



PANAMA CANAL

REVIEW



Red Cross

Social Service

Social Hygiene

Physically Handicapped

Religious Workers

Salvation Army

Boy Scouts

Tuberculosis

Cancer

Seamen's Service

Corozal Hospital

USO

Girl Scouts

YMCA

National Recreation

Summer Recreation

1959 Canal Zone United Fund

Goal: \$122,000

September 28 - November 4





WHEN RUFUS HARDY conceived the idea of an official Panama Canal publication, he received no stauncher and more consistent backing than that from his long-time friend and associate, Eugene C. Lombard, then Executive Secretary of the Panama Canal. It was natural, then, that the staff of "The Panama Canal Review," stunned and shocked by Rufus' sudden death on September 2, should turn to Gene Lombard for an appreciation of the man who, through the written word, has made a lasting contribution to the story of the Panama Canal.

MANY PERSONS HAVE given loyal and devoted service to the Panama Canal and Rufus Hardy ranks high among them. No one could have given more than he did. No one worked harder toward the goal of understanding and high morale.

His professional skill was unique. He wrote with clarity and precision and had the rare ability to reduce complex matters to simple language.

The day in 1938 when he took over his Canal duties, with the unassuming title of Press Representative, marked the beginning of real public relations for the Panama Canal. With a keen sense of news values and thorough knowledge of Canal matters, he produced a steady stream of news recounting the daily history of the waterway and the Canal Zone. His reputation was based on the solid foundation of accuracy and honest reporting.

The establishment of "The Panama Canal Review" was a notable accomplishment. The idea was entirely his and when Governor Newcomer approved it he commended Rufus for his well-detailed plan. "The Review" was a success from the start, but Rufus, a perfectionist in his work, strove constantly to improve it. That he succeeded is self-evident. The article entitled "The Turbulent Fifties" in a recent issue is typical of "The Review's" contributions to the story of the Canal.

Rufus' manner was courtly and his personality friendly. He was deeply loyal to his friends and was warmhearted and compassionate to those needing a helping hand or a word of consolation.

It is a matter of history that during the construction of the Canal there existed in all classes of workers, even the humblest laborer, a deep pride in the enterprise and the feeling that he was part of it. It was this spirit which Rufus Hardy personified and which will cause his memory to endure.

—E. C. L.

W. E. POTTER, Governor-President
JOHN D. McELHENY, Lieutenant Governor
WILLIAM G. AREY, JR.
Panama Canal Information Officer

