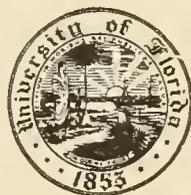


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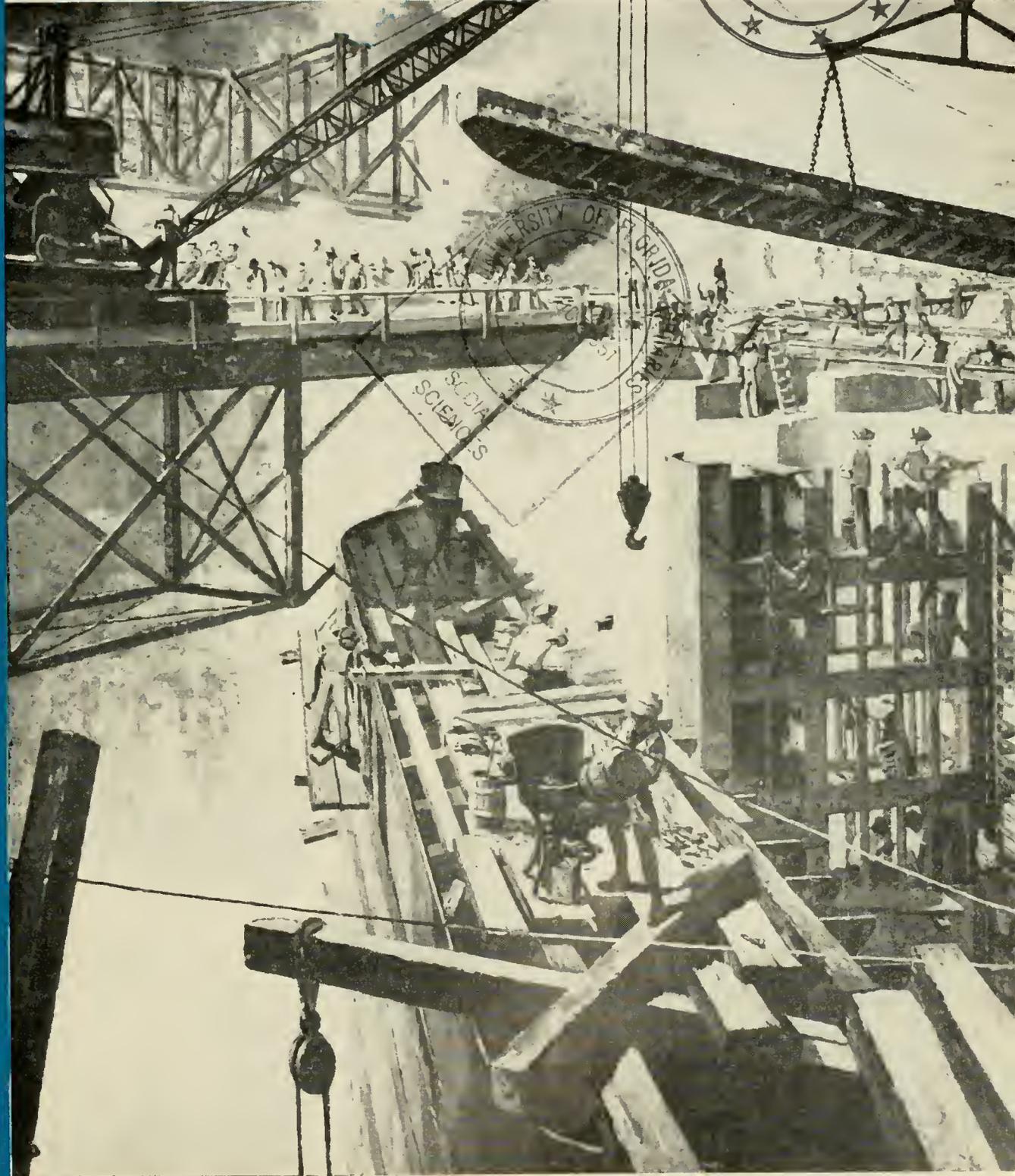
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THE PANAMA CANAL
REVIEW



15



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September 1, 1961

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Builders at Work

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Governor Comments On

Labor and the Canal

AS THE ARTICLE on the opposite page says, "Labor Built the Canal—and Keeps It Operating." The management of the Company-Government never loses sight of that fact and makes every effort to recognize the constant contributions which labor makes to the success of the enterprise.

Both old and new employees of the Canal organization constantly are improving their abilities, job performance, and knowledge. The organization strives to meet both its own future employment needs and the needs of its employees through an apprentice training program, a tuition-refund plan under which the cost of certain courses of study is refunded to the employee involved, and through similar activities. But it is only through participation and willingness of employees themselves that these programs are succeeding.

The most valuable resource of the Canal enterprise is the men and women who keep it operating, serving the needs of world commerce. Improved techniques may result in the laborer of today being supplanted by the technician of tomorrow, but the people themselves always will be paramount in operating the waterway. Without people the Canal could not have been built and interoceanic travel through it could not be maintained.

As we this month observe Labor Day, let us remember that all those who work are part of the labor force. Those directly engaged in handling ship traffic are one element of the labor force, but so, too, are the doctors, sales clerks, typists, accountants and others.

All of those who labor for the Canal have much of which to be proud, serving, as they do, the growing requirements of world commerce at the crossroads of the world. Those of us responsible for the management of the enterprise depend on all of those who work here. We know that without them one of the world's greatest engineering achievements simply would not exist or continue to function.

In This Issue

THIS MONTH'S cover scene is a section of one of the murals which decorate the rotunda in the Administration Building at Balboa Heights. Painted by W. B. Van Ingen, the murals present the artist's concept of the job of building the Canal. The scene on the cover is of work on the lock gates. Other scenes show construction of the spillway in Gatun Dam and men swarming over the partially finished lock structures.

Many demands were made on the skill, stamina, and intelligence of those who built the waterway. They achieved a great engineering feat and those who operate it today devote considerable effort to maintaining and improving it. But it is not only the waterway which is being improved; many employees are improving themselves through study and training. One such program of training is described in the article starting on page 12.



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Labor Built the Canal . . .



. . . and Keeps It Operating

Boat crewmen make check of entire channel bottom to make sure that ships using the waterway will not strike some unknown obstruction.

LABOR, millions upon millions of hours of it, built the Panama Canal and labor keeps it functioning, serving the needs of world shipping and commerce.

The dream of building an inter-oceanic waterway across the Isthmus of Panama intrigued men for almost four centuries before the Canal became a reality in 1914. The French used 400 million hours of labor in an unsuccessful effort and U.S. forces expended approximately 750 million more hours before the Canal was opened on August 15, 1914.

Dramatic as it was, opening of the waterway only marked the beginning of the work. Approximately 1½ billion hours of labor—more than required by the original construction—have been used to operate, maintain, and improve the waterway in the 47 years since 1914.

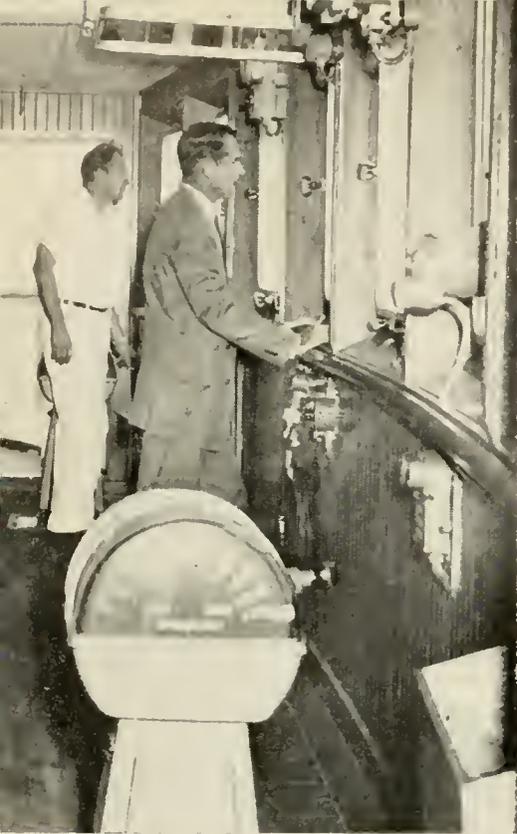
During all the years since 1880, when the French effort started, to the

present day, the Canal has made unique demands upon the men and women whose labor made it possible and continues to keep it operating. Early in the French effort, and throughout the later work by U.S. forces, it was necessary to recruit workers elsewhere and bring them to the Isthmus. The local labor supply simply was not sufficient to meet the need. Today, 81 years after the French effort began, slightly more than one-fourth of the employees come from the United States. Panama citizens gradually are filling more and more of the skilled and technical positions as the general level of training and education climbs upward.

Gerstle Mack, in his massive work *The Land Divided*, reports that the French recruited workers from the surrounding Caribbean area, with the most important source being Jamaica. "Of 12,875 laborers imported in 1885," he says, "9,000 came from that island."

The French were following a pattern established more than 30 years earlier in building the Panama Railroad, which had imported thousands of laborers from wherever they could be recruited. Commenting on this shortage of local labor, Mack says the French canal company "found itself almost constantly hampered by a more or less acute shortage of labor."

Even the more modest French effort which started 5 years after collapse of the original French company required foreign recruitment of labor to achieve an employment level of 4,000 persons. The U.S. forces, which assumed direction of the construction effort in 1904, also were forced to use foreign recruitment. Technical experts, mechanics, and craftsmen of all types, with only rare exceptions, were brought from industrially advanced nations, principally the United States. Laborers and some artisans were hired in the surrounding



Kenneth L. Bivin is one of Canal pilots.

Caribbean area, but the need also led to recruitment in Europe and Asia.

All West Indian recruits were guaranteed repatriation after 500 working days. Asiatics also were given repatriation rights and a great many of the Europeans also were returned home at the expense of the Canal organization. (During fiscal year 1961, the Canal organization spent \$1,353 in repatriating non-U.S.-citizen employees to their native countries. One of those repatriated was sent to India.)

Under the successive leadership of John F. Wallace, John F. Stevens, and Col. George W. Goethals, the U.S.-directed forces climbed from a moribund level of only a few hundred in 1904 to a peak of 43,350 in 1913. Average annual employment was more than 20,000 until 1920, then for 20 years it varied from 10,000 to 16,000. Work on the third locks project pushed employment to 37,000 in 1942, before the effort was shelved. Employment now is approximately 13,300, having been nudged up about 800 from a postwar low 2 years ago of 12,500 by increasing ship traffic and the current Canal improvement program. Without the labor forces of both past and present, the possibilities offered by the narrow Isthmus still would be unrealized and the transisthmian waterway still would be only the dream it was when first

suggested about 1530. Establishment of modern transportation across the Isthmus cost both money and lives. An estimated 7,000 died in building the Panama Railroad. Some 6,630 employees died during the U.S. Canal effort. Deaths during the French effort have been variously placed from about 6,000 to more than 20,000, with the lower figure being used in *The Land Divided*.

Development of labor unions among Canal workers has followed much the same pattern as in the United States. There were sporadic, though principally spontaneous, work stoppages during the French effort, but little if any formal organization of workers. A earbuilders union which developed in the Gorgona carshops in 1905 is believed to have been the first formal organization of Canal workers. The following year, Local 699 of the International Association of Machinists was organized on the Atlantic side of the Isthmus. Pacific-side machinists formed Local 811 of the same union in 1907. Both machinist organizations still are in operation, being among the 39 organized associations and labor groups with which the Company-Government deals today. An association of union groups, the Metal Trades Council, was founded in 1914. A second association, the Central Labor Union,

Towing locomotive operators like A. M. Hiland help ships at locks.



Antonio Hudson and John Smith help provide fuel service for ships.

