THE PANAMA CANAL REVIEW

IN THIS ISSUE

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ROBERT J. FLEMING, JR., Governor-President
W. P. LEBER, Lieutenant Governor
FRANK A. BALDWIN
Acting Panama Canal Information Officer

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JOSEPH CONNOR, Acting Press Officer
Publications Editors
ROBERT D. KERR and JULIO E. BRICEÑO
Editorial Assistants
EUNICE RICHARD, TOBI BITTEL, and TOMAS A. CUPAS

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80th Anniversary

A Proclamation

WHEREAS January 16, 1963, marks the eightieth anniversary of the signing of the Civil Service Act of 1883; and

WHEREAS the Civil Service Act has stood the tests of time in providing the excellence in civil service which is required for successful execution of Federal programs and policies which have deep significance to all Americans and all citizens of the free world; and

WHEREAS the Act of 1883 has been strengthened by subsequent laws, interpretations, and executive actions to create an even more effective and highly qualified Federal work force; and

WHEREAS the life of every American is touched directly or indirectly every day by the services which Federal public servants perform; and

WHEREAS public esteem for career civil servants is a prerequisite for attracting well-qualified citizens to compete for Government service, a fact which requires greater public awareness of the value of the merit system, the achievements of Government workers, and the career opportunities offered in Federal service:

NOW, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, do hereby call upon the people of the United States to participate in the observance of the eightieth anniversary of the Civil Service Act during the month of January 1963.

I also call upon the heads of Federal departments and agencies, as well as leaders of industry and labor and members of all public-spirited groups, to arrange appropriate ceremonies in honor of the public services performed by our able and devoted Federal civil servants throughout the country.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this twenty-eighth day of September in the year of our Lord nineteen hundred and [SEAL] sixty-two, and of the Independence of the United States of America the one hundred and eighty-seventh.

John F. Kennedy

By the President:
George W. Ball,
Acting Secretary of State.

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NOT BEAUTY ALONE

PICTURESQUE beauty of the Panama City waterfront, to many, obscures the practicality of the scene. On our front cover, aground at low tide and waiting for the next high tide to put them afloat again, are three coastal trade craft in the foreground.

Silhouetted against the horizon are a few of the scores of shrimp boats which help make Panama a prime supply source of these succulent edibles.

Shrimp exports from Panama in 1961 amounted to more than 9½ million pounds, valued at more than $5.8 million. Peak export year, dollarwise, was 1957, when the total was near $6.2 million.

Panama's shrimping industry employs more than 2,200 persons, about 800 aboard more than 160 fishing craft and 1,400 in plants where the shrimp are beheaded, cleaned, and packed. Forty-two different concerns operate 3 or more vessels and 44 operate 1 or 2.

An Invitation

A CORDIAL INVITATION has been extended to Canal Zone Gov. Robert J. Fleming, Jr., and Mrs. Fleming, and all Canal Zone residents, to attend the agricultural and industrial Fair of San Sebastian in the picturesque town of Ocu January 19-21.

A contest on use of draft animals in agriculture will be the climax of the program on Sunday, January 20.

OCEANS LEVEL? ... *Not Along Isthmus Coasts*

NO, THE ATLANTIC and Pacific oceans are NOT level with each other.

Not along the coasts of the Isthmus.

In fact, it's possible that the level of the Pacific could be nearly 12 feet above the level of the Atlantic at the same time.

The difference in level averages only 9.2 inches, however, records of Panama Canal Chief Hydrographer W. H. Esslinger show.

Many Isthmians find it important to keep track of the tides. Bathers want to know whether they'll find good swimming or mudflats at a certain point. Fishermen say they affect the catch.

Where marine ways are not available for hauling out small craft, the practice is to beach them at high tide, then work fast to slap on a coat of paint or make repairs before they're seaborne again on the next high tide.

Balboa has a regular tide with two highs and two lows every lunar day, with an average range from high to low tide of 12.758 feet and a maximum range of 22.7 feet.

Cristobal has an irregular tide varying from two highs and two lows to one high and one low each lunar day—with all possible intermediate variations. But the average range from high to low tide is only .858 feet and the maximum range is 3.05 feet.

Why big tides on the Pacific and small tides on the Atlantic?

The two entrances to the Panama Canal, by air, are only 40 miles apart. And aren't the tides caused by forces of the sun and moon?

Here are the reasons—oversimplified—as given by Hydrographer T. C. Henter:

A look at tides in general is needed to understand their local peculiarities.

At times of new and full moon, tidal forces of the moon and sun pull the seas in the same direction. At first and last quarters, they are approximately at right angles to each other. When moon and sun unite their forces, the tidal range is large. When they are at right angles, the tidal range is small.

The mass of the sun is far greater than the mass of the moon. But the sun is many times farther from the earth than the moon. Hence its tidal effect is less than half that of the moon.

Relative movement of the earth, moon and sun, together with the daily rotation of the earth, cause two primary classes of tide-producing forces:

(1) Those with a period of about half a day, called semi-daily forces;

(2) Those having a period of a day, called daily forces. The semi-daily forces are the larger, and, consequently, at most places there are two high and two low waters each day.

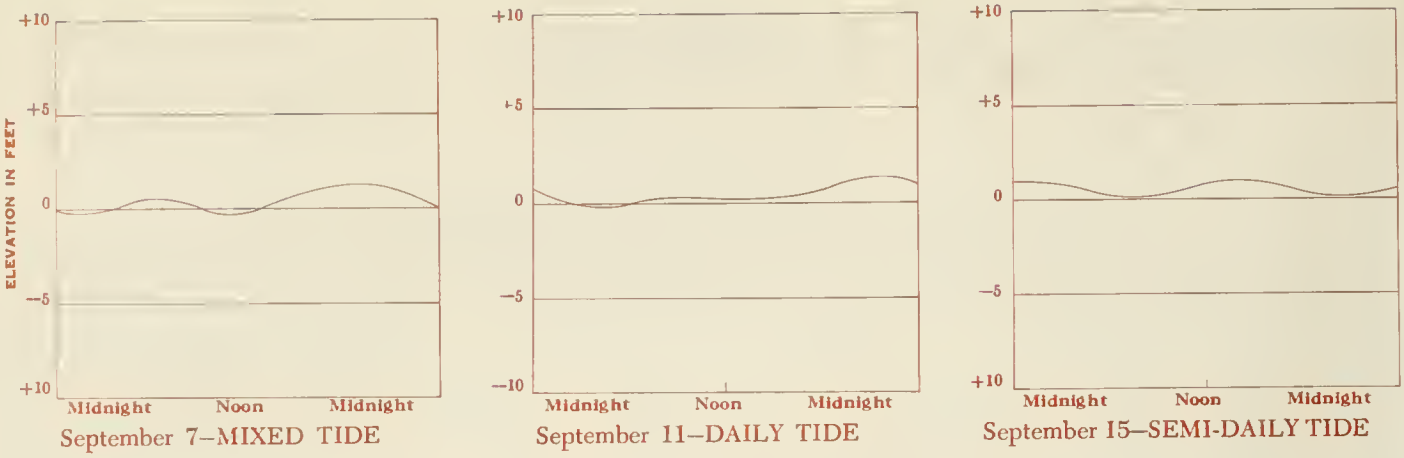
But rise and fall of the actual tide at any locality, and the times of high and low water, depend on conformation of the ocean shore and depth of the water, as well as on the tide-producing forces.

The rise and fall of the actual tide is divided into three types of tides known as semi-daily, daily, and mixed. The semi-daily has two high and two low waters each day, with little difference

(*See p. 4*)

When the tide goes out along Panama City's La Marina, drydocks aren't needed to get underneath even sizeable craft. They can be brought close inshore at high tide and there's easy access at low tide.

Lloyd A. Blenman checks tide gage located in shed at top of ramp to the Taboga launch landing at Pier 18, Balboa. Note how loops on gage match loops shown in Fig. 2 on next page.



CRISTOBAL TIDES, ATLANTIC ENTRANCE

Fig. 1

in morning and afternoon tides. The daily type has but one high and one low water in a day and the mixed type has two high and two low waters in the same period with considerable difference between morning and afternoon tides.

The mixed tide results from a combination of daily and semi-daily tides.