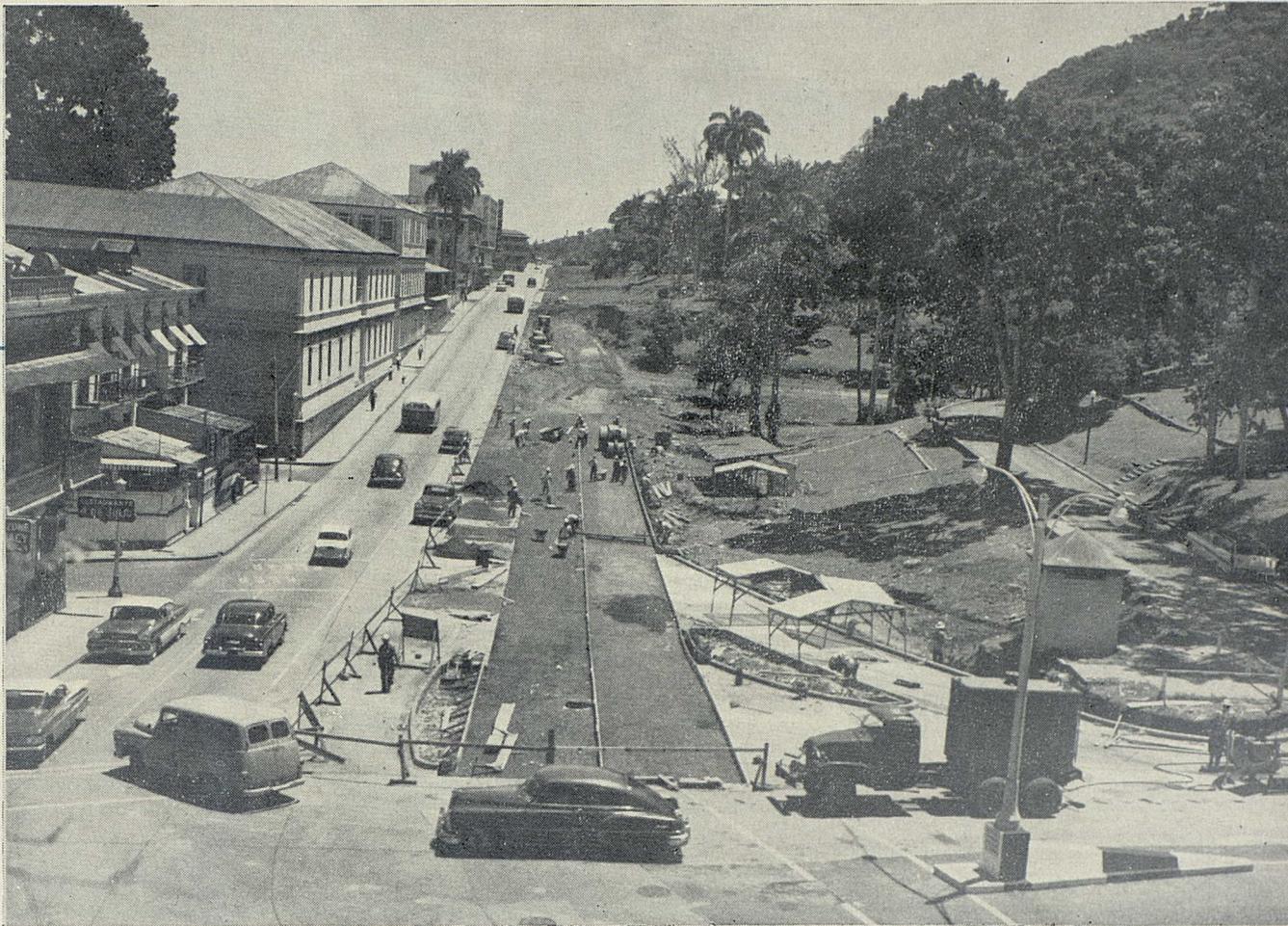


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Widening of Fourth of July Avenue, part of the work on the bridge east approach, is moving ahead.

THE BRIDGE

Work moves full steam ahead on \$20,000,000 project

WORK ON THE \$20,000,000 high level bridge across the Panama Canal at Balboa, until now restricted to construction of the two approaches, is rapidly moving into high gear.

On October 20, Lt. Col. Robert D. Brown, Jr., Engineering and Construction Director and Contracting Officer for the Panama Canal Company, will meet with contractors and their representatives in a pre-bidding conference on the bridge superstructure. This part of the work, which will cost in the

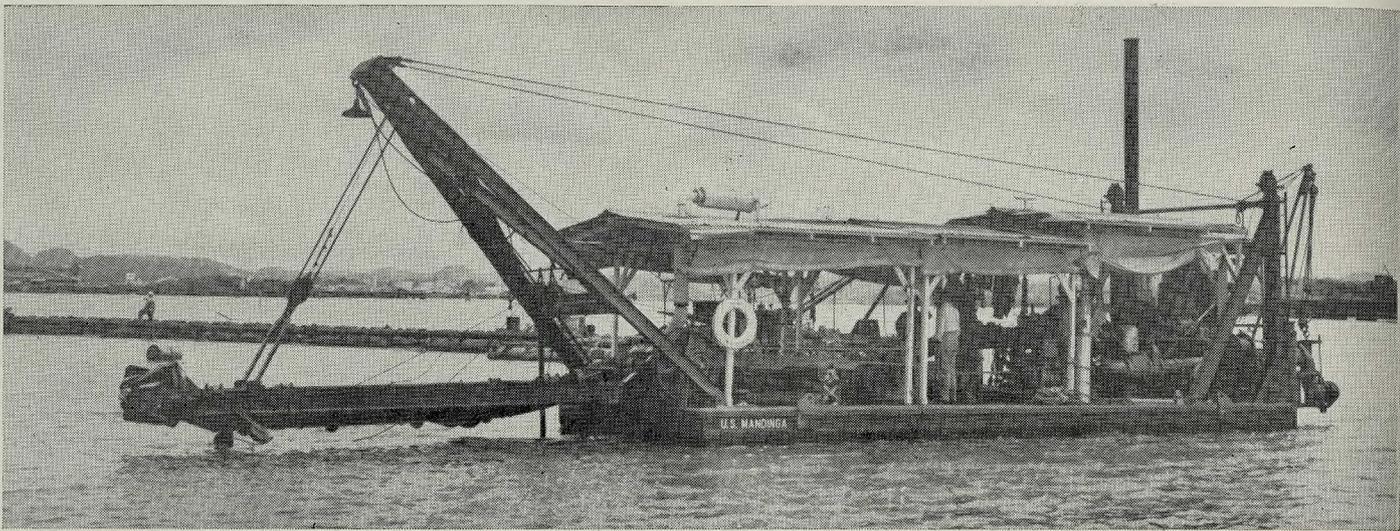
general area of \$10,000,000, will be the largest contract to be let by the Canal organization since the Third Locks project. Bids on the superstructure work, for which plans and specifications were issued early last month, are to be opened December 2.

The first actual work on the bridge substructure took place September 14 when the Panama Canal's midget dredge *Mandinga* began excavation of a channel parallel to the location of the bridge piers. This channel will enable a work

barge to reach the pier sites.

The Dredging Division, which is doing this work under contract to Fruin-Colnon International S. A. and LeBoeuf and Dougherty, Inc. prime contractors for the \$3,000,000 substructure project, claims honors for the first bridge work for the *Mandinga*. This claim is contested, however, by the Maintenance Division which has been clearing an area in the La Boca tank farm for the land operations.

During the past month equipment



The mighty midget dredge "Mandinga" is excavating a channel to the site of the bridge piers. She claims first honors on the bridge work.

for the bridge substructure began arriving from the United States and was set up on Dock 7, the old Balboa coal dock. Included in this equipment were three heavy cranes with clamshell buckets and several electric pumps. The latter will be used to unwater the cofferdams during the pier construction.