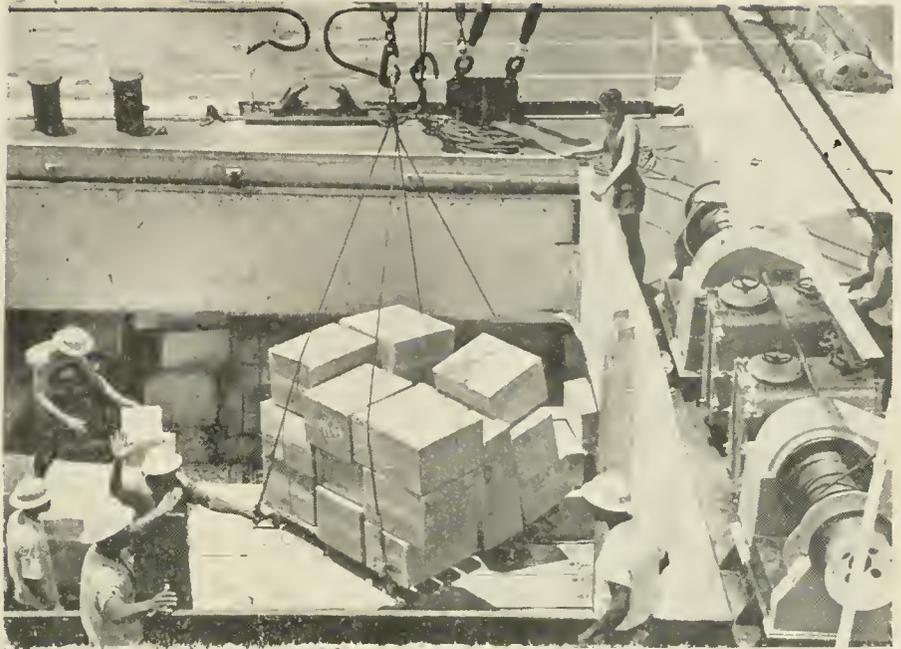


was founded in 1918. In the years since, the two associations have merged to form the CLU-MTC. Today, 29 employee organizations are affiliated with the CLU-MTC. The 10 other groups operate as independent units.

Tasks performed by present-day employees are many and diverse, just as they have been since the construction period. Some jobs have disappeared in the flux of changes since 1914, but many still are basically the same as they were then. The complexity of the effort necessary to provide uninterrupted service to world shipping—the single, overriding function of the Canal organization—is indicated by the 900-odd job designations into which employees are slotted.

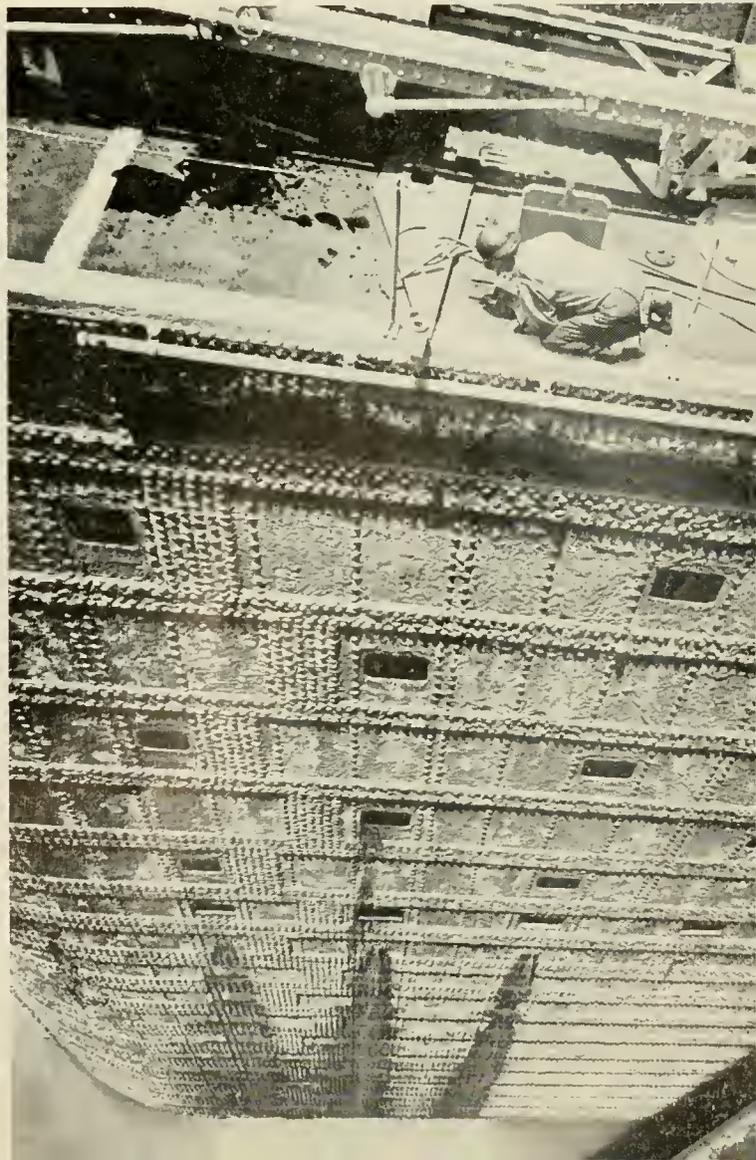
On the front line in operation of the waterway are the pilots, tug masters, crewmen, lock operators, traffic controllers, linehandlers, towing locomotive operators, and many others—3,800 in all. To serve ships calling at the Canal, port facilities employing 1,500 additional workers are maintained at both ends of the waterway. Thus, 5,300 of the 13,300 employees are directly engaged in serving world shipping.

The remaining 8,000 employees of the Canal enterprise are utilized to provide services and supply other support to those whose primary concern is direct service to shipping. Thus, there are 1½ employees in supporting roles for each employee engaged directly with shipping operations. Economists in the United States say each factory employee requires 2½ persons in supporting roles in the community to provide the services and supplies he and his family require. Tropical conditions require greater numbers of medical and sanitation per-



Canal stevedores load cargo aboard ship docked at Cristobal, another service to shipping.

It's a high perch,
but this welder
proceeds with
work which must
be done to keep
Canal operating.



R. A. Berry, operating lathe at Gatun, is one of many machinists.



sonnel here than is normal in the U.S., tending to reduce the local ratio even further below the stateside level. The "shortage" of one person is compensated for by the fact that many services and supplies required by Canal employees and their dependents are provided by individuals and private enterprises in Panama, extending direct benefits from the Canal operation into the economy of the Republic.

Some 3,680 of the present-day employee force are U.S. citizens. The remainder are nationals of other countries, the vast majority, approximately 8,000, being Panamanian citizens. This employment, large as it is, does not include employees of other organizations or U.S. Government agencies in the Zone, nor those working for contractors on Zone projects. As of June 30, other agencies and contractors employed more than 8,000, most of them Panamanian citizens.

Just as there has been a steady improvement in wages, working conditions, and fringe benefits over the years, there have been and are continual movements of employees within the organization which lead to better wages, positions, and employment benefits for a number of workers each year. During the fiscal year which ended June 30, there was an increase of 579, or approximately 5 percent, in the total number of Company-Government employees.

Allen A. Spencer
of Sanitation
Division carries
on anti-mosquito
work which
started almost
60 years ago.



During this same period, the number of non-U.S. citizens being paid at the U.S.

wage base rate increased from 270 to 424, or more than 57 percent. Institution of Canal Zone Merit System procedures, through which job applicants are hired solely on the basis of ability, skill, and experience, also has improved conditions for Canal employees.

The Canal organization, through regular training and apprenticeship programs, has played an active role in helping local residents acquire the skills necessary for better-paying jobs. As local residents gain in technical skill and knowledge, the need for recruiting employees away from the Isthmus is reduced. These additional skills and abilities among local residents not only tend to serve the Canal's needs, but also those of business and industry in the Republic.

Thus, the Panama Canal continues to play a major role in the economy of the area in which it is located, just as it has since the days when the great effort to build the waterway was started. At the same time, it contributes to the economy of the entire globe by serving the needs of world commerce. But behind the Canal, serving to make it effective as a gateway to world trade, are the thousands who labored to make it a reality, the thousands more who have kept it functioning since it opened, and the 13,300 who today continue to operate, maintain, and improve it for the present and the future.

Miss Ivy DaCosta
of the Balboa
Service Center
is among those
who help furnish
services and supplies.





Bernhard I. Everson

*Transportation
and Terminals
Director*

*Civil
Affairs
Director*



Capt. Axton T. Jones

Two Bureaus Get New Directors

NEW DIRECTORS for two bureaus of the Canal organization were named by Governor Carter on August 21, as he moved to fill the vacancy created by the retirement of Henry L. Donovan as Director of the Civil Affairs Bureau.

Bernhard I. Everson, Director of the Transportation and Terminals Bureau since 1954, was named to succeed Mr. Donovan, who was scheduled to sail August 28 on a round-the-world cruise after more than 30 years of employment in the Canal Zone.

Capt. Axton T. Jones, U.S.N., who has been Cristobal Port Captain since October 1959, was named to succeed Mr. Everson as head of the Transportation and Terminals Bureau. Captain Jones, who entered the Navy in 1941, will retire from the naval service to remain with the Canal enterprise.

The new Civil Affairs Director was born in Brevik, Norway, on November 10, 1912, and came to the Canal Zone with his father 2 years later. He became a U.S. citizen when his father was naturalized.

While still attending Balboa High School, Mr. Everson took a temporary job as a messenger at Balboa Heights in 1927. He also worked as a seaman with the Marine Division. After being graduated from Balboa High School in 1930, he attended the Carnegie Institute of Technology and received a bachelor of science degree in mechanical engineering in 1934.

Upon his return to the Canal Zone, the young engineer took a position in October 1934 as a technician-operator at the water filtration plant operated at the site of Madden Dam during the

construction of the dam and associated installations. He remained there until the fall of 1935, when he became a machinist apprentice and started the climb through various positions to the post of Director of the Transportation and Terminals Bureau.

Having learned Spanish as a child in the Canal Zone, Mr. Everson speaks the language fluently and is well known among Panamanian officials and civic leaders, particularly on the Atlantic side of the Isthmus. Active in the civic affairs of both the Canal Zone and the Republic of Panama, he was presented with the Meritorious Citizen Award by the Colon Civic Council on June 22, 1960, and is a holder of the Grand Cross of the Eloy Alfaro International Foundation.

His wife, the former Phyllis Anne Buechele, also is a lifelong resident of the Canal Zone. They have three sons, John, 17; Randall, 14; and Bernhard, 7, all living with their parents in the Zone.

Captain Jones was born in San Jose, Calif., on July 27, 1913, and first joined the Canal organization in October 1959. He attended the University of Oregon. When Captain Jones left college he went to work for Standard Oil of California. In 1935 he commenced sailing on his license in the U.S. Merchant Marine.

He was sailing as a licensed deck

officer with the Matson Navigation Co. at the time he entered the Navy in 1941. He holds an unlimited license as a master mariner and served aboard Navy vessels during both World War II and the Korean conflict.

He served aboard the U.S.S. *Altair* in the Atlantic Theater early in World War II, then as commanding officer of the U.S.S. *Algol*, an attack cargo vessel, in the Pacific Theater. He also served as executive officer and commanding officer of the U.S.S. *Grand Canyon*, a destroyer tender, in the Mediterranean Sea following World War II.

During the Korean conflict, Captain Jones was commanding officer of the destroyer *Miller* and received the bronze star medal with combat citation. He was on duty with the Chief of Naval Operations at the Pentagon and also was commander of the Rhine River Patrol of the U.S. Navy in Germany. Prior to becoming port captain at Cristobal, he was commanding officer of the fleet oiler, U.S.S. *Ashtabula*.

Mrs. Jones is the former Dorothy Dodd of Burlingame, Calif. They have four children: Dodd, 20; Guy, 17; Laurie, 14; and Douglas, 11. Dodd is on active duty with the Navy and the other three children are with their parents in the Canal Zone.

For High-Level Bridge

Steel Going Up

GROWTH of the high-level bridge being built by the United States across the Panama Canal at Balboa is proceeding, girder by heavy girder, and will be one of the sights on the Pacific side of the Isthmus during the next year or so.

Work on the superstructure, which is the second phase of the bridge construction, started early in August. Steel men employed by the John F. Beasley Co. of Dallas, Tex., climbed up and bolted two 40-foot girders into place between piers 12 and 13 in the Balboa Tank Farm to initiate the task.

Since then, these specialists in high steel construction work have nearly completed the assembly of the bridge span extending between the two piers.

Steel for the superstructure is arriving on the Isthmus at regular intervals, with the bulk of the material due here next month. If work continues at the present rate, the superstructure will be completed on schedule late in 1962. The superstructure includes installation of a concrete deck, roadway lighting, and other appurtenances, including warning lights for aircraft.

Meanwhile, the substructure work continued, with the final pour for the base of pier 4 being completed on August 18 during a continuous 10-hour operation. Work was started toward the end of the month on the two pier shafts which will rise 126 feet above the water, carrying the bridge above them.