At Cristobal, the daily tide-producing force is predominant. The afternoon tide is considerably larger than the morning tide, as shown in Figure 1.

The daily tide-producing force has little effect on the actual rise and fall of tides at Balboa. As shown in Figure 2, there is very little difference in morning and afternoon tides. Their rhythm is characteristic of the semi-daily tidal forces.

Here a look at the "stationary wave theory" of the tide is in order.

In a rectangular tank of water, a wave may be started by raising and then immediately lowering one end of the tank. This wave will not be in the form of an ordinary wave with crest and trough. Instead, it is an oscillation, or apparent swashing back and forth (but with little water movement except up and down). This type of wave is known as a stationary wave.

The stationary wave theory is that the dominant tides in the seven seas are stationary wave oscillations set up by the tidal forces of the sun and moon in parts of the oceans having periods of oscillations approximately the same as the period of the tide-producing forces.

According to H. A. Marmer, of the Coast and Geodetic Survey, a number

TIDES

MIXED—Combination of daily and semi-daily tides.

SPRING—When forces of sun and moon act in same direction (large ranges).

DAILY—One high and one low water per day.

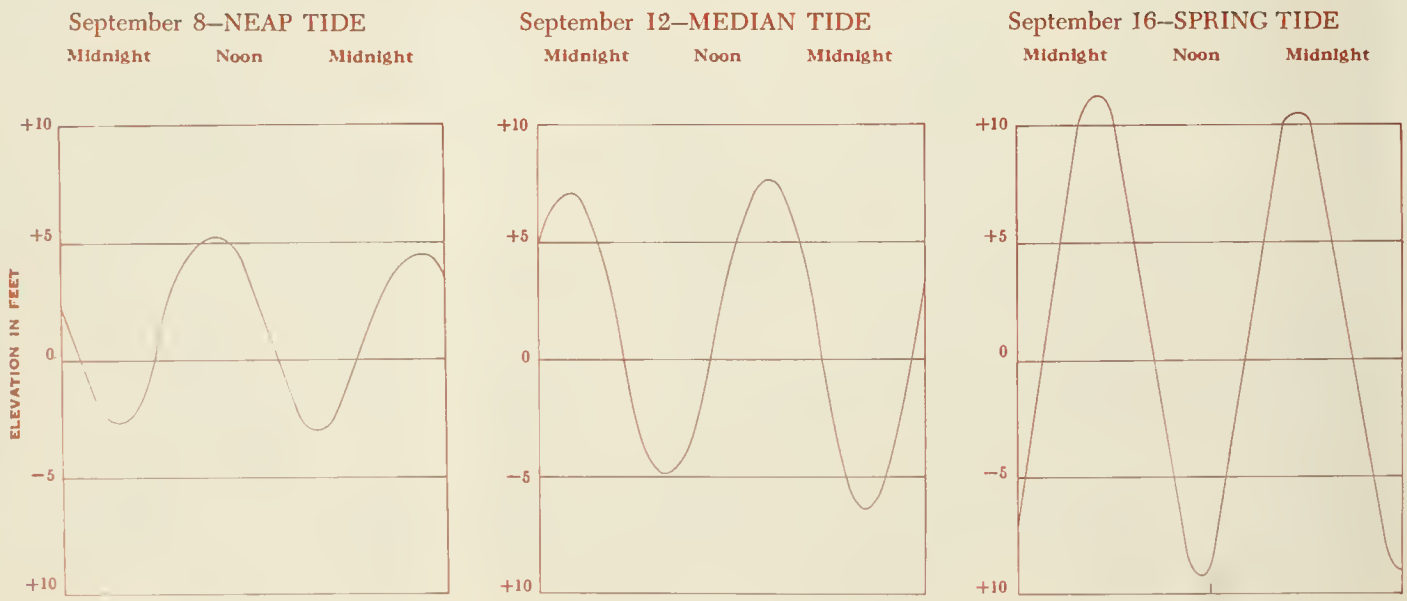
SEMI-DAILY—Usual two high and two low waters each day.

NEAP—Small range—when forces of sun and moon act in right angle directions.

MEDIAN—Mean between spring and neap tides.

BALBOA TIDES, PACIFIC ENTRANCE

Fig. 2



of puzzling tidal features can be explained by the stationary wave theory.

At Panama, the Atlantic end of the Canal opens into the Caribbean Sea, which is cut off from the open Atlantic by the girdle of Antillean islands that mark the limits of the Caribbean. Too, the Gulf of Mexico and Caribbean are of such length and depth as to have a period of oscillation of approximately 24 hours. Hence, in this area the daily tide-producing force is predominant.

The basin comprising the Gulf and Caribbean is much smaller and much shallower than the basins of the Atlantic and Pacific oceans. Therefore the actual tides are smaller.

The Pacific side of the Canal is situated at the end of an oscillating system of semi-daily tides and at a considerable distance from the center of the oscillation. Thus the range of the semi-daily tide at Balboa is much greater than the daily tide at Cristobal.

Despite the possible 12-foot difference in level of the oceans at the same time, there is no prospect that one would drain into the other if the Canal were a sea-level waterway.

In fact, maximum tidal flow current even at the greatest difference in levels would be only about 4.5 knots, it is estimated. Enough to cause transiting problems for ships in parts of the channel, but not enough to reduce the water supply of either ocean.

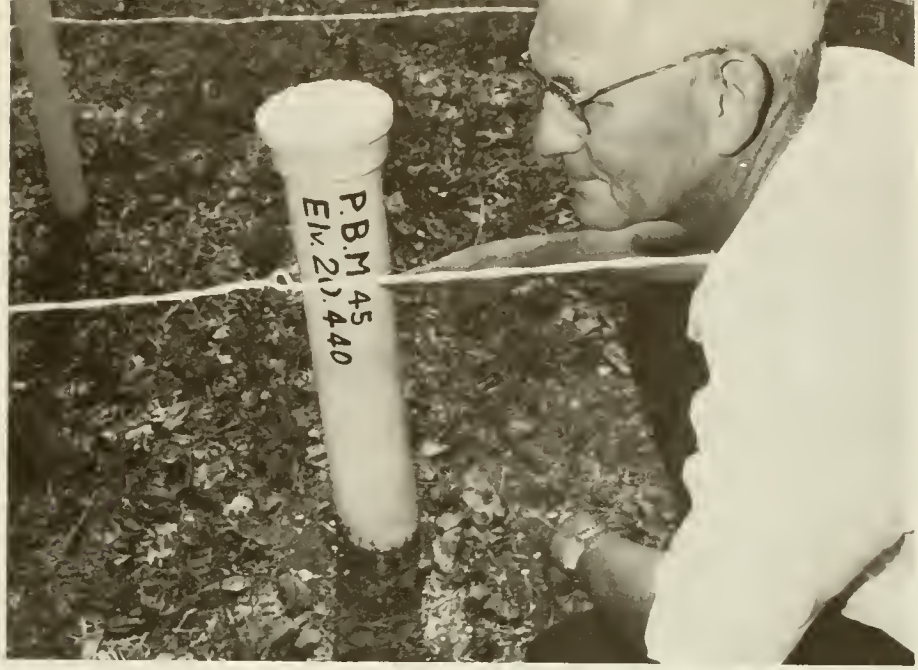
There are two main reasons for this. One is the restrictive effect of channel entrances and channel capacity itself. The other is that there are tide "reversals"—particularly with non-standard tides on either side—as soon as highs or lows are reached. Thus tidal flow volume and direction, or both, would be changing almost constantly if the Canal were a sea-level canal.

Levels of the oceans also vary from month to month due to effects of wind, ocean currents, and the cyclic variations of the heavenly bodies.

Normal dry season prevailing winds are north to northwest on the Pacific side and north to northeast on the Atlantic side. Wind effect on tides is influenced by land masses and the number of miles air flow has to "push" on open water surfaces.

To further complicate things—

There has been an apparent steady but slight rise in the levels of both oceans in the last several years. The "apparent" is stressed because there is still inconclusive debate in scientific circles as to whether the ocean levels are rising or the land masses shrinking slightly, or a combination of both.



Orlando L. Flye, Jr., supervisor of generation and transmission at the Balboa electric sub-station, takes a look at the bench mark near the sub-station.

