955	20,602,539
U.S. Government	1,612,369	813,383
Free	166,894	113,182
Total	22,038,218	21,529,104

° Includes tolls on all vessels, oceangoing and small.

°° Cargo figures are in long tons.

Johnson Line Split Service

THE SWEDISH flag *Johnson Line*, which has been in service between Europe and the west coast of the United States and South America for nearly as long as the Panama Canal has been open to the traffic, recently split its Pacific Coast-European service into two operations. One became a North Pacific service between the Pacific coast and Europe and the other a West Indies, Central America service from the west coast of Central America and the West Indies to Europe, with some stops at northern South American ports. The Central American service will include calls at such Central American west coast ports as Puntares, San Juan del Sur, La Union, Acajutla, and Champerico. It extends no further north than Mexico and is designed to provide faster service to Europe.