The cofferdam for pier 6, last of the bridge piers to be poured, was built in August and the first pour for the base was scheduled for completion by the end of the month. This pier is located on the west edge of the channel and required a 40- by 100-foot cofferdam with a depth of approximately 35 feet below low water level.

Tivoli Avenue, which is a continuation of the approach to the new bridge, rapidly is assuming the appearance of a 4-lane highway, as it is enlarged preparatory to opening of the bridge. The widening work is being done by Isthmian Constructors, Inc., whose first task was the relocation of the play shelter for the Ancon Elementary School. The section of Tivoli Avenue between J Street and Ancon Boulevard should be paved and open to traffic by the end of this year.



One of high-steel men stands on cable strand to help guide heavy bridge girder into place.



Frank Viglietti, former Italian naval officer, aboard sightseeing launch.

Return To First Love

Man who has seen a lot is helping others view Canal as operator of the Las Cruces.

THE MAN who at present is sailing up and down the waterway at the helm of the Panama Canal's new sightseeing launch *Las Cruces* is a former Italian naval officer who has been a naturalized U.S. citizen since September 2, 1955.

A former lieutenant commander of a landing craft transport in the Italian Navy, he holds Italian license as master, any seas, any tonnage. However, to Frank Viglietti the *Las Cruces* is as important as any other vessel he's ever commanded, because it is one more experience in his varied life, and because he's adding to water time.

After his graduation from the Royal Naval Academy in Leghorn, Italy, in 1941, and during World War II, the sea was his home and his career. During the past 9 years he's held land jobs. When he wished to sit for an examination for a Panama Canal license, he found recent water experience a requisite. Moreover, 25 percent of that experience has to be acquired within 3 years of sitting for the license.

Frank Viglietti was born in Cuneo-Piedmont, Italy, where his father was general manager of a large bank in the region. He was graduated from the Technical Institute at Cuneo, studied business science and economics at the University of Turin, and then attended the Royal Naval Academy.

His first assignment as a graduate ensign was to a cruiser. Promotions followed and he was navigator of destroyer-class vessels, executive officer on a cruiser and on a battleship.

He experienced, as a target, heavy

pattern bombing by superfortresses, and was on two destroyers that were sunk while en route to North Africa, the last on March 30, 1943, in the Sicily Canal, known as the "Route of Death" through the British Broadcasting Co.'s newcasts.

A fishing vessel endeavored to pick up survivors but the sea was rough, the vessel dragged over the life raft, and Viglietti was hanging over the stern when the propeller went full ahead. He shouted, and a seaman grabbed him by the seat of his pants and unceremoniously saved his life. The fishing boat put into Carthage, Africa, and from there Viglietti returned to Italy by air.

For the remainder of the hostilities he was assigned as instructor in astronomical navigation at the Italian Royal Naval Academy at Leghorn and then at Brioni, where the Academy was moved because of the bombings.

After the surrender of Italy, Viglietti was picked up by the Nazis and gained first-hand knowledge of life in concentration camps in Poland and Germany.

Knowledge of languages—in this case, German—is credited by Viglietti with saving his teeth during his stint in the concentration camps. Receipt of medicines by the internees was prohibited, but from time to time he received packages from home. He managed to get a message through to his family in Italy to send Vitamin C and, through his knowledge of German, managed to convince the guard that the package contained a preparation for soup-making.

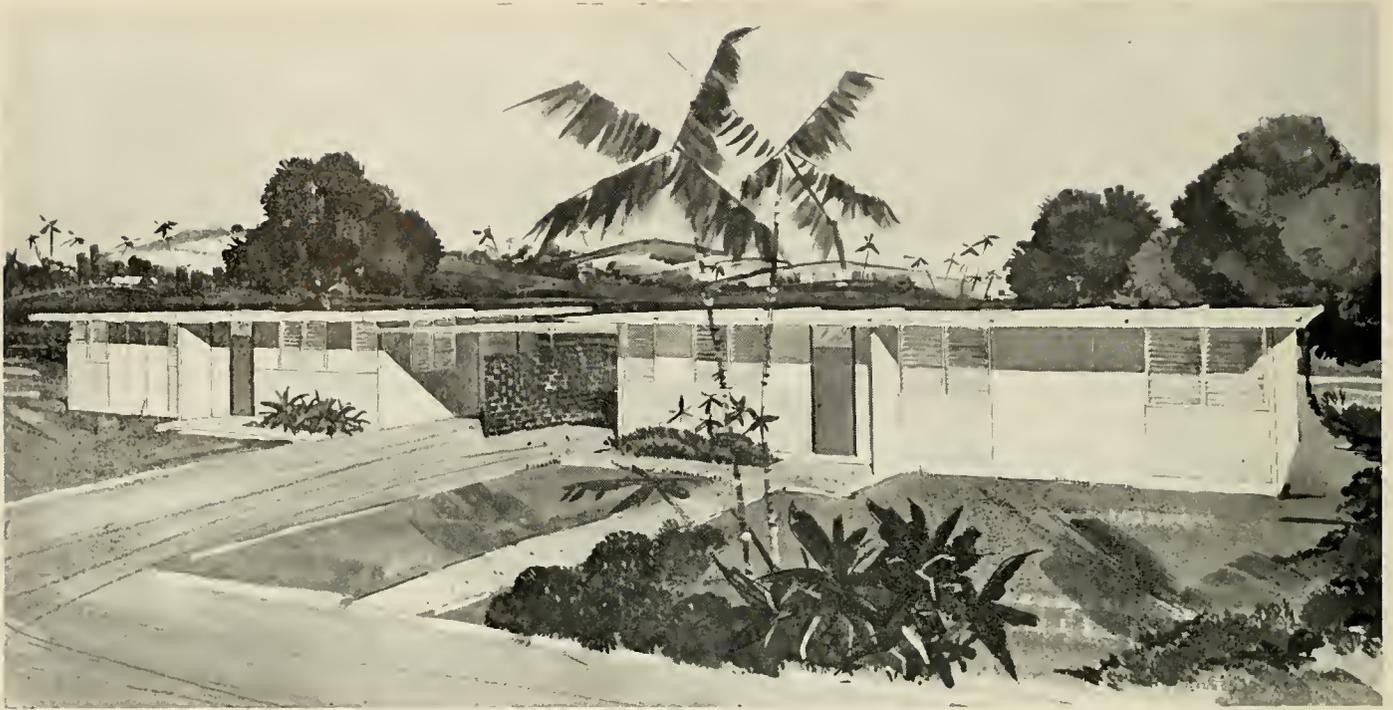
When hostilities ended, he returned to the Italian Navy, from which he received an honorable discharge. From 1948 to 1950, he was captain of an Italian ship, plying between the North and South Atlantic and the Mediterranean Sea.

Life in the Free World beckoned, however. Especially after he had a few good looks at life under Communist rule when his ship docked in Yugoslav ports.

A shipowner in San Francisco, whose path and Viglietti's had once crossed, offered the latter a job in Panama—and a new phase in his career opened. As in all shipping businesses, there were ups and downs, and in 1952 Viglietti came ashore on the Isthmus to hold landlubber positions until the launch *Las Cruces*, and an opportunity to tread a deck again, came along.

He has worked as a maritime technician with a shipping firm in Panama; as a dispatcher in the Central Exchange of the Caribbean Army and Air Force; as station manager in charge of operations for Braniff International Airways at Toecumen; as a freight handling foreman; and then a supervisory store-keeping clerk with the Panama Canal Company. Since May 11, he has been assigned to the Dredging Division in a position known as launch operator.

It's good to be in charge of a craft again, even a little craft like *Las Cruces*, he feels. And every day on the launch adds to the required total of experience necessary before he can sit for the Panama Canal license on which he's fixed his sights.



These on-the-ground, duplex-style units are the type of new housing being built in the Canal Zone's Latin American communities.

Toward More Adequate Housing



Two-story duplex units are standard for new housing in the Zone's U.S.-citizen communities.

EMPLOYEES of the Panama Canal who feel a kinship with the little old lady who lived in a shoe—no room for all those children, that is—can take heart from the housing programs now in progress.

A resumption of the program under which 500 housing units are to be built in the Zone for non-U.S. citizens employed by the Company-Government and an accelerated schedule for building replacement units for U.S. citizens employed by the Canal organization all are aimed at easing and improving housing conditions for employees and their dependents.

Plans call for construction this fiscal year of 100 of the 500 Zone units for non-U.S.-citizens employees, along with 120 family units and 25 bachelor apartments for U.S. citizens. Although neither of the programs is designed to add to the total number of housing units available, but they will result in larger, more adequate quarters for Canal employees.

The single-story, duplex housing units to be built in Latin American communities in the Zone this fiscal year include 14 two-bedroom units, 50 three-bedroom units, and 36 four-bedroom units. All of those built this year will be in Pedro Miguel. Those to be started in U.S.-citizen communities will include 12 four-bedroom units on Frangipani Street in Ancon and 108 three-bedroom units in Los Rios, Corozal, Ancon, and Gamboa. The 108 three-bedroom units will be of two-story, duplex style. The 12 four-bedroom units will be of one-story, off-the-ground construction.

During the past two fiscal years, the Canal built or started 129 houses and apartment units in La Boca, Balboa Heights, and Balboa Flats, plus 24 family units and 4 bachelor units at Gorgas Hospital. No new units were built in Latin American communities because a spending limitation imposed by Congress proved to be too low to permit construction of satisfactory units. The limitation since has been increased sufficiently to permit the 500-unit program to proceed.

Continuing programs to replace inadequate and over-age housing in both U.S. and Latin American communities in the Zone have been in progress for the past 10 years, financed from available Canal revenues.

The construction of 301 family units, including the 153 built or started in the past 2 years and the 120 to be started this fiscal year, and the 36 remaining bachelor units in U.S.-citizen communities is scheduled for completion in 1964, with 90 percent of all units to be finished by the end of fiscal year 1963.

Completion of the programs is expected to alleviate much of the present shortage in adequate housing for Zone employees. In the case of family housing for U.S. citizens, the number of satisfactory three- and four-bedroom units will be increased by 269 units over the 1959 level, while the number of two-bedroom units will be increased by 32. After completion of the program, 59 percent, or almost 6 units in every 10, will have three or four bedrooms, while the remaining 41 percent will have two bedrooms. Prior to the start of work on the 301 new housing units, two-bedroom units represented 46 percent of the total satisfactory family units, while the remaining 54 percent had three or four bedrooms.

The 500-unit program for Latin American communities in the Zone will have a similar effect. The first 200 of these units will include 50 two-bedroom units, 110 three-bedroom units, and 40 four-bedroom units. The breakdown among the remaining 300 units has not yet been determined.

A recent expansion of the number of units available for assignment to U.S. citizens with large families also is designed to improve housing conditions for such employees by tending to allocate larger units to larger families. Canal officials currently believe that all large U.S.-citizen families will be assigned to adequate large family quarters by the early part of calendar year 1963.

All of the new units in both Latin American and U.S.-citizen communities are of masonry construction and thus have a longer life expectancy than the frame housing units occupied by many employees of the Canal organization.

U. S. Schools to Open September 11

School Calendar 1961-1962

School opens	Sept. 11
End of first grading period	Oct. 20
Panama Independence Day (holiday)	Nov. 3
Veterans Day (holiday)	Nov. 11
Thanksgiving holidays (4 days)	Nov. 23-26
End of second grading period	Dec. 8
Christmas holidays (10 days)	Dec. 23-Jan. 1
End of third grading period	Jan. 26
Washington's Birthday (holiday)	Feb. 22
End of fourth grading period	March 9
Easter holidays (9 days)	April 14-22
End of fifth grading period	April 27
Memorial Day (holiday)	May 30
Commencement	June 6
End of sixth grading period	June 7
School closes	June 7

16 New Teachers From U.S.

NEW TEACHERS hired in the United States, their hometowns, degrees, schools from which they received them, and their assignments in the Division of Schools are as follows:

John Banasick, Scottdale, Pa.; Master of Arts, West Virginia University; general science, Balboa High School.

Raymond Blais, Key West, Fla.; Master of Education, Wayne University; physical education, Balboa High School.

Mrs. Dorothy Brake, Portsmouth, Ohio; Bachelor of Science, Michigan State College; physical education; Diablo Heights Junior High School.

James Breen, Kingsport, Tenn.; Master of Arts, West Virginia University; music, Balboa High School.

Ronald F. Bussiere, Pulaski, Wis.; Bachelor of Science, Wisconsin State College; industrial arts, Diablo Heights Junior High School.

Ralph Carr, Carlsbad, Calif.; Master of Education, Oregon State College; physical education, Canal Zone Junior College.