Bench Marks Keep "Trim"

"PBM-45 IS 83 FEET from the west end of the Electrical Substation, Balboa. Elevation on pipe cap is 20.440 feet."

That is a sample description of a bench mark. The letters PBM stand for "Permanent Bench Mark," the number 45 is its serial number and the elevation is the height, in feet, above the Precise Level Datum.

There are more than 250 of these little-known elevation points distributed throughout the Canal Zone, according to the Survey Branch of the Engineering and Construction Bureau.

They are used in all types of construction and engineering studies; to lay out new townsites; to set house fundations at the same elevation; to assure adequate fall for sewer lines; to establish the elevation and grade points of new roads and railroad track and to check track elevation after reballasting or other work.

They are used to set pads for big pieces of machinery and to establish the elevation of bridge piers. The allowable tolerance on the top elevation of the Thatcher Ferry Bridge piers was only 1/64 of an inch—roughly the thickness of a photographic postal card.

The standard precise bench marks used in the Canal Zone are 18 by 18 by 6-inch concrete slabs with a copper or brass bolt set in the center forming the point used for elevation determinations. The slab is buried about 3 feet in the ground, with a 4-inch pipe centered above the bolt and projecting about 18 inches above the ground.

Topping the pipe is a cast-brass cap with a projection rising from the center. The difference in elevation between the top of the bolt and this projection is measured and the elevation determination for ordinary work is referred to this projection. For precise work the cap is removed and measurements are made from the bolt at the bottom of the pipe.

Other bench marks may be bolts or rivets in lock or spillway walls, culvert headwalls, abutments, or other "solid" structures. They may be found at the tops and bottoms of dams, along locks, roads and trails, and on bridges, and culverts.

The first bench marks in the Zone were established across the Isthmus by mid-1908 and all were checked in 1924-25 and 1938. Checks sometimes reveal earth slippages or settlement of concrete work. Some are removed for construction work, at which times others are established nearby.

Some have been lost, through removal of reference points from which they could have been located. In recent years, however, officials in charge of roadwork and buildings replacement have regularly notified the Surveys Branch of removal of signs or structure changes so that the bench marks can be cared for properly.

Some of the bench marks are replacements for ones established during French construction days, with which the original Panama Canal bench marks were tied in to establish correct elevations above sea level clear across the Isthmus.

THE DRY SEASON

Pattern Shows Wide Variations

WHILE THERE'S a well-known and well-established pattern to the dry season, its beginning and ending aren't as uniform as faulty memories might lead some to believe.

Dry seasons have started as early as mid-November, in 1926, and as late as the first of February, in 1956. Average duration, on the basis of 49 years' records: 4½ months.

The season also has had exceptional ending dates, as early as before mid-April in 1919 and 1960, and as late as past mid-June in 1948. And then there were those dry years 1957 and 1959 when there were hardly any rainy seasons at all.

Exact starting and ending dates sometimes are far from solid, even though almost exact dates are indicated in the chart in the adjoining column. Hydrographic Office personnel concede that it's hard to pinpoint one day as starting or ending day, as there often is a 2- or 3-week period during which the dry season start is "hanging fire."

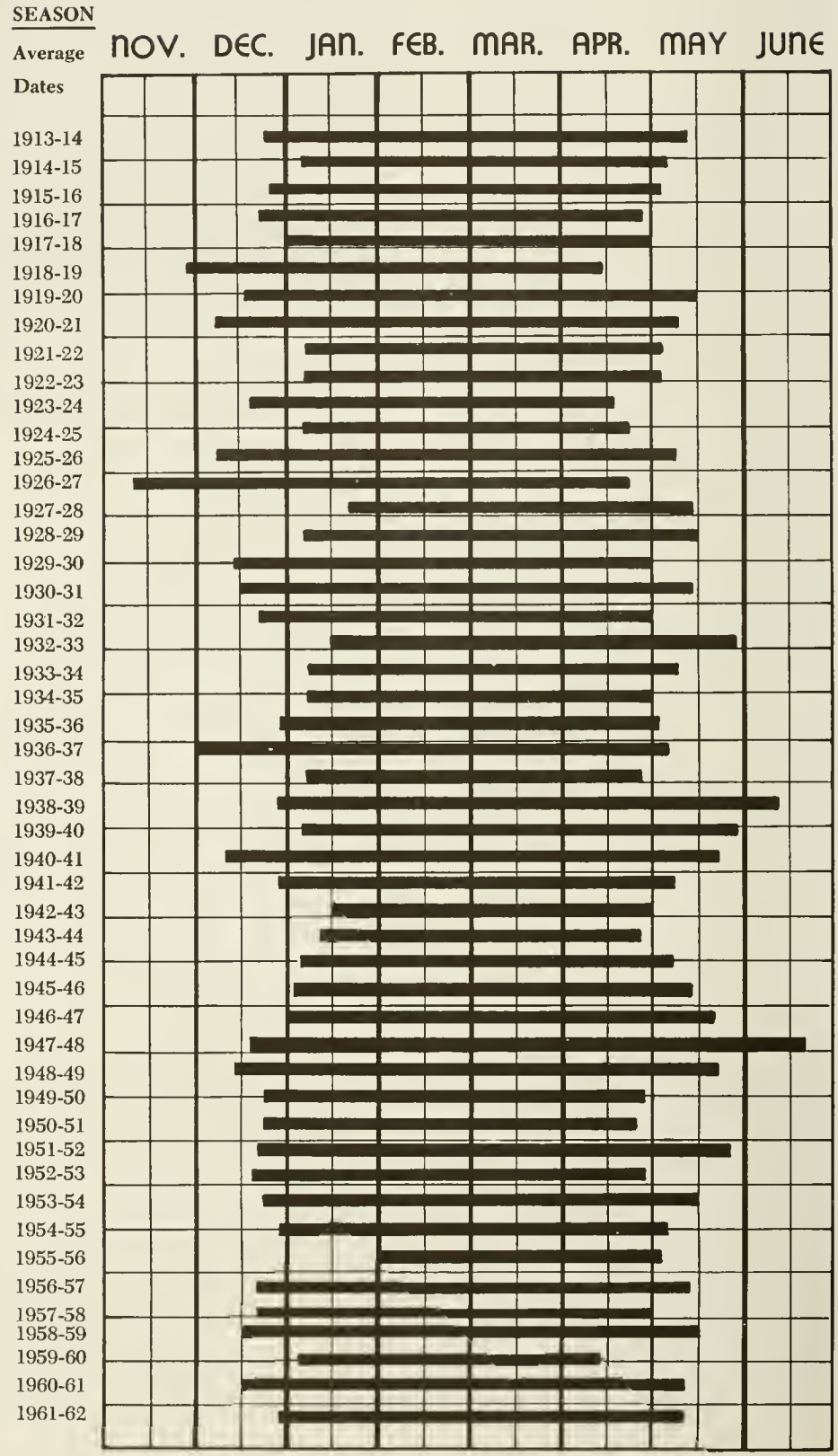
The formula for establishing the date is not too well defined. For many years the dates of the beginning and ending of the periods when Canal requirements exceeded the inflow of the Gatun Lake drainage basin were used, but that was discarded when the demand for lockage water and hydroelectric power increased to the point where it was no longer a suitable criterion.

Then there is the "10-day drouth" method, whereby if there is no 24-hour rain of 1 inch or more for 10 days at any place in the watershed the dry season is determined to have started at the beginning of the 10-day period. Actually, all elements are now considered: wind direction and velocity, both at surface and upper air levels; humidity variation; decline in watershed runoff; and, of course, the amount, and distribution of rainfall.

The purpose of establishing the date is to determine when diesel plants should be started and when the power of Gatun hydro station should be

(*See p. 7*)

Duration



New Information Officer

LONG AND widely-known on the Isthmus, Frank A. Baldwin this month succeeds Will Arey as Panama Canal Information Officer.

Mr. Baldwin, Protocol Officer since last March, has been with the Canal organization since 1941, when he took a position as an accountant. His father, Floyd H. Baldwin, who retired several years ago as General Auditor of the Panama Canal, earlier had served as an Assistant Comptroller of Panama.