On September 18 a large derrick work barge arrived in Balboa from San Francisco under tow of the tug *Donna Foss*. Aboard the 75-by-150-foot work barge were 180 tons of steel bracing for the cofferdams, two medium landing craft which will be used to shuttle concrete from the batching plant on Dock 7 to the pier sites, and miscel-

laneous construction equipment.

Other arrivals last month included a large drill rig, described by one engineer as a gigantic post-hole digger. This drill rig belongs to the Case Foundation Company, subcontractors for placing the concrete caissons in the tank farm area. A special type never before used here, it is able to drill holes, of 36 inches in diameter, up to 80 feet deep.

Key personnel for the substructure contractors are also on the Isthmus. Raymond E. Flint, a Fruin-Colnon vice president, has been here for several weeks. He was joined recently by Homer Stokes, who is to be project

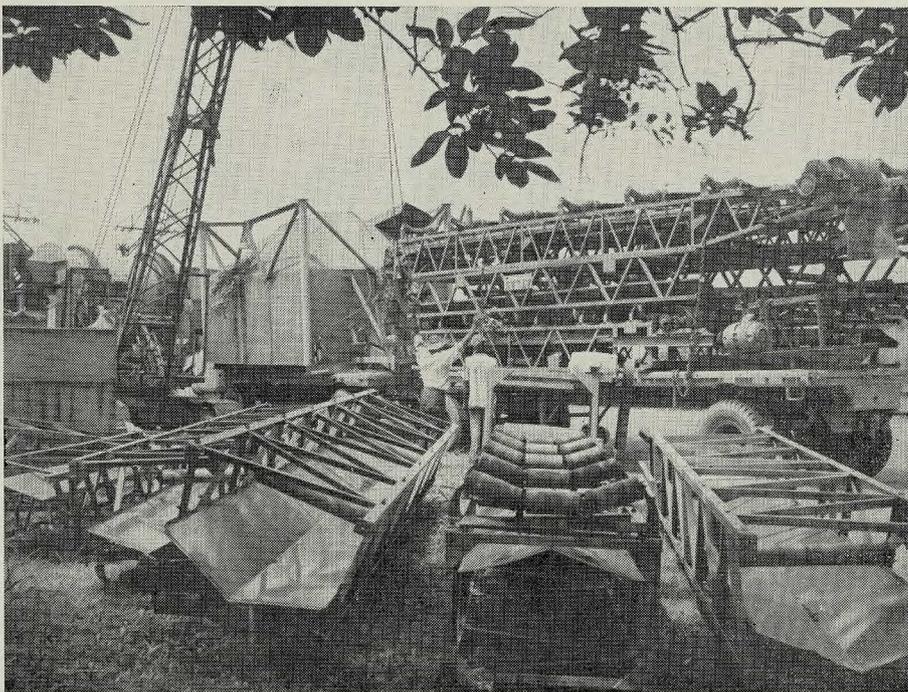
manager for Fruin-Colnon and LeBouef and Dougherty. Another recent arrival is Richard Lowe, project manager for the Case Foundation Company.

The first piece of heavy equipment other than the *Mandinga* to be used on the substructure work, a yard and a half tractor crane, started excavation on September 18 near Esso Tank 22 in the La Boca Tank Farm section.

In the meantime, Concreto Panama has been setting up a batching plant near one of the old coal pockets on Dock 7. Framorco, another Panama firm, has brought in an aggregate processing plant for concrete aggregate and is setting this up at Gamboa. The processing plant had been used on the Interamerican Highway work at Aguadulce.

Grading and earth work on the east approach to the bridge is being done under contract by Bildon, Inc. This project is now approximately 40 percent completed. It involves grading and cutting back of Reservoir Hill in the Chorrillo area and construction of a large fill across the Gavilan mud flats. The core of the Gavilan fill is rock from Sosa Hill; the lighter fill material comes from the grading at Chorrillo. Fourth of July Avenue is also being widened from J Street to the Limits and the streets at the Limits rearranged for bridge access.

On the west bank, grading is completed for the west approach. Later, both approaches will be paved under a separate contract.



This concrete aggregate processing plant is shown as it was being moved to Gamboa.

NEW DIRECTOR

A MAN WHO has been familiar with the Panama Canal and its operations for a number of years has been added to the Board of Directors of the Panama Canal Company with the appointment of former Congressman John J. Allen to the spot formerly occupied by Ogden R. Reid, now U. S. Ambassador to Israel. The appointment was announced by Wilber M. Brucker, Secretary of the Army and stockholder for the Panama Canal Company.