Lawrence E. Fraley, Jr., Boulder, Colo.; Master of Science, University of Colorado; physics and mathematics, Balboa High School.

Lyle Jenkins, Charleston, Oreg.; Master of Science, Oregon State College; general science and biology, Balboa High School.

James H. Mattingly, Alexandria, Va.; Master of Arts, Ball State Teachers College, and Master of Science, Indiana University; industrial arts, Cristobal High School.

Olin McGill, Fort Worth, Tex.; Master of Education, University of South Carolina; mathematics, Balboa High School.

James Montgomery, Greensboro, N.C.; Master of Arts, University of North Carolina; English and Spanish, Cristobal Junior High School.

Harry H. Nunley, Chattanooga, Tenn.; Master of Arts, Middle Tennessee State College; sixth grade, Diablo Heights Elementary School.

Karl Shirley, Hereford, Tex.; Master of Education, West Texas State College; mathematics, Balboa High School.

Gifford Wilde, Santa Rosa, Calif.; Master of Arts, Chico State College; social studies, Balboa High School.

Henry J. Williams, Perry, Fla.; Master of Education, University of Florida; mathematics, Balboa High School.

Charles R. Teeter, San Antonio, Tex.; Master of Education, University of Arkansas; general business and social studies, Balboa High School.

Drivers in Training

Instruction in care and handling of fork-lift trucks welcomed by pier employees, officials.

A BOARD some 40 inches wide and about 30 inches high has become a focal point of interest among fork-lift truck operators in the Cristobal pier area



Robert Yarde, a member of the committee, demonstrates the proper handling of five empty pallets, while Verol Gill, another committeeman, directs him through the obstacles.

during the past 7 weeks. The small dimensions of the board belie the importance attached to it by both the operators and their supervisors.

The somewhat laconic messages on the board reflect the apparent end results of what many of those most directly involved believe to be the best and most important training program yet instituted among terminal employees. The line which says, "J. A. Brooks 735" sets the goal for most of the operators on the piers, much as Babe Ruth's record of 60 home runs in one season is the goal of baseball men.

The inscription means that Mr. Brooks holds the best score to date in a test of fork-lift truck operating ability. The eight men directly following Mr. Brooks in the scoring also are listed on the board, with their scores. The test, combining elements of safety, care, speed, and judgment, involves putting a fork-lift truck through its paces in an intricate obstacle course on Pier 10.

Designed as a training medium for fork-lift truck operators, the obstacle course has tested the abilities of even the most able drivers on the piers—and is inducing them to take greater pride in their work and their ability to maneuver their vehicles with speed and safety. And the training program promises to be a real money saver for the Canal organization.

Albert G. Terwilliger, general foreman on the piers, in cooperation with James Barrett, training officer of the Transportation and Terminals Bureau, developed the training program. Terminals officials urged the training as part of an effort to reduce damage to

Students and committee members watch as three members of the committee demonstrate obstacle course.



cargo and equipment, improve work performance, and cut the accident injury rate.

Mr. Terwilliger recommended that field training in operation of the fork-lift trucks be provided, rather than formal classroom instruction in the handling and care to be given vehicles and cargo. Reviewing training programs suggested by manufacturers of fork-lift trucks, Mr. Barrett decided that instruction in operational methods would benefit both old and new operators. Planning of the obstacle course followed.

A major innovation in training techniques was introduced by Mr. Terwilliger and Mr. Barrett in developing the program. They called in some of the pier supervisors, asked them what kind of a program they thought would be most beneficial, then decided the supervisors' knowledge of conditions and requirements was so intimate and extensive that they and selected drivers should supervise the training program. The result was a committee which administers the program in cooperation with Mr. Barrett's office and other Terminals Division officials.

Harry Abrahams, lead foreman and 35-year veteran on the piers, was named to head the committee. Other members are Cuthbert Seales, secretary; Zoilo Crisson; Robert Yarde; Verol Gill; Albert Williams; and Ashton Pinnoek. Basil G. Coke, clerk in Mr. Barrett's office, aids the committee by preparing minutes, slogans, and other clerical work.

The committee meets twice each week to review the program, develop

changes, propose further training needs of the fork-lift truck operators, and coordinate their efforts with the objectives of the training officer and Terminals Division officials.

In an early meeting, the committee decided a basic requirement for fork-lift truck operators was good eyesight. Operating, as they do, in the often murky light of the huge terminal piers,

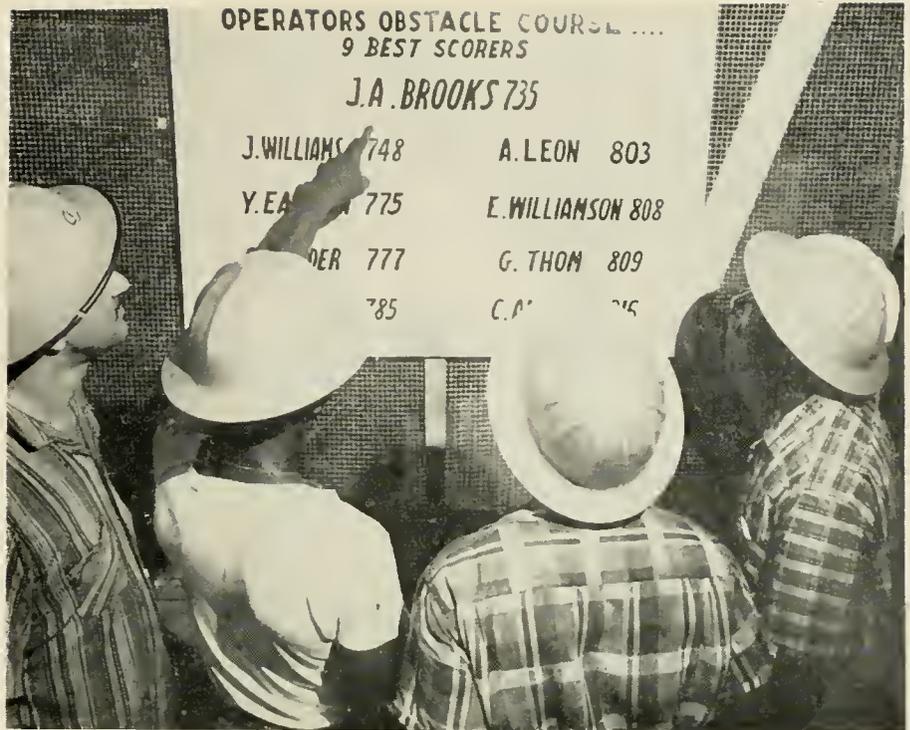
the men must have excellent vision and depth perception, the committee reasoned. They appealed to Dr. Donald Robinson for a program of eye-testing for all operators and were greeted by a hearty response and the loan of a machine which a layman can use to give a basic vision test.

Of the first 100 fork-lift truck operators to take the examination, only 30 passed with flying colors. The other 70 had varying degrees of visual difficulty which indicated the need for further examination. They have been referred to Coco Solo Hospital for examination and, if needed, a prescription for eyeglasses.

After visual tests of the operators were completed, the training program was started. The instruction opens with an oral orientation session in both English and Spanish to provide a basic knowledge of the operating parts and limitations of the fork-lift trucks.

The orientation covers starting, stopping, and traveling with the fork-lift truck, as well as safety rules to be followed. The operational instruction explains the limitations of the vehicles, how damage to them can be avoided, how to use them with various types of cargo and loads, and how they can be used safely for towing or pushing other vehicles. The safety practices stressed include proper approach to pallets, proper loading and moving of pallets, warnings against a wide range of unsafe practices, and recommended procedures in handling various types of cargo.

(See p. 11)



Four fork-lift truck operators check the scoreboard in the repair shop in the pier area.



Examining some of the written materials for the training course are, in front, left to right, Albert Williams, Basil G. Coke, and Harry Abrahams. Other members of the committee looking on are, left to right, Verol Gill, Ashton Pinnoek, Cuthbert Seales, and Zoilo Crisson.



Core-drilling crew works on unfinished part of Cut-widening project.

It's What's Down There That Counts

Knowledge of Isthmian past is dug up—literally—in the course of core-drilling work.

THE ISTHMUS of Panama, so free of major earthquakes that it was considered safe for the construction of a lock-type Canal, once rumbled and shook as hundreds of active volcanos spewed lava over the landscape and hurled rock fragments hither and yon.

The sea, which is now held back by a 50-mile wide strip of land, rose and covered the Isthmus several times in the past and completely separated North from South America.

Prehistoric wild life, including a fresh water turtle whose fossilized remains were found a few years ago by Robert Stewart, the Panama Canal's geologist, roamed the land and lived in fresh water lakes the size of Gatun.

The turtle, which dated back 15 million years to the Middle Miocene Period, lived in a climate and amid vegetation very similar to that existing today.

These and other prehistoric facts have been determined by Mr. Stewart and fellow geologists, who during the years have studied the geological history of the Isthmus through field trips, during major excavation projects, and by taking core samples, the standard method used by engineers to determine what lies beneath the surface of the earth.

The French took core samples when they started digging through the Panama hills in the vicinity of what is now Gaillard Cut. These samples, incidentally,

later proved highly valuable to the United States construction forces working with the Isthmian Canal Commission.

With a few hundred feet of core samples, Canal engineers have been able

to trace geological history dating from the recent, or last few hundred years, back to the Miocene Age and beyond. They have also found a wide variety in the types of rock, clay, and shale.

Cores cut from the lock structures may reveal weak spots before trouble develops.



Core samples by the thousand are stored in a core shed in the Balboa Industrial Division, where they undergo periodic scrutiny by contractors and engineers. A majority of the samples were taken as preliminary to the Cut-widening work or as part of the survey for the Sea-Level Canal studies. Some samples have been taken in Panama at the request of the Panama Government and others have been obtained of the concrete in the lock structures during routine overhauls to determine its condition and possibly locate areas which should be strengthened by grouting.

The system of core drilling used during the past 20 years or so involves the use of a special type of drill which has a hollow center to accommodate the core. The drill bit cuts around the core sample and then frees it for removal. The actual work of core drilling is done by the Dredging Division, which then turns the core samples over to the Engineering Division. They are studied and classified by Mr. Stewart.

The average depth of a core hole is about 200 feet, although some have gone to a depth of 1,200 feet. The deeper ones were taken on the banks of the Canal during the Sea-Level Canal studies and later during preliminary work on the Cut-widening.

On occasion, when core samples have not satisfied the needs of engineers planning a construction project, holes 30 inches in diameter have been cut to permit an on-the-spot inspection of the material while it is still in place.

Canal officials now are studying the possibility of using a recent innovation in the core drilling field—a camera which can be lowered inside a 3-inch hole to take pictures. This procedure would not only eliminate the need for large and expensive 30-inch core holes but could be used to advantage on studies in relation to the widening work still to be done at Gaillard Cut between Empire Reach and Gamboa.

Engineers say that the additional information provided by the camera could add substantially to the amount of data obtained from the core samples removed prior to use of the camera and conceivably could affect major design, blasting patterns, and other plans.

Even with improved methods, it hardly seems likely that Canal core drillers will ever strike oil or find mineral deposits of any value. In the past, however, geologists have come across coins, buttons, old bottles, and buried construction machinery. On one recent occasion they were responsible for a minor gold rush when a quantity of pyrite, or fools' gold, was unearthed in a place called, appropriately enough, Gold Hill.

Transit Limitations Defined

THE WIDEST SHIPS ever to transit the Panama Canal have been U.S. Navy battleships of the *Iowa* and *Indiana* classes, with beams up to 108 feet and 2 inches. The longest ship was the old German passenger ship *Bremen*, which was 898 feet long.

Despite the fact that there was less than a foot to spare on each side of the big battleships, they transited without undue damage, partly because of the armor plate they carried. The thin shell of a commercial vessel is not made to withstand the blows which the inches-thick armor plate of a battleship can resist. Consequently, commercial ships must be given more gentle treatment as they go through the 110-foot-wide locks.

Widest commercial ship ever to transit was the *Sinclair Petrolore*, which was taken through with no appreciable damage, despite her 106.4 feet of width and 789 feet of length. The big tanker

The sizes of the maximum merchant ships which are currently transiting the Canal in a routine manner and with little or no damage is 102' beam by 800' length by 36'6" draft Tropical Fresh Water.

The length of the ship of the above description may be extended to 850' without incurring any additional difficulty. This length is controlled by the radius of turn in the present Canal Cut.