Mr. Arey resigned after 9 years of service as Information Officer to take a U.S. Government position in Washington, D.C. He and his wife, Louise, and their sons, John and William, returned to the States last month. William, a senior in Balboa High School, will return to the Zone to complete his high school work. Mrs. Arey is the former Louise Turner Craft of Hartwell, Ga.

Mr. Baldwin was Chief of Plant Accounting in the Comptroller's Office prior to being named Protocol Officer. He attended grade schools in the Canal Zone and the Canal Zone Junior College. He is a graduate of Castle Heights Military Academy, Lebanon, Tenn., and the University of Kentucky, where he received his Bachelor of Science degree in Commerce.

Mr. Baldwin, 42, was born on the Isthmus. His wife is the former Laura García de Paredes of Panama. They have five children: four boys and a girl. Mr. Baldwin is a major in the Active Reserve, having enlisted as a private and been commissioned at the Infantry School, Fort Benning, Ga., during World War II.

Indicative of the high regard in which Mr. Arey was held were numerous expressions of regret and best wishes via both Spanish and English news media. One noted particularly his attitude toward the working press, appreciation of their problems and the "large reservoir of respect and esteem" he had earned among newspapermen in Panama.

In accepting Mr. Arey's resignation, Governor Fleming said he did so "with regret."

Mr. Arey served 2½ years as Public Affairs Officer with the U.S. Embassy in Bogota, Colombia, prior to coming to Panama as Public Affairs Officer of the U.S. Embassy in July 1951.

Born in Shelby, N.C., Mr. Arey is a graduate of the University of North Carolina. He was President and General Manager of the Cleveland Times Publishing Co., commercial printing plant and publisher of the *Cleveland Times* in Shelby, from 1941 to 1948, when he was appointed to the U.S. Foreign Service of the Department of State.

He had served as president of the Public Relations Society of Panama, vice president of the Panama Rotary Club and was a charter member of the Panama-North American Association. Other affiliations in both Panama and the Canal Zone included the Panama Carnival Junta, the Board of Management of the Balboa YMCA, Board of Directors of the Canal Zone Tuberculosis Association, and Christian Board of Education of Balboa Union Church.

As Information Officer, Mr. Baldwin takes charge of all Panama Canal public relations activities, including providing counsel in this field in conduct of the Canal's overall operations.

Frank A. Baldwin and family.

As directed by the Governor, the information officer prepares reports analyzing public opinion relating to the Canal and Zone. He directs issuance of news releases and informational materials. These include THE PANAMA CANAL REVIEW and the weekly SPILLWAY, published in both Spanish and English.

Operation of the Canal Zone Guide Service and the *Las Cruces* tour vessel also are under his direction.

The Areys, with son William, standing; son John, seated, foreground, and a disinterested dog, Pepe.

The Dry Season

(*Continued from p. 6*)

curtailed to conserve water for lockages.

In 1959-60, it appeared that the dry season already had started, late in December, but heavy rainfall New Year's Day, which even caused flood conditions in the Chagres River, made it necessary to change the starting date to January 3.

The mid-May ending date for the 1958-59 dry season verges on pure speculation, for both rainfall and runoff were below normal until October 1959 —the 20th consecutive month of such sub-par conditions. And this was in the wake of a long 1956-57 dry season, with the entire year 1957 one of the driest on record.

New Rig Helps On "Stemwinders"

Coming in off the Caribbean ahead of a rain squall, the Oswego Defender and another ship seemed small craft in the wide locks area and approaches.

But rain overtook the 745-foot tanker, above as its 30,486-gross-ton bulk and 101-foot beam were maneuvered into the chamber with little space to spare.

The huge tanker headed for Gatun Lake was lifted level with lock walls, fitting so snugly that ship and locks appeared as a single surface.

WHEN A CANAL PILOT says he's "got a stemwinder," he means he is going aboard one of those really big, broad, newer tankers and ore ships which has its bridge way aft.

Nobody along the waterfront recalls how the low-riding behemoths came to be called "stemwinders," but there's a suspicion the name was coined by some harassed pilot who found that when he was standing on the bridge he was too far astern to see how the bow was entering the Locks.

Some 5 or 6 years ago, when the first big stemwinders began looming up over the Atlantic and Pacific horizons, nobody had foreseen the problems of putting them through the Canal.

The waterway had handled many longer and some wider ships than, for example, the *Oswego Defender*. But the bigger vessels were passenger liners or warships provided with crow's-nests or other points of vantage from which assistant pilots could observe and give signals.

Not only can the senior pilots stationed on a stemwinder's bridge get only a general view of what is going on up front, an assistant pilot peering over its stumpy bow cannot see either side of its hull. And if he looks over the side, he might not be able to judge the exact course on which the ship is aimed.

The problem was solved by the design of twin conning-station or lookout-post rigs placed aft the bow on port and starboard. Usually they are constructed of short lengths of aluminum pipe screwed together. Each rig has a platform on which an assistant pilot may walk back and forth, plus a canvas cover to give him a little protection from rain or sun.

When the *Oswego Defender* showed up in Cristobal Harbor, her two "temporary bridges" already were in place. Marine Traffic Controllers were expecting her.

As the stemwinder had transited before, Canal officials knew she was 745 feet long, had a beam of 101 feet, and a gross of 30,486 tons.

The Liberian flag vessel belongs to Oswego Ore Carriers, Ltd., of Monrovia. Her local agents are Wilford & McKay, Inc. She is operated by Marine Transport Lines, Inc., and had put in at Las Piedras, Venezuela, for her load of 35,361 tons of crude and diesel oil. She carried a crew of 46, all Spaniards, including Capt. C. Moragues, who was making his first transit as master.

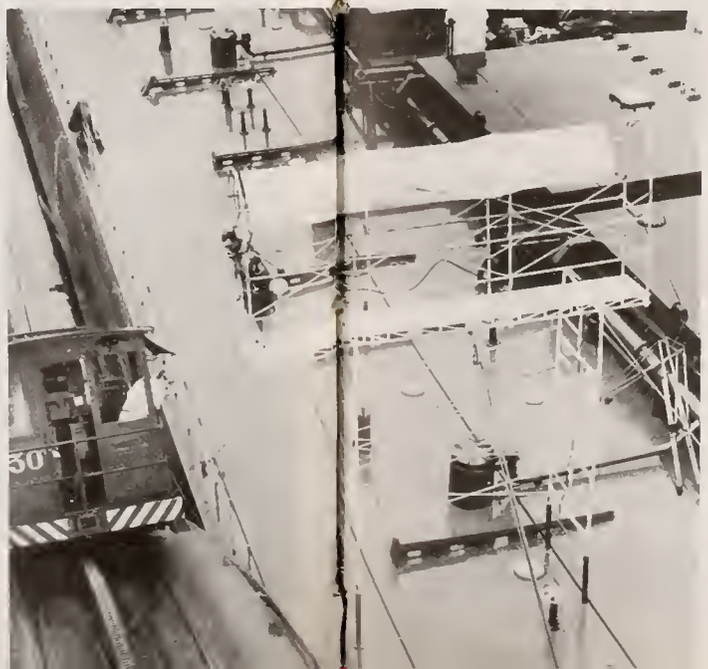
Five pilots were put aboard under command of Capt. Rudolph W. Rubelli, who was to retire and take his last ship through a few weeks later after 18 years on the reaches.

Rain started as she entered the first chamber. Two assistant pilots wrapped in raincoats paced the lookout-post rigs some waterfronters have been wont to call "those birdcages." At one point, because of the ship's broad beam, she fit so closely into the 110-foot space between lock walls that pilot and mule operator could have passed a copy of THE REVIEW across.

The *Oswego Defender* made a smooth transit in 9 hours 23 minutes. Only 17 days later she delivered her cargo in Yokohama, Japan. A fast trip, her agent said.

New stemwinders being built today are likely to come out of the shipyard equipped with deck pipe on which lookout-posts can be fitted. Their designers often ask Canal engineers to approve such details, including placement of chocks and bitts, before the craft leave the drawing boards.

This lookout-post rig may resemble the stat for a steward at racetrack, but it's a necessary adjunct for Canal pilots' u on many tankers and ore ships.



Presiding over the manifold details of lifting the Oswego Defender was Locks Engineer Richard J. Danielsen, Acting Locks Superintendent.