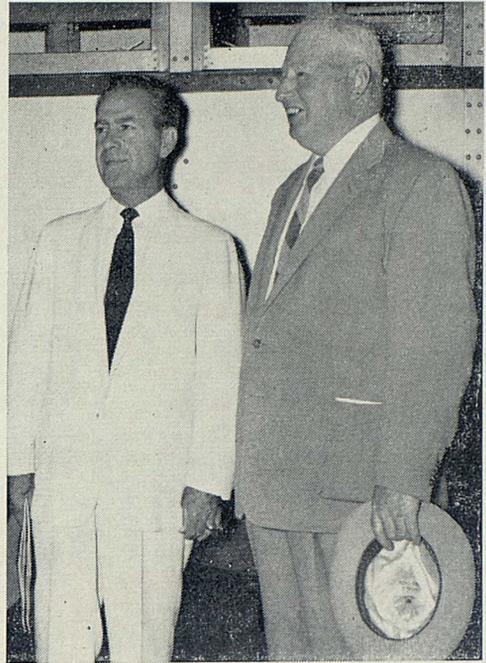
Mr. Allen, who served as a Representative from California for twelve years, is now Assistant Secretary of Commerce.

He will attend his first Board meeting this month when the Panama Canal Company's Board of Directors holds its quarterly meeting in Washington.

During his years in Congress, Mr. Allen served as a member of the Panama Canal subcommittee of the Merchant Marine and Fisheries Commission and at one time was its chairman.

He has made at least three visits to the Canal Zone, the last of these in March, 1957. During one of his earlier visits, when he was chairman of the Panama Canal subcommittee, he attended one of the monthly Shirtsleeve Conferences, the first Congressman to do so.

Born in Oakland, Calif., he attended the University of California and took a degree in law there. For some time he practiced law in Oakland in partnership with his brother, Liston O. Allen. He is a Navy veteran of both World Wars.



Mr. Allen and the Governor are shown here during the new Director's 1957 visit to the Zone.

TREES

and

more trees

ORNAMENTAL TREES, PALMS, and shade trees, some of which are leaving the confines of the nursery at Summit Gardens for the first time, are being planted in Canal Zone communities these days by the Grounds Branch of the Community Services Division.

The local version of Arbor Day is part of a Panama Canal Company program to replace trees which have either died or been removed from Canal Zone towns in recent years. Some also are being planted to beautify spots which never before have been shaded by trees.

One of these is the section of Roosevelt Avenue running from Frangipani Street to Corozo Street in Balboa. On one side there is now a row of *eugenia grandis* and *barringtonia*, two types of ornamental flowering trees which will grow into large well-shaped shade trees. On the other side, next to the railroad tracks, a row of fan palms which will eventually grow to a height of 75 feet are making their first bow to the Canal Zone outside of Summit Gardens.

Nicobar palms, another tall graceful variety of tropical palm tree, have been planted the length of Frangipani Street to replace other palm trees which re-

cently died of old age. Near the Health Bureau Sanitation Office in Ancon, a young shade tree, whose ancestor was sent to the Canal Zone from Washington, D.C., is starting life in a tropical community. This variety—the species is not known—sent here as an experiment, did so well at Summit Gardens that its offspring are gradually being distributed around the Canal Zone wherever large shade trees are needed.

Another newcomer to the Canal Zone outside the Summit nursery is the golden *latania* palm, a shorter variety of the fan palm. Some of these have been planted near the Balboa Retail Store housewares annex.

So far the program has not moved much farther than Ancon and parts of Balboa but eventually it will take in most Canal Zone communities on both sides of the Isthmus. The final results—in most cases—will not be appreciable for many years, for some of the trees, such as the *eugenias* and *barringtonias* take time to reach maturity.

Others, like the more familiar yellow shower trees and the purple flowering jacarandas, will show results almost immediately under the tender care of the Grounds Branch experts.

ONLY THE Indians
and Eskimos
are permitted to
use fish traps
like this.
The force of the
current moves
windmill
like arms.



The 49'ers

are on the march

THE "FORTY-NINERS" are on the move again! The goal this time is the 49th State of the United States of America, and the mere fact that it involves a jaunt from the Equator practically to the Arctic Circle has not daunted three Canal Zone families, accustomed to long vacation trips. Accompanied by former Canal Zone residents in two cases, they chose Alaska as their vacationland this summer, with strolling on glaciers, fishing for king salmon, photographing of moose, and gold panning as some of the highlights.

Mrs. G. E. Cooper and her son, Jerry, 14, of Gamboa travelled by ship and by plane to reach Alaska. There they went on a trailer tour with Mrs. Cooper's sister and brother-in-law, Lt. Col. and Mrs. Donald M. Callahan, who like Alaska so much they requested an extension of their tour of duty at Fort Richardson, five miles outside of Anchorage. (Mrs. Callahan was the former Patsy Getman and had attended Canal Zone Junior College.) Mr. and Mrs. Allen K. Miller and their two daughters, Martha, 18, and Marjorie, 14, of Balboa went by ship to New York. They joined former Canal Zone residents George and Grace Dunlop and their sons, David, 17, and Robert, 13, now of Texas, at Livingston, Mont., from where the two families in their respective cars set out on the trek to Alaska. Chester A. Luhr and son, Jonathan, 16, of Diablo Heights travelled by air to Petersburg in the Alaskan Panhandle, where Mr. Luhr met his brother, Frank, for the first time in 21 years. The two Luhr families took off on a 10-day king salmon fishing trip,

dodging whales in Frederick Sound on the way.

The Coopers' trip was exciting from the start, for they sailed from the Canal Zone in the German vessel *Essen* which had played a key role in the rescue at sea of 38 survivors from the burning Colombian ship *Rio Atrato*.