The Canal is now being widened from 300' to 500', date of completion not yet determined, but should be completed within a very few years. At that time the length of the ship can be extended to 925', controlled by the length of the lock chambers, without encountering any undue difficulties.

Based on the rather extensive experience that we have had to date with ships of beam 102' x 800' length by 36'6" draft, Tropical Fresh Water, it appears that it might be feasible to transit, expeditiously and safely, ships with beams as wide as 104', with lengths up to 850', and drafts of 36'6". However, since we have had very little experience with merchant ships of this size, we would have to reserve final judgment until actual transits had been made.

There is a complicating factor in the matter of beam versus draft, which is presented by fillets or batters that are present on the bottom of the lock walls. Ships wider than 100' beam with a draft deeper than about 35' will start to encounter interference in the area of the turn of the bilge, particularly if they have bilge keels installed in this area. In short, the wider the ship, the less the allowable draft, unless the ship's hull form is built to accommodate these fillets. (A cross-section diagram of a lock chamber, showing these fillets, may be obtained from the Marine Bureau, Panama Canal Company, Balboa Heights, C.Z. One

made the transit only once, however, sinking off the coast of Brazil before a second transit could be attempted. The single transit was not enough to determine if the ship could have been safely transited on a regular basis or if she would have had to be turned away because of too great risk of damage to her side plating.

Because a few inches more in width and draft and a few feet more in length can add considerably to the cargo tonnage of a ship, while adding only pennies to the cost of operation, shipbuilders and operators understandably are interested in building vessels as large as possible.

In reply to queries about the maximum size of commercial ships which can safely be transited through the Canal, Capt. Richard G. Jack, Marine Bureau Director, with the approval of Governor Carter, now is issuing the following answer:

section of the fillet in Miraflores Locks is shown in the bottom picture on p. 14.)

Concerning the draft of ships, it is normal procedure to limit the draft of a very large ship on its initial transit to approximately 33' until its handling characteristics under this draft are established. Assuming that successful transits are made at 33', succeeding transits at 1 foot increments of draft would be permitted until the draft of 36'6" is attained, each increment depending upon the successful negotiation of the Canal at the previous 1 foot lesser draft. The above draft restrictions apply when Gatun Lake is at 85' or above, which is normally from about July until the end of January. During dry seasons of exceptionally dry years when Gatun Lake falls below about 84' above sea level, draft restrictions may be applied, generally during the months of March, April, and May, to as little as 35', possibly less in extremely dry "dry" years. Advance notices of such draft restrictions are published at least a week in advance, with forecasts running as much as 1 month in advance in order to permit ship operators to load their ships to the proper draft prior to dispatching them to the Canal for transit.

Panama Canal reserves the right to transit a particularly large or difficult handling ship as a dead ship, charging the operators for the necessary tugs at the current rate of \$80 per hour per tug. At the present time, ships of the size of those given in the first paragraph are normally required to use at least one tug to aid in steering through the Cut and additional tugs to aid in positioning the ship to enter the locks safely. Charges for this type of tug service run about \$1,900 per ship per transit, over and above the regular tolls.

There is not now any authorized project to increase the size of the locks, which are the ultimate controlling factor of the Canal.

Greater Security For Employees

*Life insurance program
getting warm reception.*



Robert Van Wagner, Employee Services Officer, discusses life insurance program with A. M. Parchment and Ellis L. Fawcett of the Latin American schools in Paraiso. Both support the program.

THE LIFE INSURANCE program recently inaugurated for non-U.S.-citizen employees of the Company-Government and other Federal agencies in the Canal Zone has met with a warm welcome from employees of the Canal organization.

With approximately half of the 12-week signup period completed, some 5,100, or more than 50 percent of the 9,500 eligible employees of the Company-Government have signed for the life insurance coverage. Hundreds more are expected to join the program before

the deadline of October 10, after which physical examinations may be required of applicants.

The life insurance program, styled on that provided for U.S.-citizen employees, provides life insurance on the basis of annual earnings. The minimum policy provides \$2,000 coverage and the maximum is \$10,000. The bi-weekly cost per \$1,000 of insurance is 27½ cents, or \$7.15 per year.

The insurance also provides double indemnity for accidental death. Robert Van Wagner, Employee Services Officer of the Personnel Bureau, said all insurance counselors in the various units of the Company-Government have been provided with explanatory materials and application forms for the insurance.

The new program is another major step in extending fringe employment benefits to non-U.S.-citizen employees in the Canal Zone. Other fringe benefits include coverage of the non-U.S.-citizen employees under the Civil Service Retirement Act and the group health insurance program.

Under the group life insurance plan, no physical examination is required if the employee becomes insured within the present enrollment period or within 30 days of employment. At the time of retirement, the employee will have 31 days in which to convert the insurance to any plan he desires.

Any person insured under the program who becomes totally disabled from either injury of illness prior to his 70th birthday will be insured for 1 year after cessation of premium payments. The policy also provides compensatory payments for loss of major body parts, such as eyes, legs, hands, and arms.

Information Booklets Readied

On Health Insurance Plans

INFORMATION booklets giving complete information about benefits provided by the various group health insurance plans available to U.S.-citizen employees of the Company-Government are to be distributed to all such employees early this month.

Under provisions of the group health insurance program of the Federal Government, all employees are to be given an opportunity to change insurance plans before November 1, if they wish to do so. The recent increase in charges for medical care in Canal Zone hospitals has resulted in an increase in rates for the Canal Zone Benefit Plan, effective November 1, but the other plans available to U.S.-citizen employees were not affected.

Similar booklets describing the health insurance plan available to non-U.S.-citizen employees will be prepared as soon as details of the new plan can be developed. Like the altered Canal Zone Benefit Plan for U.S.-citizen em-

ployees, the revised plan for non-U.S.-citizen employees will provide increased coverage to compensate for the increased medical charges.

Applications which can be used to join the program or to change from one plan to another will be available from the insurance counselor in each unit of the Company-Government organization. Employees not wishing to make any change in their present insurance program do not have to file an application to continue their present plan; it will be continued automatically.

A comparison of the new medical care charges for non-U.S.-citizen employees and the coverage to be provided by the revised group health insurance plan was not yet available at REVIEW press time, but will be published in the October 6 issue. A similar comparison of the new charges and group hospital coverage available for U.S.-citizen employees was given in the August issue of the REVIEW.

Worth Knowing

A DOZEN interesting features on pre-Colombian Isthmian culture are included in the latest issue of *The Panama Archaeologist*, now available locally. This is the third consecutive annual publication of the Panama Archaeological Society.

The volume contains reports of field work in Chiriqui, Old Panama, Coele, and Venado Beach, and has 26

illustrations, both line drawings and photographs. The articles deal with new approaches to cultural features in Chiriqui and Old Panama, further developments on findings in Coele and Venado Beach, and descriptions of especially interesting artifacts and examples of contemporary and indigenous Indian cultures.

The lead article is one by the noted German archaeologist, Dr. Wolfgang Haberland, on work done in Chiriqui

Province. Dr. Haberland, a member of the local Society, is a constant contributor to the Society's publications.

Other articles deal with projectile points, by Dr. Russell H. Mitchell; spindle whorles, by Dr. Leo P. Biese; metal and pottery associations, by Gerald A. Doyle; fabric and metal figurines, by Dan Sander and Dr. Mitchell; "Pre-ceramic Engineers," by Kenneth W. Vinton; an exploration in Coele by Philip L. Dade; C-14 dates for Venado Beach, by Dr. Samuel K. Lothrop of the Harvard Peabody Museum; and a report on a pottery stamp from Chiriqui, by Dan Sander.

There also are brief descriptive articles by Karl P. Curtis; on a stone mask by Dr. Mitchell; and the "Cueua" costume, by Mrs. Beatrice Curtis. Philip L. Dade is editor of the publication and Mrs. Thelma H. Bull is assistant editor.

Company Steamship Sailings

THE SCHEDULE of the SS *Cristobal* between New Orleans and the Canal Zone will be changed from 10 days for the round trip to 14 days, effective with the sailing from New Orleans on September 26. The faster schedule has been in effect this summer to facilitate travel of Company-Government personnel taking home leave.

Sailing and arrival times for the next month are as follows:

Leave New Orleans	Arrive Cristobal	Leave Cristobal	Arrive New Orleans
September 2	September 6	September 6	September 10
September 12	September 16	September 18	September 22
September 26	September 30	October 2	October 6

The new schedule for the fall, winter, and spring calls for the ship to leave New Orleans at 1 p.m., every other Tuesday; arrive at Cristobal at 7 a.m., every other Saturday; leave Cristobal at 1 p.m. every other Monday; and arrive in New Orleans at 8 a.m. every other Friday.

(Continued from p. 13)

Drivers in Training

Practice on the obstacle course follows, with scoring based on a demerit system, in which the best score possible is zero. Combining speed requirements against such mistakes as bumping into one of the obstacles, each error or too-slow operation results in a predetermined number of points, with the object being to get as low a score as possible. Passing score for the test is 1,200. Anyone scoring higher than that is given more training. It is a point of some merriment but obvious pride among the committee members that one of the top nine operators now listed on the board was unable to pass the test on his first try, primarily because of an inability to control the machine properly when operating it in reverse.

Those around the piers who are in a position to know, give unqualified endorsement to the training. J. H. Rheney, foreman of the Motor Transportation Repair Shop in the Cristobal pier area, which maintains and repairs the fork-lift trucks, has a number of laudatory comments about the program. "It's pretty easy to damage one of these machines if you don't handle it properly," he notes. "A lot of the damage is caused because these men haven't

understood what the fork-lifts can and can't do. I'm sure this is going to help correct that situation."

J. W. B. Hall, chief stevedore foreman of the Cristobal pier area, also praises the program. "It costs us about \$2.50 to repair a pallet on which one of the boards has been broken by ramming one of the forks into it while attempting to load it. That doesn't sound like much, but in a year's time it can cost a lot of money. And you can well imagine what one of those forks will do to cargo—say an air conditioner—if the operator misses the pallet and rams it. We're teaching them to operate their trucks as fast as possible—but consistent with safety. I know it's going to help a lot."

"We're pretty proud of this program," admits E. B. O'Brien, Jr., Superintendent of the Terminals Division, "but we're also real proud of the employee committee which is administering it. They have taken a real interest and aroused a lot of enthusiasm among the drivers to do the best they know how, while learning to do a better job. We know it will pay off through greater pride among the men, better work performance, and reduced damage and accidents."

HOWARD C. PETERSEN, president of the Fidelity-Philadelphia Trust Co. and longtime member of the Board of Directors, Panama Canal Company, last month was appointed by President Kennedy as a special assistant to prepare an international trade program to replace the reciprocal trade program next June 30.

Mr. Petersen is to survey the reciprocal trade program and developments in international trade and help draft legislative proposals, while coordinating activities of all departments interested in the trade-agreements program. He will continue as a member of the Panama Canal Company's Board of Directors.

NOTICE TO READERS

BOUND copies of volumes 10 and 11 of THE PANAMA CANAL REVIEW (August 1959 through July 1961) now are available on special order for a limited period. Orders should be received before November 1, 1961. The price will be \$13.50 for each book containing both volumes.

The 24 issues will be bound in fabrikoid, with gold stamping on the cover, similar to previous bound copies. Covers are available in red, black, green, brown, or blue. Temporary binders of board and Linsou cloth, in light blue only, are available at \$2.50 per set. Heavier temporary binders of board and fabrikoid, in dark blue only, are \$3 per set.

Orders addressed to the Superintendent, Printing Plant, Box 5084, Cristobal, C.Z., should be accompanied by a postal money order or local check, payable to the Treasurer, Panama Canal Company.



John Palmer Smith, Jr.

Swamp Tamer and Administrator

The following article, in a slightly longer version, was published in a recent issue of the "Health Officers News Digest," a publication of the Public Health Committee of the Paper Cup & Container Institute. Because of its interest to Canal Zone residents, permission was obtained to reprint it in THE PANAMA CANAL REVIEW. Mr. Smith recently was named to succeed William Brown as Assistant to the Health Bureau Director, but will continue to serve as Chief of the Sanitation Division in addition to his new duties.

AMERICA'S SCHOOL children learn at an early age the dramatic story of the construction of the Panama Canal and how its completion was made possible by the sanitation, yellow fever, and malaria control measures applied by Gorgas and LaPrince. Few adults realize, however, that even today constant effort is necessary to assure the health of the host of workers who keep this great engineering marvel functioning.