When she arrived in Cristobal, Watch Supervisor Marine Traffic Controller Martin Sawyer, right, assigned the tanker as No. 9 transit, notified Gatun she was laden with oil, would require 12 mules. . . . Control House Operator Joseph Elliott turned the handles that closed the gates, let in the water.

Alvin H. Hassock, right, clerk to the Operations Supervisor, and Clifford B. Bellamy, far right, teletype operator, keep track of everything on the locks, before and after it happens.

Navigation Division Has New Skipper

CAPT. ELI D. RING, USN, became Chief of the Navigation Division, Captain of the Port of Balboa and Chairman of the Board of Local Inspectors last month when Capt. Claude S. Farmer, USN, ended a 3-year tour of duty with the Panama Canal.

Capt. Ernest B. Rainier, previously senior assistant port captain, was appointed temporary Port Captain, Cristobal, and member of the Board of Local Inspectors.

Captain Farmer has returned to the States, reporting to the Commandant of the 6th Naval District, Charleston, S.C., for reassignment with the Navy.

Captain Ring came aboard as Port Captain, Cristobal, and member of the Board of Local Inspectors in January 1962. A Navy officer since 1941, he is a veteran of World War II service in both the Atlantic and Pacific Theaters of Operation. He came to the Zone from duty with the Atlantic fleet, where he had been Commander of Destroyer Division 162.

Capt. Claude S. Farmer

Captain Ring calls Noble, Ill., his home town and attended Illinois State Normal University. He joined the Navy in 1940, completed officer training the following year at Northwestern University, and after receiving his commission was stationed in the office of the Chief of Naval Operations, Washington, D.C. By his own definition, he likes to play "at" golf.

Captain Rainier, who was a Panama Canal pilot for 15 years, was promoted to Assistant Port Captain, Cristobal, in 1955.

A native of Mathews County, Va., he went to sea soon after graduation

Capt. Ernest B. Rainier

from high school and won advancement through the ranks to master in 12 years, all in service with the Colombian Steamship Co.

After that company was sold in 1938, he was employed by the Panama Line and sailed as second officer of the SS *Cristobal,* later becoming chief officer and master before entering Canal service and joining the PanCanal pilot force in August 1939. He holds the rank of commander in the Naval Reserve, of which he has been a member since 1931.

The Colombian ship on which he was master was a new passenger ship and he says he was always lucky to be

Capt. Eli D. Ring

master of passenger ships. He went to two maritime schools and three technical schools between 1926 and 1930 relative to maritime activities and navigation.

Captain Rainier has been interested in baseball since his youth and was president of the Colon Baseball Club of the former Canal Zone Baseball League in 1947. He's gone overboard twice on rescues, once for an injured seaman and once for the master of a merchant ship who had fallen overboard in Cristobal harbor.

Before his departure, Captain Farmer was presented the award of the Army Commendation Medal by Governor Fleming, in recognition of his outstanding performance. The accompanying citation noted his success in handling the all-time high volume of ship traffic with the lowest accident rate in the Canal's history.

Captain Farmer, born in Chattanooga, Tenn., was graduated from the U.S. Naval Academy at Annapolis in 1938.

During World War II he was commander of a submarine chaser out of Trinidad and Curacao and on destroyer escort duty in both the Atlantic and Pacific, including a Pearl Harbor tour. He attended the Navy's General Line School, Newport, R.I., after the war and later was executive officer at the Mine Warfare School, Yorktown, Va. He came to the Canal Zone in 1959 from Charleston, S.C., where he was commander of Mine Squadron 8.

Gleam in early morning sun isn't everlasting.

MAINTENANCE

NEXT BRIDGE TO CROSS

PUTTING UP the Thatcher Ferry Bridge cost $20 million.

Keeping it up may cost around $200,000 a year.

The maintenance cost figure isn't solid yet, because there's been no final decision on several points, but the experimental crew of 13 men on full-time maintenance work is thought to be a minimum.

Paint alone will be a substantial cost item. The first complete paint job for the new bridge linking the Americas required 15,000 gallons of primer and final coat paint. Another 3,000 gallons is on hand for touch-up work.

Still undecided is whether to schedule continuous painting or patch painting, with a big crew put on for a complete paint job every several years, depending on need.

Painting needs estimates are available on such major bridges only in other climates, so the guide on what requirements will be for the new bridge across the Canal will have to be established by regular inspections to determine how much heat, humidity, and salt air here will cause variance.

The inspection schedule for the new bridge is still in development stage.

The initial experimental crew of 13 on full-time maintenance work will be made up of a lead foreman in charge of 4 maintenance painters, 4 structural ironworkers, and 4 helpers. Additions may be necessary later. It is believed unlikely it would be possible to reduce this force.

Heigh-Ho, Heigh-Ho, it's off to work we go . . .

Safety Factor: Big Margin For Big Blows

DESIGNED strength of Thatcher Ferry Bridge puts its sturdiness in high winds far above any known velocities ever recorded here.

And its type of construction, combination cantilever-tied arch, is such that there are no appreciable "sway" problems, such as exist with suspension type bridges.

The bridge here has built-in strength to survive winds of up to 70 m.p.h.

The highest gust (short duration) velocity ever recorded on this side of the Isthmus was 56 m.p.h. during a storm in 1943.

Suspension bridges such as San Francisco's Golden Gate Bridge sway as much as several feet in high winds. The Golden Gate Bridge has the world's longest single span: 4,200 feet.

No matter where, or how high, painting for protection must continue regularly.

Activities of Office Have Broader Scope

Paul M. Runnestrand

A MARKED CHANGE has been made during recent months in the administrative structure of the Office of the Executive Secretary. Its activities, under the administration of Governor Fleming, have gained wider scope.

At the head of this nerve center in the administrative structure of the Panama Canal is a Minnesota attorney who has been with the Canal more than 20 years: Paul M. Runnestrand.

Mr. Runnestrand was a legal editor of the West Publishing Co. of St. Paul, Minn., before joining the Canal organization in 1941. He was born in Litchfield, Minn., and received his law degree from the University of Minnesota in 1938.

He is a member of the bar of the Supreme Court of the United States, the Supreme Court of the State of Minnesota, the United States District Court in the Canal Zone, and the United States Court of Appeals, Fifth Circuit, New Orleans.

Associate Attorney in the Office of the General Counsel of the Canal until 1948, Mr. Runnestrand then was promoted to Assistant General Counsel. In 1953 he was transferred to the Washington, D.C., office of the Canal organization as Attorney and Assistant to the Secretary of the Panama Canal.

He returned to the Isthmus in October 1955 as Special Assistant to Canal Zone Gov. J. S. Seybold. He became Executive Secretary of the Canal Zone and Executive Assistant to the President of the Panama Canal March 1, 1956.

The Executive Secretary is the principal adviser, liaison officer, and official representative of the Office of the Governor-President on policy matters concerning the Government of the Republic of Panama, the U.S. Embassy, other diplomatic and consular missions, and commercial and non-commercial interests in the Republic and the Canal Zone.

These may include religious, welfare, charitable, educational, recreational, scientific, fraternal, and social organizations.

The Executive Secretary also supervises policies and regulations concerning eligibility of individuals and organizations to engage in business activities in the Canal Zone, to make purchases in the Zone, or to reside or remain here.

He also represents the Office of the Governor in policy matters concerning laws which govern foreign corporations, including insurance companies, and the securities sales law.

In addition to his other functions, the Executive Secretary performs consular and related duties prescribed by law or regulations, including issuance of immigration visas; and he is custodian of the Seal of the Canal Zone Government.

He provides, in addition, administrative supervision of the Magistrates Courts of Balboa and Cristobal.

As Executive Assistant to the President of the Panama Canal, Mr. Runnestrand performs special duties assigned him by the President.

As required by particular cases, he takes direct action; serves as staff adviser and participates in the formulation of policies, or acts as liaison officer or staff representative in the coordination or supervision of administrative or policy matters.

By direction of the President, he initiates, coordinates and reviews programs, reports, correspondence and other assignments involving the presentation of information to committees or members of Congress, the Board of Directors and others in matters that require the attention of the Office of the President.