Anchorage, said Mrs. Cooper, is a modern city with a 14-story building, supermarkets, and shops where one may purchase a Dior model, if so inclined, and where hamburgers cost \$1.50 each and tomatoes are 55 cents a pound.

The Coopers and the Callahans started out on their trailer trip from Anchorage, travelled up Glenn Highway, and through Matanuska Valley whose farm colony became famous during the depression of the 1930's in the United States, when 200 families were moved there.

The roads they travelled are well maintained, Mrs. Cooper said. But, because of the frost heave, there are frequent signs warning of a "dip" or "bump." Moose abounded, usually cows accompanied by calves, but the party saw only one grizzly.

At Fairbanks, one of Alaska's busiest and most crowded cities, Mrs. Cooper was particularly interested in watching the work of a gold dredge which, she learned, processes 15,000 tons of earth a day. Dredges are a family interest, for Mrs. Cooper has been working with the Panama Canal Dredging Division for 10 years, and her husband is with the dredge *Cascadas*.

They saw Mt. McKinley from the air; and in all their travel by car and by air constantly were aware of the

size of Alaska, the tremendous mountains and glaciers, and the atmosphere of "get-up-and-go."

Gold? There's still gold in them thar hills. The Coopers and the Callahans went panning for gold, and they actually did get some dust.

MR. AND MRS. MILLER and their two daughters, travelling with the Dunlop family, drove over 15,000 miles and, as a highlight of their trip, crossed the Arctic Circle by plane.

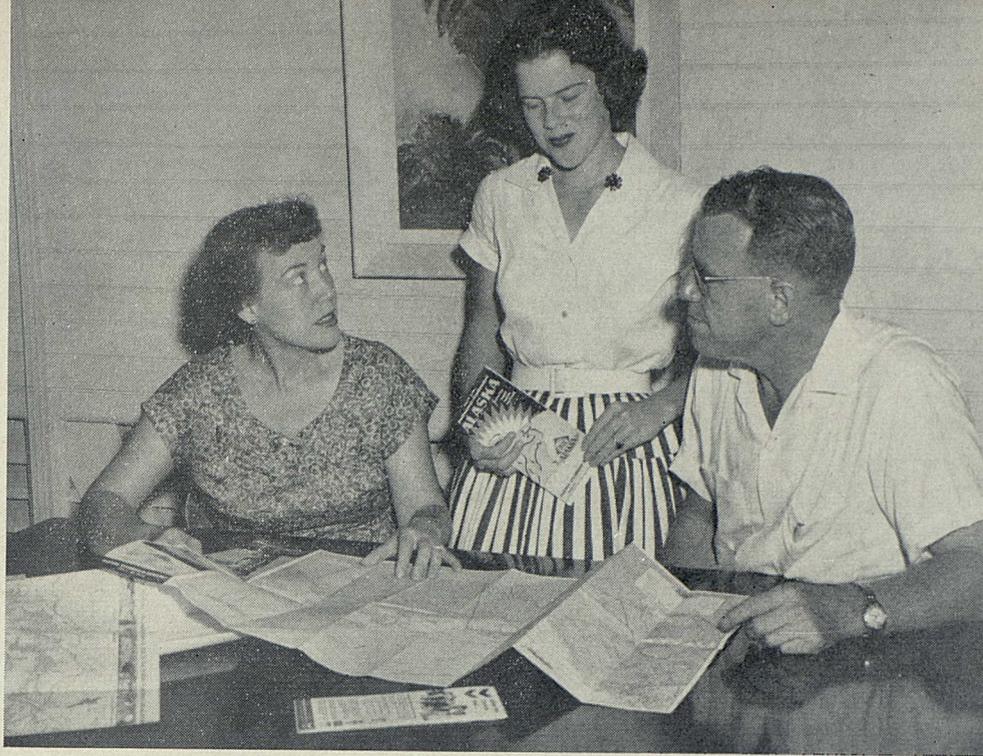
Leaving Livingston, Mont., the first of July, the two families in their respective cars drove through Glacier National Park, visited Banff National Park and went through Jasper National Park, where they encountered a heavy snow-storm.

At Dawson Creek, British Columbia, the mileage post was marked with a huge "0" denoting the start of the Alaska Highway. From Dawson to the boundary of Alaska is a distance of 1,221 miles and on the third night after leaving Dawson the party reached the 49th State.

They crossed the Arctic Circle by plane, and landed at Fort Yukon, about four miles north. A young girl from Virginia is the teacher at this settlement of about 300 native Indians or Eskimos, and she also is the tour agent. As a memento, each member of the family has a colorful certificate which states "Wien Alaska Airline. This certifies that...has crossed the Arctic Circle. 9th day of July 1959."

Homeward bound, the Millers and the Dunlops separated at Dawson Creek,

*Wonders of Alaska
fascinating to
three Zone families
who trekked
to the 49th State*



The Allen K. Miller family retraces their 15,000-mile motor trip on maps of the United States, Canada and Alaska. They crossed the Arctic Circle by airplane.

the Millers coming down through Seattle and then across the continent to New York, where they boarded a Panama Canal Liner for the Canal Zone.