For the past 20 years it has been the job of John Palmer Smith, Jr., to maintain the sanitation protection of the Canal and the surrounding Canal Zone. The present official position of this energetic man in his late fifties is Chief, Division of Sanitation, Health Bureau, Canal Zone Government.

The Sanitation Chief answers to the nickname "Pam" because in the relaxed drawl of the "low-country" of South Carolina around Charleston where he was born, his middle name was pronounced "Pama." He is a graduate of Porter Military Academy in Charleston and of Clemson College in Clemson, S.C., from which he received a bachelor's degree in civil engineering.

After leaving Clemson, Pam worked during the mid-twenties for a speculative homebuilder in Washington, D.C., advancing from foreman to field superintendent. In 1927, he got his introduction into tropical sanitation when he joined the United Fruit Co. and was sent to Santa Marta, Colombia, as general foreman of their construction department. His job included the construction and maintenance of buildings,

dwellings and hospitals, roads, municipal utilities, and irrigation structures.

While he was stationed at Santa Marta, he met and married Eva Flye, whose father, a Yankee from Maine, had a coffee plantation in the mountains overlooking the city.

In 1931 he moved his wife and two sons back to the States, and with the depression in full swing he worked at whatever jobs he could find in engineering and architectural design, carpentry, and building.

Palmer Smith spent 8 months in the Hell Hole Swamp of eastern South Carolina, which abounds in rattlesnakes, water moccasins, razorback hogs, and malaria mosquitoes. Part of the time he was making transit surveys of cutover timberlands with a crew which included two men with masters degrees in engineering, an unemployed bootlegger, and a still operator. During the rest of his time there he was in charge of malaria control drainage for the State Health Department.

Then in 1934 he became District Sanitary Engineer for the Army Third Corps area, covering Pennsylvania, Maryland, and Virginia. His job was to see to the sanitation of approximately 200 Civilian Conservation Corps camps. On this assignment, while checking the water supply of a remote mountain town near a proposed CCC camp, he recalls he asked a town elder whether there was a chlorinator. The reply he received was: "We got one, mister, but don't let the damn thing worry you none. We only use it when an inspector comes

from the State Health Department, and that ain't often!"

When the U.S. Navy offered Smith a job in 1938 as Assistant Engineer (Civil) at its base at Coco Solo, C.Z., he went into a huddle with Eva before deciding. It didn't take them long, however, to agree that the job offered interesting possibilities, since both of them liked the tropics and both spoke Spanish. Coco Solo was an active and soon-to-be-expanded aviation and submarine facility. Pam's principle duty was development planning for expansion at the site as programmed by a task group in Washington.

Two years later he transferred to the Panama Canal as an assistant engineer doing estimation, specification writing, and job planning. In September of 1941, he was approached by Gen. M. C. Stayer, Chief Health Officer for the Canal, who needed a sanitation engineer. Pam agreed to join his staff on a temporary basis, but has remained with the Canal's Health Bureau ever since.

With our entry into the war, Pam's responsibilities grew, for the Canal Zone became the administrative center of the Antilles Theater, covering all of the Greater and Lesser Antilles islands of the Caribbean.

Things were calm for a while after the war, but in 1948 there was an outbreak of jungle yellow fever. The Canal Zone, the Republic of Panama, and the Pan American Sanitary Bureau joined forces in a drive to vaccinate everyone in the Zone and the Republic, and also to eradicate the *Aedes aegypti* mosquito,

the urban vector of yellow fever, to prevent explosive epidemics in the cities. Eradication was achieved in 1951, and since then there has been no evidence of the mosquito in the Zone or the Republic.

In his job as it is presently constituted, Palmer Smith and his staff of about 135 men deal in the Zone with all the usual phases of a health department's environmental sanitation program. He says they all feel the weight of their responsibility to protect the health of the residents and of the approximately 750,000 passengers and crewmen of the vessels using the Canal and its ports each year. Because of the experience he has gained in his 20 years of service in the Zone, he is called upon frequently for advice in solving sanitation problems in other tropical and subtropical countries.

Pam is active in the affairs of several professional engineers' groups, notably Sanitary Engineering, of which he is a charter member and is a diplomate in public health of the American Academy of Sanitary Engineers. He also takes a lively interest in his church, the YMCA, and the Canal Zone Boy Scout Council. For recreation he enjoys golf and photography.

The Smiths live in a ranch-style house at Balboa Heights on the Pacific end of the Zone. In addition to the two boys born in Colombia, there are two other children, a girl and a boy, born in Ancon, Canal Zone. The two older boys attended college in the States and are now working away from home. The third child, Mary, is currently attending the Canal Zone Junior College, but will complete her college education in the States. The youngest son, now 15, is a sophomore in high school, and also will attend college in the States when ready.

Recently, Palmer Smith was offered a challenging job in Pakistan because of the international reputation he has earned. He turned it down because he said he preferred to consider the Zone his permanent home until the time for his retirement. He felt that his experience would be more valuable to the people in the area than it would be to people on the other side of the world, where conditions and needs might be quite different.

Against the time when he will be retiring, he has held title to his family's riverfront homestead in Charleston County, S.C. There he says, he hopes "to fish and garden and entertain our children, grandchildren, and relatives among the live oaks and magnolias." And among his friends in the Zone he is promoting the idea of their building homes for themselves on his land "so that our pleasant associations may continue" beyond their retirement.



Workmen put finishing touches on stilling basin below old railroad bridge.

Going Strong at 100-Plus

SOMETHING NEW has been added to a structure which has undergone a number of changes and served a variety of purposes on the Isthmus for more than 100 years.

The structure involved was built originally as a bridge for the Panama Railroad, on its original route across the Isthmus. Later, it was modified to serve as a dam to impound water of the Rio Grande near Contractors Hill, while the top of it was used to carry vehicular traffic, rather than the relocated railway.

For many years, the water impounded behind the dam was the principal source of supply for the Pacific side of the Isthmus, including Panama City. With the reservoir no longer being used to impound water for treatment by the Zone's Pacific-side purification and filtration plant, a hole 5 feet in diameter recently was made through the bottom of the dam to permit the water to escape to the Canal.

The limited size of the hole in the dam, coupled with the volume of water which at times collects upstream from it, causes considerable turbulence and potentially destructive force in the water being discharged, so a stilling basin designed to dissipate the turbulence and force of the flow has been built just below the dam.

The project is part of a flood control system for the Rio Grande drainage area. It is associated with a recently constructed culvert under the relocated section of Borinquen Highway and with the concrete spillway just south of Contractors Hill through which the river enters the Canal.

By dissipating the force of the water flowing through the stream during periods of heavy rainfall, the dam and stilling basin permit the gradual discharge of the water without detriment to downstream structures or to ship traffic in the Canal.

ANNIVERSARIES

(On the basis of total Federal Service)

4
ENGINEERING AND
CONSTRUCTION BUREAU
Theophilus J. Babb
Seaman

3
CIVIL AFFAIRS BUREAU
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Contraband Control Inspector
Joshua A. Cunningham
Police Private
Casey J. Hall
Police Private

ENGINEERING AND
CONSTRUCTION BUREAU
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Clerk
Abraham Cruz
Helper Welder
Justino Ortega
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Aurra Cueto
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Floating Plant Oiler
Clifford Bartley
Helper Furniture Repairman

HEALTH BUREAU

Laura N. Scott
Nursing Assistant
Iceline Simmons
Pantryman
Lillian F. de Gómez
Clerk Typist
Eric H. Ferguson
Storekeeping Clerk

MARINE BUREAU

2
Bud R. Emery
Chief Engineer, Towboat or
Ferry
George R. Murray
Chief Engineer, Towboat or
Ferry
Walter M. Hartman
Lead Foreman Locks Control
House
Joseph T. Cope
Lead Foreman Locks
Control House
Leslie W. Croft
Lead Foreman Locks
Control House
John G. Boswell
Leader Lock Operator
Machinist
Rupert Maynard
Helper Lock Operator
Evelyn O. Baker
Maintenance Painter
Billie B. Gray
Lock Operator
Nicolás Hernández
Deckhand
Jose Hall
Heavy Laborer
Julio López
Helper Lock Operator
Julian Archer
Deckhand
Lefard A. Bennett
Launch Seaman
Clifford Bynoe
Seaman

Rufus Ellis
Boatman
Francisco Díaz
Boatman
Juan González
Carpenter
Anthony H. Hopiak
Leader Shipwright

OFFICE OF

THE COMPTROLLER

Russell A. Edwards
Time, Leave, and Payroll
Clerk
W. K. Galloway
Plant Accounting Assistant

PERSONNEL BUREAU

Edward A. Doogan
Director

SUPPLY AND COMMUNITY SERVICE BUREAU

August I. Bauman
Superintendent, Grounds
Branch
Evelyn S. Griffith
Retail Store Sales Checker
Nethina Scott
Sales Clerk
Myrtle O. Campbell
Sales Clerk
Godfrey G. Smith
Washman
Miguel T. Díaz
Laborer
Sylvester Rouse
Leader Maintenance
Clara Walton Reid
Food Service Sales Checker
Amos Garth
Maintenance Carpenter
Rafael G. Osorio
High Lift Truck Operator
C. A. Brathwaite
Cemetery Worker
Audrey Hammond
Utility Worker

Myra Olton
Pantryman
Hubert L. Joseph
High Lift Truck Operator
Harry A. Smith
Heavy Laborer
Frank E. Day
Assistant Retail Store Manager
Telmo P. Cooper
Baker
Carlota de Navarro
Laundry Checker
Florentino Uaytoti
Utility Worker
Alfonso Rivera
Kitchen Attendant
Adolfo Mera
High Lift Truck Operator

TRANSPORTATION AND TERMINALS BUREAU

Peter Dailey
Dock Maintenance
Clayton F. Osborne
Guard
Herbert Thomas
Helper Lock Operator
M. J. Carrasquilla
Truck Driver
Gilbert F. Chase
Leader Liquid Fuels
Wharfman
Walter E. Robison
Inspector, Wood and Steel
Carman
Fred T. Lorde
Truck Driver
Emilio G. Garay
Chauffeur
Richard M. Hiron
Automotive Machinist
Samuel Bryan
Helper Liquid Fuels
Wharfman
Carl W. Warner
Lead Foreman Railroad Yard
Joseph H. Gray
Cargo Clerk

PROMOTIONS AND TRANSFERS

July 10 through August 10

EMPLOYEES who were promoted or transferred between July 10 and August 10 are listed below. Within-grade promotions and job reclassifications are not listed.

ADMINISTRATIVE BRANCH

George Vieto, from Supervisory Passenger Traffic Officer, to Traffic Manager.
Constance L. Bishop, Marie M. Herbling, from Passenger Traffic Clerk, to Passenger Rate Assistant.

CIVIL AFFAIRS BUREAU

Customs Division

Joseph S. Corrigan, from Contraband Control Inspector, to Customs Inspector.
Salvatore Rinaldo, from Customs Guard, to Contraband Control Inspector.
Rudolph L. Crespo, from Customs Guard, to Customs Inspector.

Postal Division

Glenn R. McNall, from Theater Doorman, Supply Division, to Window Clerk Substitute.
Charles D. Ward, from Signalman, Navigation Division, to Distribution Clerk Substitute.

Division of Schools

Melida M. Bembenek, Clerk-Typist, from Gorgas Hospital.
Frank Jackman, from Heavy Laborer, to Dressing Room Attendant.
George H. Sylvester, from Laborer Cleaner, to Leader Laborer Cleaner.
Carlos Chanis, from Heavy Laborer, Maintenance Division, to Laborer Cleaner.

ENGINEERING AND CONSTRUCTION

Joseph Stultz, from Office Machine Operator, to Clerk, Engineering Division.

Dredging Division

George F. Smith, from Dipper Dredge Engineer, to Chief Engineer, Towboat or Ferry.

William K. Renner, from Third Assistant Engineer, SS "Cristobal," Water Transportation Division, to First Assistant Engineer, Pipeline Dredge.

Asbury A. Harris, Jr., from Lock Operator Machinist, Locks Division, to Marine Machinist.

Cecil A. Archhold, from Utility Worker, Supply Division, to Clerk.

Gerardo Cosca, from Apprentice Carpenter, to Apprentice Machinist.

Albert G. Brown, Clifford S. Tomlinson, from Detention Guard, Police Division, to Seaman.

Luis Torrero, from Winchman, Terminals Division, to Debris Control Winchman.

José S. Pérez, from High Lift Truck Operator, Terminals Division, to Debris Control Winchman.

Rudolph A. Thompson, from Helper Lock Operator, Locks Division, to Seaman.