Offices of the Executive Secretary are on the second floor of the Administration Building, Balboa Heights. Personnel in these offices provide an Executive Secretariat for the Office of the Governor.

Responsibilities include supervision of administrative procedures between the Office of the Governor and other offices and units as well as general supervision of the Administrative Branch and assuring compliance within the organization with all regulations and directives relating to administrative practices.

In performing and supervising performance of these varied duties, Mr. Runnestrand is aided by the Administrative Assistant, F. G. Dunsmoor, who is Administrative Assistant to the Governor and also serves as Deputy Executive Secretary. He is authorized, among other functions, to perform the duties of "Consular Officer," as well as attest such acts, as representative of the Executive Secretary, as are required to be performed under the Seal of the Canal Zone Government.

Other members of the staff of the Office of the Executive Secretary, added in recent months to handle the new and additional responsibilities which Governor Fleming has assigned the office, are: J. Patrick Conley, Assistant Executive Secretary; Robert S. Jeffrey, Staff Assistant; Sylvester D. Callender, Coordinator of relations with Latin American communities; and Walter M. Mikulich, Special Services Officer.

ANNIVERSARIES

(On the basis of total Federal Service)

40

MARINE BUREAU

M. B. J. Aguilar
Floating Plant Oiler

30

CONSTRUCTION BUREAU
ENGINEERING AND

Louis Cox
Leader Maintenance, Transmission Lines
Earl O. Dailey
Supervisory Electrical Engineer
Adriano Botello
Seaman
Pedro Fernández
Work Order Clerk

PERSONNEL BUREAU

Nathan Fleckner
Administrative Assistant

MARINE BUREAU

Howard L. Sampsell
Lead Foreman, Locks Control House
Arturo E. Agard
Launch Dispatcher

SUPPLY AND COMMUNITY SERVICE BUREAU

Mabel Collins
Packager
Petronella Osborne
Clerk

20

CIVIL AFFAIRS BUREAU

Karl D. Glass
Police Technician
Lyle B. Morau
Police Sergeant
Fred E. Mounts
Police Private
Ethlin L. Fawcett
Elementary Teacher, Latin American Schools
Elouise Garnes
Elementary Teacher, Latin American Schools
Luke C. Palumbo
Elementary and Secondary School Teacher
Mary B. Turbyfill
Elementary and Secondary School Teacher

ENGINEERING AND CONSTRUCTION BUREAU

Angel Franco
Fireman, Floating Plant
Allan L. Bodden
Oiler
Nicolás Ortiz
Boiler Tender
Leonard E. Case
Marine Machinist
Ricardo Rodríguez
Seaman
Gladstone S. Fowles
Clerk Typist
Marco T. Molinares
Leader Heavy Laborer
Teófilo Urriola
Debris Control Winchman
Máximo Cabezas
Surveying Aid
Emilio Mayorga
Carpenter
Juan Aguilar
Heavy Laborer

HEALTH BUREAU

Louis Fink
Veterinarian, Public Health
Mildred R. Largent
Staff Nurse, Medicine and Surgery
Ruth R. Beck
Clerk
Herbert W. Dena
Hospital Attendant
Mauricio Rivas
Messenger
Manuel de J. Cortés
Cook
Martín Reyes
Laundry Checker
Jorge Martínez
Exterminator
Emigdio Carvajal
Nursing Assistant, Medicine and Surgery
Angel Lino
Stockman
Roland J. Jarvis
Nursing Assistant, Medicine and Surgery
Alfonso A. Moore
Nursing Assistant, Operating Room

MARINE BUREAU

Juan B. Cianca
Deckhand
Clarence Cadogan
Chauffeur
Joseph A. Janko
Guard Supervisor
James H. Hagan
General Foreman, Docking and Undocking
Roy Savage
Deckhand
James M. Snell
Pipe Coverer and Insulator
Conrado E. Pimienta
Cement Finisher, Limited
Thomas A. Hull
Carpenter, Maintenance
Frank R. Costanzo
Towing Locomotive Operator
Antonio Vallejo
Helper Lock Operator
Herbert V. Hutchison
Deckhand Boatswain
John E. Hotz
Guard Supervisor
Manuel Fuentes
Maintenanceman (Rope and Wire Cable)
Cyril Holt
Seaman
Clifford O. Blake
Maintenanceman
Antonio Jiménez
Helper Lock Operator

OFFICE OF THE COMPTROLLER

Juan A. Cedeño
Bookkeeping Machine Operation Supervisor

SUPPLY AND COMMUNITY SERVICE BUREAU

Cordelia E. Smart
Sales Section Head
Rupert Hylton
Cook
Middle M Morrison
Laborer Cleaner
José J. Niño
Ice Cream Maker
W. J. Sinclair
Baker
Cayetano Hernández
Laborer Cleaner
Lolita Wade
Clerk Typist
Amilia J. Pinder
Sales Checker, Food Service
Clifford E. Thomas
Crane Hookman
Josephine Charles
Sales Section Head
Alejandro Martínez
Cemetery Worker
Marcos Avila
Leader Laborer Cleaner
José D. Altamar
Garbage Collector
Bertene E. Smith
Grocery Worker
Luisa B. Seyrus
Retail Store Sales Checker
Victoria C. de Rojas
Clerk Typist

TRANSPORTATION AND TERMINALS BUREAU

Cristobal A. Buddle
Guard
Manuel Salvador
Helper Liquid Fuels Wharfman
William D. McArthur
Leader Liquid Fuels Wharfman
Percival A. Samuels
Timekeeper (Typing)
Kenneth A. Thompson
Leader Automotive Machinist
Hugh H. Harrison
Carpenter, Maintenance
Merlin B. Yocum
Supervisory Cargo Officer
José M. Testa
Laborer
Percival Griffith
Stockman

PROMOTIONS AND TRANSFERS

November 5 through December 5

EMPLOYEES who were promoted or transferred between November 5 and December 5 are listed here. Within-grade promotions and job reclassifications are not listed:

CIVIL AFFAIRS BUREAU

Peter J. Barr, Guard, Locks Division, to Fire Protection Inspector, Fire Division.

Police Division

Braxton W. Treadwell, Police Sergeant to Police Lieutenant.

John F. Gilbert, Jr., Police Private to Police Sergeant.

Division of Schools

Martha M. Browder, Mary E. Ellwood, Substitute Teacher to Elementary and Secondary School Teacher.

Betty M. Martin, Substitute Teacher to Librarian-Teacher.

Era L. Greene, Substitute Teacher and Visiting Teacher to Kindergarten Assistant.

Florence G. Cobham, Substitute Teacher to Elementary Teacher, Latin American Schools.

Hartford Livingston, Laborer Cleaner to Heavy Laborer.

ENGINEERING AND CONSTRUCTION BUREAU

Frank H. Lerchen, Supervisory Maintenance Engineer (Maintenance Engineer) to Supervisory General Engineer (Designing Engineer).

Electrical Division

Kazimierz Bazan, Electrician to Senior Operator (Generating Station).

Ernest M. Reinhold, Jr., Central Office Repairman to Lead Foreman Central Office Repairman.

John J. McLaughlin, Marine Machinist, Industrial Division, to Shift Engineer (Mechanical).

Thomas W. Petersen, Cable Splicer to Leader Electrician (Lineman).

William W. Good, Window Clerk, Postal Division, to Radio Mechanic.

Florencio J. Guerrero, Maintenanceman to Launch Operator.

Dredging Division

Arnold S. Hudgins, Electrician, Towboat, Salvage, to Lead Foreman Electrician.

Harry J. Harrison, Second Mate Pipeline Dredge to Leverman, Pipeline Dredge.

Julius Cheney, Leader Electrician (Lineman) to Electrician, Towboat, Salvage.

Lefard A. Bennett, Seaman to Launch Operator.

Clifford H. Standard, Fireman (Floating Plant) to Watertender (Floating Plant).

Leland Truick, Counterman, Supply Division, to Messenger.

Maintenance Division

Carl J. Browne, Supervisory Maintenance Engineer to Supervisory Maintenance Engineer (Maintenance Engineer).

Howard W. Osborn, Maintenance Engineer to Supervisory Sanitary Engineer (Chief, Water and Laboratories Branch).

Alexander C. McCatty, Joseph C. Stair, Maintenanceman to Carpenter.