Mr. Miller said he would advise anyone planning a similar trip to drive a car not more than eight to ten years old, and a good set of tires is a must. The Canal Zone-Alaskan travellers also found the "Milepost," a pocket guide to Alaska, an indispensable companion.

TEN OF THEIR 15 DAYS in Alaska were spent by Mr. Luhr and his son on a salmon fishing trip with Mr. and Mrs. Frank Luhr, who have been residents of Petersburg, Alaska, since 1943. The temperature ranged between 48 and 54 degrees, and wind and rain precluded photography. But the fishing was good.

The Luhrs watched whales cavorting at Frederick Sound, a breeding ground which is closed to hunters. The whales, said Mr. Luhr, leap 'way out of the water, and there is a tremendous noise when they hit water again. He and his son viewed whales at such close range they were able to see the barnacles on their tails.

The fishing party travelled the Inside Passage and Mr. Luhr described the beautiful scenery, the picturesque mountains, and the glaciers, where one could hear the ice breaking off, if anchored nearby at night. Alaska, he said, is the last frontier, a rugged land demanding rugged settlers. Both Chester Luhr and his son, however, would like to go back for a longer visit and a more extended fishing trip.



Mrs. Cooper and her son, in interior Alaska, view a moose antler-decorated cache house which holds provisions in the dread event the family home burns.



William Jump is the senior employee in the Canal service.

SECURITY FOR THEIR old age and protection for their families became a reality for thousands of non-U.S. citizen employees of the Canal organization this month as the Civil Service Retirement system went into effect for these workers.

Seven non-U.S. citizens will be among the Canal organization employees who will be retired from Canal service during October with full retirement benefits.

Although they have been paying into the retirement fund for only a year, these seven, like others who will follow them, will receive the same retirement benefits as the United States-citizen retirees who have been paying into the Civil Service Retirement fund for years.

They are not the first non-U.S. citizens to retire from the Canal since last October when 9,000 were blanketed into the Civil Service Retirement plan, but they are the first to retire for age and service.

Heading the group of non-U.S. citizen retirees is William Jump, senior man on the Canal organization rolls who this year completed 54 years of service, all of it in the Industrial Division where he is a timekeeper.

Others are Louis L. Moolchan, employee of the Administrative Branch at Balboa Heights—he has worked at the Administration Building since September, 1914; Charles I. Bertoncini, cartographic aide in the Engineering Division; John Flemming, heavy laborer in the Ter-

*First non-United States
citizens, with age and
service, to benefit from*

CIVIL SERVICE RETIREMENT

minals Division; Joseph Norville, track laborer in the Railroad Division; Louis Parfait, library assistant, Canal Zone Library; and T. C. Taueres, janitor in the Division of Schools.

Civil Service retirements for non-U.S. citizen employees started October 5, 1958, with the provision that each member must have contributed to the retirement fund for at least a year before becoming qualified for a pension. Only those employees who became disabled were eligible for retirement between last October 5 and this month. During the past year, there has been an average of three such disability retirements each month.

Some of those retiring on disability had paid only a few dollars to the retirement fund but they and their families are now receiving full retirement benefits. In addition, widows of non-U.S. citizen employees who died since last October are receiving the same retirement benefits as if their husbands had been members of the retirement plan for years.

The new retirement system, a provision of the 1955 Treaty between the United States and Panama, provided non-citizen employees with exactly the same retirement benefits as government employees in the United States.

Since last October, non-U.S. citizen employees have been contributing 6½ percent of their salary for retire-

ment each month and the remainder of the cost of retirement, or about 13 percent, is being supplied by the Canal organization and the U. S. Government.

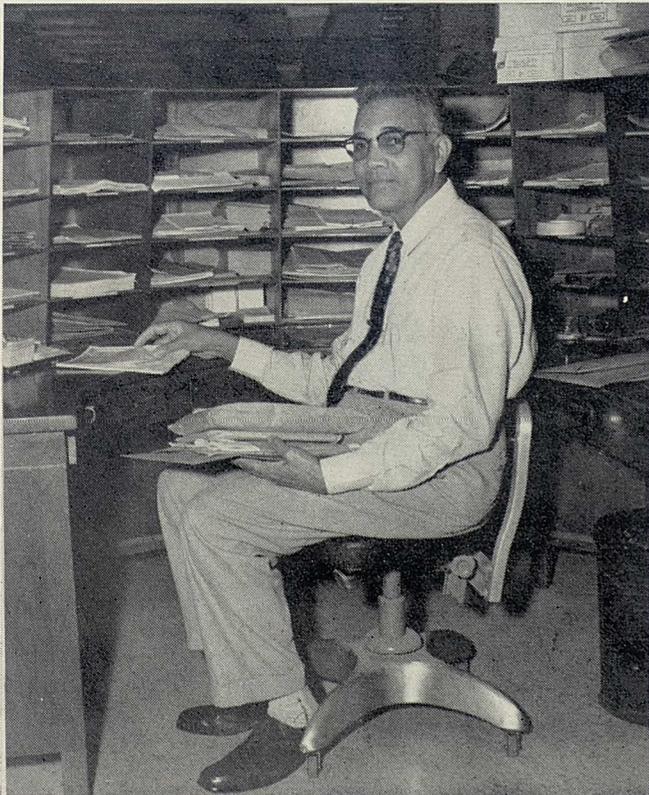
If an employee who had five years of government service became disabled after October 5, 1958, he was retired and was given an annuity based on his salary and length of service. If he died, his widow is entitled to an annuity for life, or until she remarries, plus an extra monthly payment for each child under the age of 18.