Alburn A. King, from Helper Marine Machinist, to Toolroom Attendant.

Johnathan Harriott, from Helper Boilermaker, Industrial Division, to Helper Marine Machinist.

Gerardo Rivera, from Dock Worker, Terminals Division, to Truck Driver.

Teodoro Ayarza, Cesario Rujano, from Dock Worker, Terminals Division, to Launch Seaman.

Gerardo Gill, from Clerk Checker, Terminals Division, to Launch Seaman.

Fidencio Echaverra, Saturnino Fragueiro, from Dock Worker, Terminals Division, to Boatman.

Rito Ruiz, from Grounds Maintenance Equipment Operator, Community Services Division, to Boatman.

Vincent L. Thomas, from Railroad Trackman, Railroad Division, to Boatman.

Dudley G. Blanchard, from Dock Worker, Terminals Division, to Helper Rigger.

James D. Raymond, from Laborer, Community Services Division, to General Helper.

Frances A. Wade, from Laborer Cleaner, Community Services Division, to Floating Plant Wiper.

Heraclio Domínguez, from Dock Worker, Terminals Division, to Heavy Laborer.

Alphonso H. Thomas, from Utility Worker, Supply Division, to Heavy Laborer.

Juan Justiniani, from Dock Worker, Terminals Division, to Heavy Laborer.

José D. Vázquez, Heavy Laborer, from Maintenance Division.

Bolivar Wilson, from Laborer, Maintenance Division, to Heavy Laborer.

Nazario Góndola, from Dock Worker, Terminals Division, to Laborer.

Electrical Division

Thomas R. Dugan, from Life Guard, Division of Schools, to Apprentice Cable-splicer.

Hubert J. Jordan, from Window Clerk, Postal Division, to Apprentice Electrician.

Douglas A. Harding, from Leader Heavy Laborer, to Maintenanceman.

Burnell F. Dowler, from Operator-Diesel Machinist to Operator-Foreman Mechanic.

Ruben Eversley, Reginaldo A. James, Jr., Hugh L. Shannon, Vibert Turner, José A. Córdova, from Power Plant Wiper, to Helper Electrician, Power Plant.

Harold L. Fairclough, from Heavy Laborer to Helper Electrician.

Amos A. Brathwaite, from Waiter, Supply Division, to Heavy Laborer.

Maintenance Division

Howard W. Osborn, from General Management Engineer, to Maintenance Engineer.

Ruth B. Krziza, from Clerk Stenography to Secretary Stenography.

Murphy B. Alexander, Waldo B. Gilley, Peter A. Warner, from Lead Foreman to General Foreman.

Roger E. Hamor, from Guard Supervisor, to Water Systems Controlman.

Bertie Gittens, from Painter, to Leader Painter.

Carol A. Scott, from Field Tractor Operator, to Automotive Equipment Operator.

Vernon B. Smith, from Timekeeper, to Clerk.

Andrés DeGracia, from Laborer, to Helper Refrigeration and Air Conditioning Mechanic.

HEALTH BUREAU

Sammel Moore, from Housekeeping Aid, to Nursing Assistant, Gorgas Hospital.

Coco Solo Hospital

Dr. Edwin T. Ricketts, Medical Officer, from Gorgas Hospital.

James E. Agee, from Pharmacist, to Supervisory Pharmacist.

Nellie S. Hickman, from Head Dietitian, to Assistant Chief Dietitian.

Fred L. Workman, from Funeral Director, to Hospital Housekeeping Officer.

Albert A. Smith, from Timekeeper, to Clerk.

Roger J. Games, Clerk-Typist, from Gorgas Hospital.

MARINE BUREAU

Navigation Division

Robert D. Valentine, from Probationary Pilot, to Pilot.

José D. Regalado, from Laborer, Community Services Division, to Deckhand.

Victor Ramos, Heavy Laborer, from Terminals Division.

Industrial Division

Steven E. Garnett, from Clerk, Terminals Division, to Apprentice Machinist.

Cecil Morgan, from Fire Fighter Driver Operator, Fire Division, to Apprentice Boilermaker.

Entimo Amaya, from Dock Worker, Terminals Division, to Helper Machinist.

Arnold T. Alphonse, Robert M. Jolliffe, Jr., from Utility Worker, Supply Division, to Laborer Cleaner.

Locks Division

William L. Bennett, from Apprentice Electrician, Electrical Division, to Electrician.

James J. Boughner, James W. Morris, Apprentice Electrician, from Electrical Division.

June A. Stevenson, Clerk-Typist, from Employment and Utilization Division.

John J. Christopher, Roy Feurtado, Walter Hyde, from Heavy Laborer, to Helper Lock Operator.

Gregorio Borbuá, Nicomedes Murillo, from Railroad Trackman, Railroad Division, to Heavy Laborer.

Juan B. Castro, Heavy Laborer, from Maintenance Division.

Nathan Barns, from Laborer, Supply Division, to Heavy Laborer.

OFFICE OF THE COMPTROLLER

Accounting Division

Florence M. Pierson, from Supervisory Accounting Clerk, to Supervisory Accounting Technician.

Anne A. Lawson, Frances P. Smith, from Accounting Clerk, to Accounting Technician.

Gilbert M. Smith, from Graduate Intern, Business Administration, Supply Division, to Accountant.

Paula C. Decker, Clerk-Stenographer, from Safety Branch.

María E. de Yeaza, from Clerk-Typist, Division of Schools, to Time, Leave, and Payroll Clerk.

James A. Dowlin, from Clerk-Typist, Supply Division, to Office Machine Operator.

Lloyd B. Joseph, from Timekeeper, Motor Transportation Division, to Office Machine Operator.

Manuel S. Rivera, from Electrical Accounting Machine Operator, Employment and Utilization Division, to Office Machine Operator.

Manuel S. Rivera, from Electrical Accounting Machine Operator, Employment and Utilization Division, to Office Machine Operator.

Manuel S. Rivera, from Electrical Accounting Machine Operator, Employment and Utilization Division, to Office Machine Operator.

SUPPLY AND COMMUNITY SERVICE

Harry C. Egolf, from Superintendent, Housing Branch, to Chief, Community Services Division.

Wendell G. Cotton, from Supervisory Housing Manager, to Superintendent, Housing Branch.

Clarence W. Kilbey, from Chief, Administrative Section, Service Center Branch, to Service Center Assistant Superintendent.

(See p. 22)

(Continued from p. 21)

Phyllis D. Powers, from Service Center Supervisor, to Accounting Assistant.
 Marcella E. Thompson, from Clerk-Typist, to Clerk, Catering.
 George Thorbourne, from Cash Clerk, to Guest House Assistant.
 Douglas C. Best, from Sign Painter, to General Illustrator.
 Alfred A. Cox, Karl L. Harris, Jr., Roberto O. Martin, Undine M. Reid, Josefina H. Thorne, from Clerk, to Guest House Clerk.
 Lorhland Rall, from Telephone Operator, to Guest House Clerk.
 Joseph Richards, from Leader Laborer, to Leader High Lift Truck Operator.
 David S. Beckett, from Clerk, to Service Center Supervisor.
 Philip Walker, from Bookkeeping Machine Operator, Accounting Division, to Clerk.
 John Hull, from Clerk, to Accounting Clerk.
 Lloyd S. Smith, from Accounting Clerk, Terminals Division, to Clerk.
 Harold F. Brown, from Truck Driver, to Motor Vehicle Operator.
 Clifton M. Vasselle, from Heavy Laborer, to Maintenance Carpenter.
 Marcos A. Argüelles, Victor A. Marks, Luis Pleitez, Justo Vega, from Warehouseman, to Guard.
 Selwyn L. Moody, Gilbert Thompson, from Helper Rigger, to Crane Hookman.
 Honorio Magan, Wilfred A. Richards, Pedro Sotomayor, from Heavy Laborer, to Crane Hookman.
 George A. Jackman, Ernest A. Jones, Hubert S. Robinson, from Warehouseman, to Stockman.
 George W. Wallace, from Utility Worker, to Storekeeping Clerk.
 Eugene A. Johnson, from File Clerk, to Stock Control Clerk.
 Winston A. White, from Waiter, to Waiter Captain.
 Wilmoth L. Davis, Urbano Vásquez, from Kitchen Attendant, to Cook.
 Allensword Williams, from Heavy Laborer, to Cook.
 Gladys U. Weekes, from Counter Attendant, to Pantryman.
 Joaquín Cedeño, Ulrie S. Moore, from Heavy Laborer, to Warehouseman.
 Alfonso C. Bennett, from Toolroom Attendant, Locks Division, to Warehouseman.
 Joseph Gall, Stanley B. Hunte, from Heavy Laborer, to General Helper.
 Nicolás Aguilar, Lewis W. Armstrong, Henry J. Ford, Vincent C. Forde, George M. Weeks, from Laborer, to Heavy Laborer.
 Ricardo Henry, Teófilo Gómez, from Laborer Cleaner, to Heavy Laborer.
 Norman J. Clarke, from Package Boy, to Heavy Laborer.
 Fernando A. Ponce, from Dock Worker, Terminals Division, to Heavy Laborer.
 Daniel Guerrero, from Laborer Cleaner, to Laborer.
 Carl R. Cumberbatch, from Waiter, to Laborer.
 Julian E. Brooks, John J. Drakes, from Package Boy, to Laborer Cleaner.
 Edith L. Simpson, from Counter Attendant, to Sales Clerk.
 Gabriel V. Adoniam, Jr., from Laborer, to Produce Worker.
 Artemio E. Pacheco, from Laborer, to Grounds Maintenance Equipment Operator.
 Gregorio Márquez, José D. Ruiloba, from Laborer, to Garbage Collector.
 Candelario Morales, José P. Pájaro, from Laborer, to Grounds Equipment Operator.

Geraldine W. Allen, Constance S. Cadienhead, Ethlin J. Alston, from Utility Worker, to Counter Attendant.
 Lloyd G. Wilson, from Bus Boy, to Waiter.
 Lester J. Leonard, Lester Payne, from Waiter, to Utility Worker.
 Hepburn S. Barber, Hector J. Markland, Earl R. Samuels, from Package Boy, to Utility Worker.
 Ashton A. Brown, Jr., from Laborer Cleauer, to Utility Worker.
 Maud E. Bethune, from Laundry Worker, to Laundry Checker.
 Iva L. Benton, from Doorman, to Ticket Seller.

TRANSPORTATION AND TERMINALS
Terminals Division

George W. Bae, from Marine Superintendent, Water Transportation Division, to General Foreman Ship Cargo Operations.
 William D. McArthur, from Liquid Fuels Gauger, to Leader Liquid Fuels Wharfman.
 Aureliano Quiroz, from Winchman, to Leader Ship Cargo Operations.
 Everett E. Dudley, Accounting Clerk, from Industrial Division.
 Carl DaCosta, Timekeeper, from Industrial Division.
 Cecil J. Dutton, from Timekeeper, Locks Division, to Clerk.
 Rafael A. Vaughn, from Oiler to Fireman.
 Ismael Meléndez, from Dock Worker, to Helper Liquid Fuels Wharfman.
 Allan Toussaint, from Helper Liquid Fuels Wharfman, to Oiler.
 Alejandro Cevillano, Ulrie G. Easey, from Dock Worker, to Heavy Laborer.
 Selwyn O. Brown, Hagar E. Salmon, from Heavy Laborer, Locks Division, to Dock Worker.
 Victorio Bello, from Heavy Laborer, Maintenance Division, to Dock Worker.
 Carlos E. James, from Dock Worker, to Clerk Checker.
 Pedro A. Magaña, Joshua Samuels, Sylvester Tracey, Lorenzo Alvarado, Pastor Solis, from Dock Worker, to Ship Worker.

Motor Transportation Division

Fermín L. Ibáñez, from Clerk, Engineering Division, to Timekeeper.
 Leo M. Collymore, from Truck Driver, to Motor Vehicle Dispatcher.
 Arthur E. Richards, Hermon A. Williams, from Truck Driver, to Guard.
 Harry J. Ailant, Gustave A. Moller, Bradford Doyle, from Truck Driver to Heavy Trailer Truck Driver.