Diego Sierra, Helper Carpenter, Industrial Division, to Carpenter.

Victoriano Almengor, Asphalt or Cement Worker to Cement Finisher.

Andrés Díaz, Helper Refrigeration and Air Conditioning Mechanic to Oiler.

HEALTH BUREAU

Maria L. Keller, Staff Nurse (Medicine and Surgery), Gorgas Hospital, to Public Health Nurse, Division of Preventive Medicine and Quarantine.

Horace Reid, Clerk, Industrial Division, to Clerk-Typist, Division of Preventive Medicine and Quarantine.

Eduardo V. Lindsay, Laborer Cleaner, Terminals Division, to Nursing Assistant (Psychiatry), Corozal Hospital.

Gorgas Hospital

Dr. Francis X. Schloeder, Jr., Medical Officer (General Medicine and Surgery), to Medical Officer (General Internal Medicine).

Helen S. Plumer, Stock Control Clerk to General Supply Clerk (Medical).

Wanda L. Boriotti, Staff Nurse to Staff Nurse (Medicine and Surgery).

Cecile G. Didier, Clerk-Typist to General Supply Clerk (Medical).

Louis E. Sprauve, Nursing Assistant (Psychiatry), Corozal Hospital, to Medical Technician (General).

Coco Solo Hospital

Alberto J. Howell, Hospital Attendant to Storekeeping Clerk.

Cyril E. Hewitt, Counter Attendant, Supply Division, to Food Service Worker.

MARINE BUREAU

Navigation Division

Emley M. Henter, Clerk-Stenographer, from Police Division.

Heliodoro C. Thachar, Laborer (Cleaner) to Seaman.

Vincent Blackman, Laborer (Heavy), from Division of Schools.

Industrial Division

Jean G. Dockery, Clerk-Typist to Clerk-Stenographer.

M. Lucille Behre, Stock Control Clerk to Accounts Maintenance Clerk.

Ernest V. Baptiste, Warehouseman to Stock Control Clerk.

Leonard A. Shirley, Messenger, Administrative Branch, to Clerk.

Wendell H. Reid, Laborer (Cleaner), Division of Schools, to Helper Machinist.

Locks Division

Gilbert H. Davis, Leader Lock Operator (Iron-Worker Welder) to Lead Foreman Lock Operator (Iron-Worker Welder).

Joseph M. Bateman, Teddy A. Marti, Lock Operator (Machinist) to Leader Lock Operator (Machinist).

Elbert L. Hughes, Leverman, Pipeline Dredge, Dredging Division, to Lock Operator (Engineman-Hoisting and Portable).

Howard M. Armistead, Armature Winder, Electrical Division, to Electrician.

George K. Hudgins, Jr., Marion E. Taake, Guard to Towing Locomotive Operator.

William H. Peart, Helper Lock Operator to Carpenter (Maintenance).

Santiago Evans, Line Handler to Carpenter (Maintenance).

Alphonso L. Brandford Warehouseman, Supply Division, to Toolroom Attendant.

Alfredo Graham, Line Handler to Boatman.

Manuel Linan, Luis E. Rodríguez, Line Handler to Helper Lock Operator.

Victor E. Waite, Utility Worker, Supply Division, to Line Handler.

OFFICE OF THE COMPTROLLER

Ferne E. Levee, Clerk-Stenographer to General Claims Examiner, General Audit Division.

Ashton Brooks, Jesús N. Barahona, Paul D. Vergara, Arnoldo A. Young, Office Machine Operator to Bookkeeping Machine Operator.

Accounting Policies and Procedures Staff

Maenner B. Huff, Digital Computer Systems Analyst to Supervisory Systems Accountant.

Julian M. Mountain, Systems Accountant to Supervisory Systems Accountant.

SUPPLY AND COMMUNITY SERVICE BUREAU

Supply Division

Donald C. Pierpoint, Service Center Supervisor to Service Center Manager.

Olianda A. De Alvarado, Accounts Maintenance Clerk to Accounting Clerk.

Sidney O. Ford, Warehouseman to Storekeeping Clerk.

Myrtle S. Anglin, Sales Checker (Retail Store) to Clerk.

Roy Waterman, Warehouseman to High Lift Truck Operator (Cold Storage).

Levy Beckford, Sales Clerk to Sales Section Head.

Ronald G. Bushell, Utility Worker to Leader Laborer.

Alfonso Elliott, Utility Worker to Clerk.

Robinson Caraquitos, Harold G. Fergus, Utility Worker to Counterman.

Roberto N. Hall, Package Boy to Utility Worker.

Alfred D. Jackman, Package Boy to Laborer (Heavy).

Gwendolyn Oddman, Car Hop to Counter Woman.

Herman Johnson, Henry H. Phillips, Pinsetter to Utility Worker and Pinsetter.

Nicolas D. Bishop, Noel A. Jones, Pinsetter to Utility Worker.

Community Servicees Division

Richard S. Brogie, Accounting Assistant to Housing Project Assistant (Assistant Manager, Cristobal Housing Office).

Mariela G. Quirós, Clerk-Typist, Terminals Division, to Clerk-Stenographer.

Serapio De Los Ríos, Victoriano Ortega, José Santamaría, Laborer to Grounds Maintenance Equipment Operator.

Francisco Barrios, Juan Gómez, Dock Worker, Terminals Division, to Laborer.

TRANSPORTATION AND TERMINALS BUREAU

Ricardo M. Martínez, Truck Driver, Supply Division, to Chauffeur, Motor Transportation Division.

Terminals Division

Helen L. Meisinger, Cargo Claims Assistant to Supervisory Accounting Technician.

Elbert F. Ridge, Leader Liquid Fuels Wharfman to Liquid Fuels Dispatcher.

Arnaldo H. Davis, Ramón S. Pinto, Line Handler to Leader Line Handler.

Juan De León, Arquimedes Mosquera, Julio Osorio, Tereso Pérez, Alejandro Romero, Dock Worker to Stevedore.

Cromwell A. Panton, Bertram O. Bryce, Line Handler, from Locks Division.

Elvan W. Lim, Line Handler to Water Service Man.

Onofre Coronado, Railroad Trackman to Helper Liquid Fuels Wharfman.

Alfred Davidson, Utility Worker, Supply Division, to Cargo Marker.

Alphonso Bell, Messenger to Clerk.

Pablo Galván, Heavy Laborer, Locks Division, to Dock Worker.

Railroad Division

George J. Herring, Road Conductor and Yard Conductor to Yardmaster.

José M. Testa, Laborer to Heavy Laborer.

OTHER PROMOTIONS which did not involve changes of title follow:

Chester E. Pearson, Hospital Administrative Officer (Assistant Director, Gorgas Hospital).

Fredrick J. Wainio, Administrative Service Officer, Terminals Division.

George H. Logan, Management Technician, Administrative Branch.

Donald S. Hounschell, Assistant Dairy Manufacturing Technologist, Supply Division.

Harry A. Carlson, Thomas P. Belford, Construction Inspector (General), Contract and Inspection Division.

Barbara D. Peterson, Clerk-Stenographer, General Audit Division.

Constance C. Nelson, Clerk-Stenographer, Navigation Division.

Patricia M. Flores, Clerk-Stenographer, Industrial Division.

Efraín I. Herrera, Time, Leave, and Payroll Clerk, Accounting Division.

Emilio H. Archer, Clerk, Navigation Division.

Maria A. C. De Horna, Stock Control Clerk, Gorgas Hospital.

James A. Dowlin, William H. Lovell, Bookkeeping Machine Operator, Accounting Division.

Ruby M. Jones, Sales Clerk, Supply Division.

Hugh L. Reid, Clerk, Industrial Division.

CANAL HISTORY

50 Years Ago

PLANS FOR ILLUMINATION of the new Panama Canal were being made. According to the CANAL RECORD, exhaustive studies of the illumination of the Locks had been completed in order that a distribution of light best suited to all of the conditions might be achieved.

A few concrete lampposts had been erected on the walls of the upper Locks at Gatun and a pair of bracket arms for trial were being cast at the Gatun concrete yard. Some concern was felt over the shading of illumination from the eyes of approaching pilots, permitting thereby an unhampered vision of all range and signal lights.