Employees retiring for age or service this month will receive an annuity determined by formulae based on his pay and length of service. At the age of 60 an employee with 30 years of service can retire at his own option or if, at age 55 with 30 years service, at an annuity reduced by one percent for each year that he is under 60.

At the time the retirement system went into effect last October, there were 642 non-U.S. citizen dock workers who were not included because they worked part time. Since that time approximately 170 of these employees have been included in the retirement plan and the benefits are gradually being extended to others.

Approximately 4,200 non-U.S. citizens who left the Canal service before the Civil Service Retirement plan was placed in operation are receiving monthly disability relief payments from the United States Government. These payments add up to a yearly total of more than \$1,900,000.

Louis L. Moolchan works in the Mail Room at the Heights.



Worth knowing . . .

Next week the people of the Isthmus will get their annual reminder to be fire conscious. Fire Prevention Week begins Sunday and continues through Saturday. Posters, TV shows, lectures and demonstrations to units throughout the Company-Government organizations will serve to educate the grownups. Children will learn about Fire Prevention Week through contests in each classroom in the first through sixth grades; the winners of these classroom contests will be given certificates that they are Honorary Fire Marshals. Both children and grownups will be invited to attend a special demonstration during the week at the Panama Stadium. The program for Fire Prevention Week has been developed by the Joint Fire Prevention Week Committee, consisting of the Canal Zone Fire Division, the Fire Prevention Units of the Army, Navy, Air Force, and the Cuerpo de Bomberos of Panama.

Two new standard-type harbor tugs with 1,800 horsepower engines, will be purchased this fiscal year by the Panama Canal Company. One will be used by the Dredging Division and the other by the Navigation Division. The two new tugs are in addition to a special purpose, 2,400 horsepower tugboat on which bids are already being solicited by the Panama Canal Company. This tugboat, designed by Thomas D. Bowes, New York naval architect and engineer, will be used by the Navigation Division in Gaillard Cut.

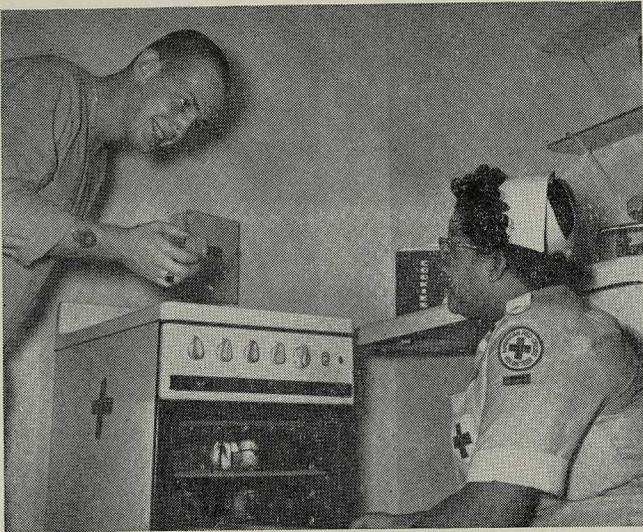
The problem of skin cancer, common among light skinned, blue-eyed people who make their homes in the tropics is being studied by the Canal Zone Health Bureau and plans are being made to conduct a survey among Canal employees who spend a major part of their working day in the open air. A medical team, headed by Dr. A. W. McFadden, Dermatologist at Gorgas Hospital, will set up stations sometime this month in such areas of employee concentration as the Canal Locks, the Terminal Buildings, and the Industrial Areas on both sides of the Isthmus. Doctor McFadden will examine any employee who volunteers and if evidence of skin cancer is found, an appointment will be made for laboratory tests and medical treatment. If skin cancer is discovered early, hospital treatment is usually limited to visits to the Out-Patient Clinic, Health authorities pointed out.

It will be a lot more comfortable soon for patients waiting to see a doctor in the Gorgas Hospital Out-Patient Clinic. Air conditioning of that section, which includes the blood bank and the laboratory located in Section A, is to be completed by the last part of October. The work which began there earlier this year also included the installation of a suspended ceiling and fluorescent lighting in the waiting room. Air conditioning also will be completed in October in the main office of the Industrial Division at Mount Hope.

Who's the frosting

on the Zone hospitals' cake?

GRAY LADIES



PFC Gerald L. Gleich and Gray Lady Henrietta Alexis sample a cookie from the oven in the Red Cross lounge at Gorgas Hospital.



Mrs. Veda Pence and her handicraft brighten days for patients in the Chest Section. She has given hundreds of hours of service.

Gray Ladies trundle bookcarts to wards and rooms. Below, Mrs. H. J. Quinlan helps PFC William Wells choose reading matter.