Granville R. Moore, from Chauffeur, to Automotive Mechanic.
 Morrell W. Clarke, Medad U. Evans, Manuel Edwards, Reginald W. Graham, George G. Mandeville, Lionel Thorne, Stephen N. McClean, Sidney A. Tomlinson, from Truck Driver, to School Bus Driver.
 Cephas Daniels, from Chauffeur, to School Bus Driver.
 Wilfred Daily, Ishmail O. Walker, from Chauffeur, to Heavy Truck Driver.
 Ernest F. Sandford, from Utility Worker, Supply Division, to Helper Automotive Machinist.
 Raúl H. Pinedo, Arthur N. Clarke, Ezra J. McClair, Samuel F. Jones, Rupert A. Vaughn, George McKenzie, from Truck Driver, to Heavy Truck Driver.

OTHER PROMOTIONS

PROMOTIONS which did not involve changes of title follow:
 William G. Dolan, Chief, Fire Division.
 Robert G. Laatz, Maintenance Engineer, Maintenance Division.
 Melvin E. Walker, Service Center Manager, Supply Division.
 Wilfred R. Waldrip, Commissary Store Manager, Supply Division.
 Robert L. Rankin, Marine Traffic Controller, Navigation Division.
 George R. Cook, Construction Inspector, Contract and Inspection Division.
 Frances M. Brandl, Dolores Espinosa, Staff Nurse, Gorgas Hospital.
 Patna L. Brown, Retail Store Supervisor, Supply Division.
 José A. Muñoz, Cook, Supply Division.
 Vivian Blandford, John B. Monrose, Alfred S. Walker, Motor Vehicle Dispatcher, Motor Transportation Division.
 William Dunn, Edmond C. Elliot, Clerk-Typist, Dredging Division.
 Victoria Campbell, Clerk-Typist, Supply Division.
 Clyde M. Francis, Storekeeping Clerk, Supply Division.
 Clyford K. Foster, Hilton D. Perkins, Clerk, Supply Division.
 Agnes C. Meade, Clerk, Coco Solo Hospital.
 Abrie H. Fischle, Clerk, Corozal Hospital.
 Benjamin Mojica, Baker, Supply Division.
 Kenneth O. Sealey, Sylvester L. Searles, Telephone Operator, Supply Division.
 Juan Guehara, Luis E. Hurtado, Utility Worker, Supply Division.
 Oscar Edmund, Grounds Maintenance Equipment Operator, Community Services Division.

Be Careful - Not a Statistic

ACCIDENTS

FOR
THIS MONTH
 AND
THIS YEAR

JULY

ALL UNITS
YEAR TO DATE

	FIRST AID CASES		DISABLING INJURIES		DAYS LOST	
	'61	'60	'61	'60	'61	'60
ALL UNITS	199	262	7	12	110	225
YEAR TO DATE	1778(397)	1769	84(4)	73	7740(58)	13733

() Locks Overhaul injuries included in total.

CANAL HISTORY

50 Years Ago

SPECIFICATIONS and plans for the locomotives to tow ships through the locks were sent to Washington 50 years ago this month. Bids were to be sought on the 40 locomotives required for the locks at Gatun, Pedro Miguel, and Miraflores. The system of towing outlined in the specifications was developed by Edward Schildhauer of the Canal engineering staff. Two bids were to be asked, one for a locomotive to be used for test purposes and the other for the remaining 39, if the test machine was satisfactory.

About 66 percent of the concrete for all the locks was in place. More than 80 percent of the concrete for the system of locks at Gatun had been laid, concrete work at Pedro Miguel was 87 percent complete, and 31 percent of the concrete for Miraflores Locks was in place.

In order to increase the water supply for the city of Panama, it was decided that a new 20-inch water main should be laid from the Rio Grande

Reservoir to replace the 16-inch main then in use.

Footnote to the developing awareness of hygienic practices: Paper drinking cups were placed in the coaches of the Panama Railroad and the common drinking cup previously used was abolished.

25 Years Ago

THE TIES of friendship between the United States and Panama have been strengthened and a spirit of sincere cordiality and mutual understanding exists between the two countries, Panama President Harmodio Arias told the Panama National Assembly.

In a message reporting that the 1936 treaty between the United States and Panama would be submitted to the National Assembly, President Arias lauded the Good Neighbor Policy of President Franklin D. Roosevelt and expressed satisfaction with the economic situation of the Republic.

In the Canal Zone, it was announced

that a minimum of \$500,000 would be spent during fiscal year 1936 and nearly \$2 million in fiscal year 1937 on new construction in the Zone. Plans included building a new post office in Balboa, a new Balboa Magistrate Court, moving and rehabilitation of the Ancon movie house, construction of two new buildings in Cristobal, and a new Ancon Police Station.

A petition asking the President of the United States and Congress for enactment of a law which would provide Panama Canal construction employees with a higher rate of retirement pay was circulated in the Canal Zone.

10 Years Ago

A REPLACEMENT housing program for the Canal Zone which would cost \$11 million was announced by Col. George K. Withers, Engineering and Construction Bureau Director. The work would include construction of 484 apartments in Silver City (since renamed Rainbow City), Paraiso, Diablo Heights, Balboa, Ancon, Margarita, and Gatun, he said.

Pay raises were in the books for all classified employees of the Federal Government in the Canal Zone as the House of Representatives passed a bill authorizing a \$400 per year boost in salaries. Raises also were expected for policemen, firemen, teachers, and postal employees.

More than \$1,500,000 was spent in Panama by the Canal organization during fiscal year 1951, according to an official report. This was in addition to salaries paid during the year to non-U.S.-citizen employees.

One Year Ago

THE FLAG of the Republic of Panama, together with the United States flag, was raised at Shaler Triangle in the Canal Zone 1 year ago this month. The ceremony was attended by Governor Carter and high officials of both Panama and the United States, including U.S. Ambassador to Panama Joseph S. Farland.

Shaler Triangle, where the two flags have flown side by side every day since September 21, is located a short distance from the new 4-lane highway which is being constructed as an extension of the approach to the bridge over the Canal at Balboa.

RETIREMENTS

RETIREMENT certificates were presented at the end of August to the employees listed below, with their birthplaces, positions, years of Canal service and future residence.

Gertrudes Aguilar, Panama; Cattle Attendant, Mindi Dairy; 13 years, 3 months, 25 days; Panama.

Fitzherbert Bolden, Barbados; Fork Lift Operator, Terminals Division; 45 years, 4 months, 16 days; Panama.

Valentin César, Philippine Islands; Deck Hand, Navigation Division; 8 years, 11 months, 19 days; Panama.

Seymour S. Clarke, Barbados; Truck Driver, Motor Transportation Division; 38 years, 7 months, 17 days; Panama.

Manuel Cortés, Costa Rica; Upholsterer, Motor Transportation Division; 41 years, 4 months, 29 days; Panama.

Edward A. Dias, Jamaica; Deck Hand, Navigation Division; 36 years, 9 months, 2 days; Panama.

William O. Felton, Indiana; Auto Repair Machinist, Motor Transportation Division; 18 years, 10 days; Indiana.

Eugene Ferdinand, Virgin Islands; Chief Checker, Haiti Office; 13 years, 2 months, 16 days; Haiti.

Noel E. Gibson, Illinois; Shop Teacher, Division of Schools; 26 years, 4 months, 15 days; Florida.

David W. Hawthorne, Canada; Super-

visory Coffee Specialist, Supply Division; 23 years, 23 days; Tennessee.

Jose G. Hugues, Panama; Illustrator, Engineering Division; 18 years, 1 month, 14 days; Panama.

Ezra A. Josephs, Jamaica; Fork Lift Operator, Terminals Division; 26 years, 11 months, 20 days; Panama.

William E. Kirkland, Scotland; Diesel Engineer, Electrical Division; 20 years, 10 months, 12 days; Panama, for the present.

Levi A. McLean, Jamaica; Public Works Section, Maintenance Division; 26 years, 11 months, 13 days; Panama.

Andrés Ortiz, Panama; Helper Painter, Maintenance Division; 26 years, 11 months, 13 days; Panama.

Willis N. Pence, North Carolina; Electrician, Electrical Division; 17 years, 8 months, 14 days; Florida.

Joseph M. Raylson, New York; Supervising Purchasing Agent, New York Office; 29 years, 6 months, 14 days; New York.

Ephama Rojas, Panama; Helper Mechanical, Pacific Locks; 37 years; Panama.

Capt. Frank J. Russell, New York; Pilot, Navigation Division; 22 years, 6 days; New Orleans.

Mohan Singh, India; Dock Employee, Terminals Division; 31 years, 2 months, 22 days; Panama.

Josiah E. Wilkie, Jamaica; Dock Employee, Terminals Division; 34 years, 10 months, 2 days; Panama.

SHIPPING



Midsection of ship is towed through locks.

TRANSITS BY OCEAN-GOING VESSELS IN JULY

	1960	1961
Commercial	941	931
U.S. Government	17	11
Total	958	942

TOLLS*

Commercial	\$4,683,578	\$4,777,367
U.S. Government	127,137	55,133
Total	\$4,810,715	\$4,832,500

CARGO (long tons)

Commercial	5,583,670	5,626,160
U.S. Government	134,517	71,319
Total	5,718,187	5,697,479

*Includes tolls on all vessels, ocean-going and small

Windjammer Transits Canal

WITH A CREW of working guests aboard, the windjammer *Yankee* passed through the Canal from Cristobal to Balboa during August, en route to the South Seas on an 18-month round-the-world cruise.

The *Yankee*, which is a sailing ship in the old tradition, is a veteran of four previous cruises around the world. She previously has visited Canal ports on several occasions, under command of the explorer, Irving Johnson.

The vessel now is owned by Capt. Mike Burke, whose Windjammer Cruises, Inc., operates from Miami, Fla. Captain Burke has the largest fleet of sailing ships in U.S. waters, including the *Polynesia* and the *Caribee*, which make 10-day cruises through the Caribbean area.

On her recent trip through the Canal, the *Yankee's* passengers included Mr. and Mrs. Barney LeVeau, both graduates of the University of Colorado, who are making a honeymoon cruise on the vessel. The young newlyweds plan to make a study of the cultures of primitive peoples during the trip. They are part of the working crew and, like other guests, will stand watch and perform other duties.

The famous windjammer will visit Tahiti, the Polynesian Islands, the Solomons, New Guinea, Bali, Singapore, Zanzibar, and then cross the lower Atlantic to Rio de Janeiro. The vessel is due to return to Miami in February 1963.

Liner "United States" Coming

THE GIANT trans-Atlantic liner *United States* will call at Cristobal twice during February as part of a series of Caribbean cruises planned for the vessel this winter. The liner, which is 990 feet long and 101.7 feet wide, will be one of the largest commercial liners ever to dock at a Canal port. She will not transit.

Panama Agencies, agent for United States Lines on the Isthmus, has announced that the vessel will dock in Cristobal on both February 10 and February 26. She will remain in port from 7 a.m. the day she arrives until 5 a.m. the following day.

This will be the ship's first visit to the Canal and also will be the first time that she has left the North Atlantic trade to go on a winter Caribbean cruise. She will be carrying approximately 850 passengers on each visit.

New Bulk Carrier

ONE OF the newest Panama Canal customers is the Norwegian bulk carrier *Orm Jarl*, which made her first transit through the waterway about 2 months ago, carrying a cargo of coal from Norfolk, Va., to Japan.

The *Orm Jarl* is the first of five similar ships being built in Sweden for the Det Nordenfjeldske DS of Trondheim, Norway. The vessels are equipped to carry grain or oil in the upper water ballast tanks. The *Orm Jarl* is equipped to carry grain in her tanks.

To facilitate the loading and unloading of the grain, each of the side tanks is provided with three small oval hatches. The ship is 25,100 deadweight tons. She is 577 feet long and 75 feet wide. Agent here is C. Fernie & Co.

New Ship Master

THE ITALIAN LINE's *Marco Polo*, which runs between Italy and South American west coast ports on a monthly schedule, made her July trip under command of a new master. He is Capt. Aurelio Assereto, who was transferred from another Italian Line vessel to the *Marco Polo* to succeed Capt. Oscar Ribari, who recently was appointed master of the 27,000-ton passenger ship *Augustus*, which plies between New York and Italy.

Unusual Customer

A RECENT Canal customer, and one of the most unusual in some time, was the midsection of a cargo ship which was being towed from Japan to Baltimore, where it is to be fitted on to the bow and stern of the cargo vessel *David D. Irwin*.

Three Panama Canal tugs were used to tow the 415-foot section from Balboa to the Cristobal breakwater, where she again was taken in tow by the Japanese sea-going tug *Daisho Maru No. 1*, which brought it here from Japan via Hawaii. Norton Lilly acted as agent at the Canal.

UNIVERSITY OF FLORIDA



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LATIN AMERICA