Lighting at Culebra Cut, on the other hand, would be nonexistent except for the system of beacons on either side of the bank. Otherwise, the journey through the Cut was to be made in the dark, except for such light as was given by the moon and stars.

Slides in Culebra Cut continued to plague the Canal workers. On the afternoon of January 16, the Cucaracha slide, on the east bank of the Canal, again renewed its activity and by the morning of the 17th the moving mass of material had covered all tracks in the Canal except one next to the west bank. The movement carried material a greater distance across the Canal than in any other case except the original movement of the same slide in 1907.

On the night of January 19, the rock bluff on the east bank of the Canal south of Gold Hill broke away at a distance of several hundred feet and moved into the Canal, entirely covering all tracks to the east of the center line.

25 Years Ago

A PLAN BY which tolls through the Panama Canal would be reduced on U.S.-flag ships on the inter-coastal run was dealt a blow when Senator Bennet Champ Clark, Chairman of the Senate Inter-Oceanic Canal Committee, revealed there was opposition from both the State and War Departments.

The reduction was planned in order to induce the Panama Pacific Lines to retain their luxury liners on the New York, Panama Canal-California run. Panama merchants, meanwhile, said that their greatest problem was the withdrawal of the tourist ships from the inter-coastal run.

In Washington, President Roosevelt proclaimed the need for the greatest U.S. Navy in history—a Navy capable of defending simultaneously both the Atlantic and Pacific coasts of the United States in view of the possibility that the Panama Canal might be destroyed or its operation paralyzed in time of war.

10 Years Ago

STUDIES IN connection with the proposed conversion of the Panama Canal electrical power system from 25- to 60-cycle current were announced by President Truman. President Truman also told Congress that the present toll rates of the Panama Canal were providing sufficient revenue for operation of the Canal.

New rental rates on Panama Canal quarters became effective. The schedule was based on the recommendations of the Rent Panel which were accepted by the Board of Directors. Increases ranged from 53 cents to $4.84 a week.

One Year Ago

GOVERNOR W. A. CARTER left the Isthmus for his new post as senior engineer adviser of the Inter-American Development Bank in Washington, D.C. Prior to his departure he was honored at a public ceremony of tribute which was organized by a group of Panamanian citizens. The tribute included a program of Panamanian folklore, dancing, and presentation of a medal from the Panamanian people.

Earlier in the month, the appointment by President Kennedy of Maj. Gen. Robert J. Fleming, Jr., to succeed General Carter as Governor of the Canal Zone, was announced in Washington.

RETIREMENTS

EMPLOYEES who retired in November, with their positions at time of retirement and years of Canal service:

Darnley Barrow, Stevedore, Terminals Division; 33 years, 2 months, 3 days.

Robert A. Berry, Machinist, Locks Division; 15 years, 1 month, 25 days.

Mrs. Eileen G. Brady, Head Nurse (Psychiatry), Corozal Hospital; 18 years, 4 months, 17 days.

Santo V. Casella, Towing Locomotive Operator, Locks Division; 21 years, 28 days.

Samuel T. Crichlow, carpenter, Maintenance Division; 31 years, 1 month, 7 days.

James C. Garth, Cargo Clerk, Terminals Division; 26 years, 8 days.

Mrs. Melba M. Heintz, Accounting Clerk, Supply Division; 17 years, 6 months, 7 days.

Martín G. Herrera, Ramp Operator, Navigation Division; 35 years, 11 months, 15 days.

James B. Ricketts, Seaman, Navigation Division; 34 years, 7 months, 23 days.

Reyes Rodríguez, Surveying Aid, Engineering Division; 34 years, 10 months, 26 days.

Harry H. Stultz, Seaman, Navigation Division; 25 years, 2 months, 9 days.

Kenneth W. Vinton, Instructor, Schools Division; 31 years, 11 months, 16 days.

Alexander Weir, Helper Lock Operator, Locks Division; 49 years, 1 month, 7 days.

SHIPPING

New Grace Liner Due

THE NEW $17 million Grace Line passenger-cargo ship *Santa Magdalena*, which was launched last February, will arrive in Cristobal February 6 on her maiden voyage from New York to Guayaquil, Ecuador. Panama Agencies announced that the new vessel will leave New York February 1 and probably will dock in Cristobal.

The *Santa Magdalena*, the first of a series of new replacement vessels to be placed by Grace Line on the South American west coast run, is capable of accommodating 120 passengers and can carry 175 standard 20-foot containers or truck trailer vans with a total capacity of 188,600 cubic feet. Banana conveyers, installed as part of the ship's standard equipment, will load at the rate of 2,400 stems an hour.

"Gulfoba" Going Great

NORTHBOUND AND THEN southbound, merrily does the *Gulfoba*, a Gulf Petroleum, S.A. tanker, transit the Panama Canal—in 1 day and out the next—only to be back again in a wink.

The sea-going twin-screw tanker, which has a capacity of about 6,000 barrels of oil, has been engaged in carrying oil from the Refinería Panamá on the Atlantic side of the Isthmus to the Pacific side. When on the Pacific side, the *Gulfoba* docks at Pier 4, Balboa.

The *Gulfoba* started its heavy traffic business in November, completing 16 Canal transits that month.

All employees on the Panama Canal lock walls are on first name basis with everyone on the *Gulfoba*, but the tanker still uses a pilot and locomotives, just as does a vessel making a transit for the first time.

Captain of the *Gulfoba* is George Murphy Hayes of Grand Cayman Island.

TRANSITS BY OCEAN-GOING VESSELS IN NOVEMBER

	1962	1961
Commercial	924	891
U.S. Government	38	15
Free	7	4
Total	969	910
TOLLS *		
Commercial	$4,685,585	$4,444,586
U.S. Government	213,824	77,727
Total	$4,899,409	$4,522,312
CARGO**		
Commercial	5,177,751	5,232,796
U.S. Government	110,207	99,216
Free	51,027	31,534
Total	5,338,985	5,363,546

*Includes tolls on all vessels, ocean-going and small.
** Cargo figures are in long tons.

Speed Demon

ONE OF THE fastest freighters afloat came southbound through the Canal December 11 on her way from New York to the Far East. She is the *Pioneer Moon*, an American Challenger Class vessel which holds the trans-Atlantic speed record for cargo class ships. She made the run from Bishop's Rock off England to Ambrose Light, recently, at an average speed of 24 knots.

The *Pioneer Moon* will make regular trips through the Canal for the United States Line with general cargo from New York to the Far East and return. The first in the line's $380-million long range cargo ship replacement program, the *Pioneer Moon* was launched in Newport News, Va., in April by Mrs. Clarence D. Martin, Jr., wife of the Under Secretary of Commerce. Mr. Martin also is a member of the Panama Canal Board of Directors.

Tanker's transit timetable like shuttle service.

Shipping Agent Retires

ERNEST S. BAKER, manager of Norton, Lilly & Co. in Balboa and dean of the shipping agents in the Canal Zone, retires from his position with the company in January after more than 37 years of service. Mr. Baker, who has been with Norton, Lilly since 1925, will make his home in Panama after his retirement. His wife was a former teacher with the Canal Zone Division of Schools.

JOSEPH NOONAN, also a veteran employee of Norton, Lilly, who has been manager in Cristobal, will take over as manager of Norton, Lilly on the Isthmus. The Balboa office of the agency will be headed by Colin Lawson, former assistant manager of C. B. Fenton & Co. Other changes in the company staff are the appointment of Lloyd Alberga as assistant manager in the Cristobal office and of Archibald Irvine, former chief engineer on the cable ship All America, as boarding officer in Cristobal for Norton, Lilly.

Space Ship Part Transits

THE PANAMA CANAL took a part in the space program recently when a section of NASA's huge Saturn was carried through the waterway as deck cargo aboard the freighter *Smith Builder*. The big missile section, which resembled somewhat a giant thimble, was manufactured at the Douglas Aircraft Co. plant in Santa Monica and was being taken on a 41-foot transporter to the launch and test sites in Huntsville, Ala.

The part was the S-IV upper stage of the Nation's largest space vehicle and is scheduled for unmanned earth orbital missions this year. The *Smith Builder* picked up the part in Los Angeles, Calif., and was taking it to New Orleans.