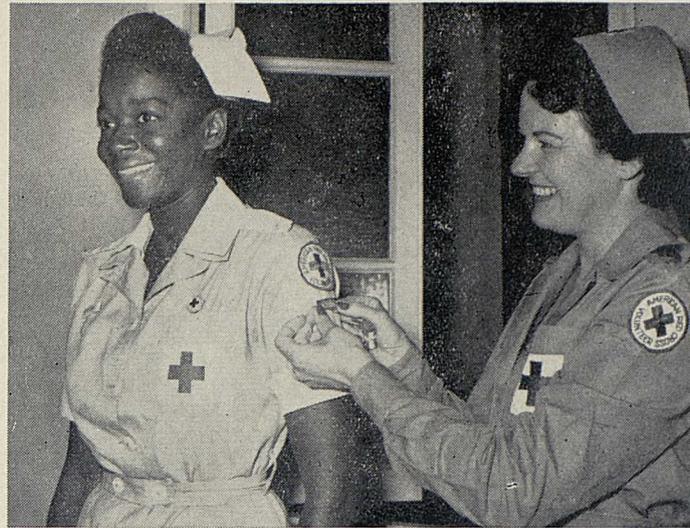


Gray Ladies bring recreation to patients. SP-4 R. B. Stahl, in bed, and Cpl. W. C. Leister enjoy a game with Miss Thoms.





Mrs. Virginia Barber of Albrook, above, receives her cap from Miss Beatrice Simonis, the Gorgas Hospital Nursing Service Director



Miss Dorothy Powell gets her 75-hour stripe for service from Mrs. Tina Feierlein, the Volunteer Services Chairman.

Miss Rosita Thoms, for instance, is the sort of person who has a gift for cheering people up, and her speciality is recreation work. She serves as hostess at ward parties, teaches crafts, helps ambulatory patients bake cookies in the diminutive kitchen in the Red Cross lounge, or wields an expert popcorn shaker. The patients—and Miss Thoms—have a wonderful time.

Nor does she restrict her activities to Gorgas Hospital where she is one of the leaders of Gray Ladies in the number of volunteer hours—683 last year for her. In her spare time, she also serves as a volunteer at the Santo Tomas Hospital del Niño.

The service provided by the Gray Ladies at Gorgas and Coco Solo Hospitals and by the Gray Ladies and Gray Men at Corozal Hospital has been described as the “icing on a hospital’s cake.” These volunteers, 79 in all, offer the morale-building attention which busy doctors and nurses do not have the time to give.

The volunteers visit patients, sometimes just to talk. They write letters for those who cannot handle pen

or pencil, read to those who cannot see. They play games with or teach crafts to others who are a bit more mobile. They wheel cartfuls of books from bed to bed in a perambulating library service, serve as escorts for visiting entertainers.

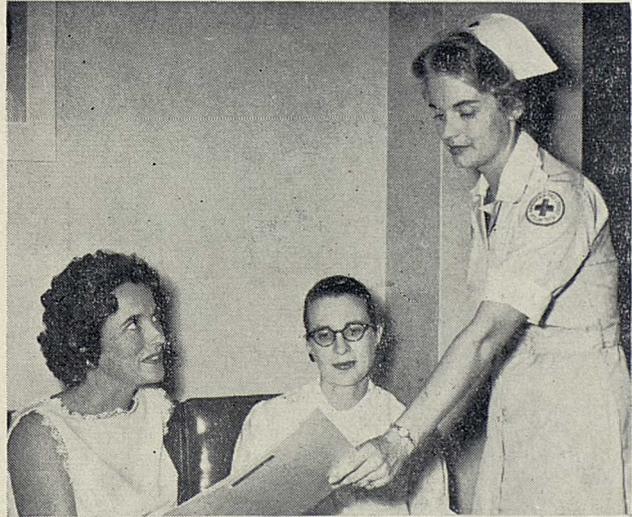
They shop for the hospital patients; one Gray Lady was delegated to buy a complete winter wardrobe for a merchant seaman who was being sent back home. They entertain youngsters in the children’s ward, conduct bingo games, or serve as hostesses for parties in the various wards or in the Red Cross lounges. And, as an extension of the service which the Red Cross offers in other hospitals, the Gorgas Gray Ladies also work in the hospital clinics and in the Chest Section.

Few of the Canal Zone’s Gray Ladies, or Gray Men, are able to spend as much time as volunteers as Miss Thoms does but there are a good many who proudly wear the red stripe for 75 hours of volunteer service in a year. Some of the Gorgas Hospital volunteers have to fit that service in after business hours.

The Gorgazette, a monthly, is put out by the Gray Ladies. Mrs. Anona Kirkland interviews Dr. Julieta Burda, an optometrist.



Gray Ladies perform various services in the Gorgas clinics. Mary P. Langalis is assigned to duty in the obstetrical clinic.



During the past
fiscal year,

THE PANAMA CANAL MEANT

WHAT DOES THE PRESENCE of the Panama Canal organization in the Canal Zone mean to the Republic of Panama?

In terms of dollars-and-cents it meant, during the past fiscal year, direct benefits of \$24,000,000 to the Republic's growing economy and uncounted hundreds of thousands of dollars in indirect benefits.

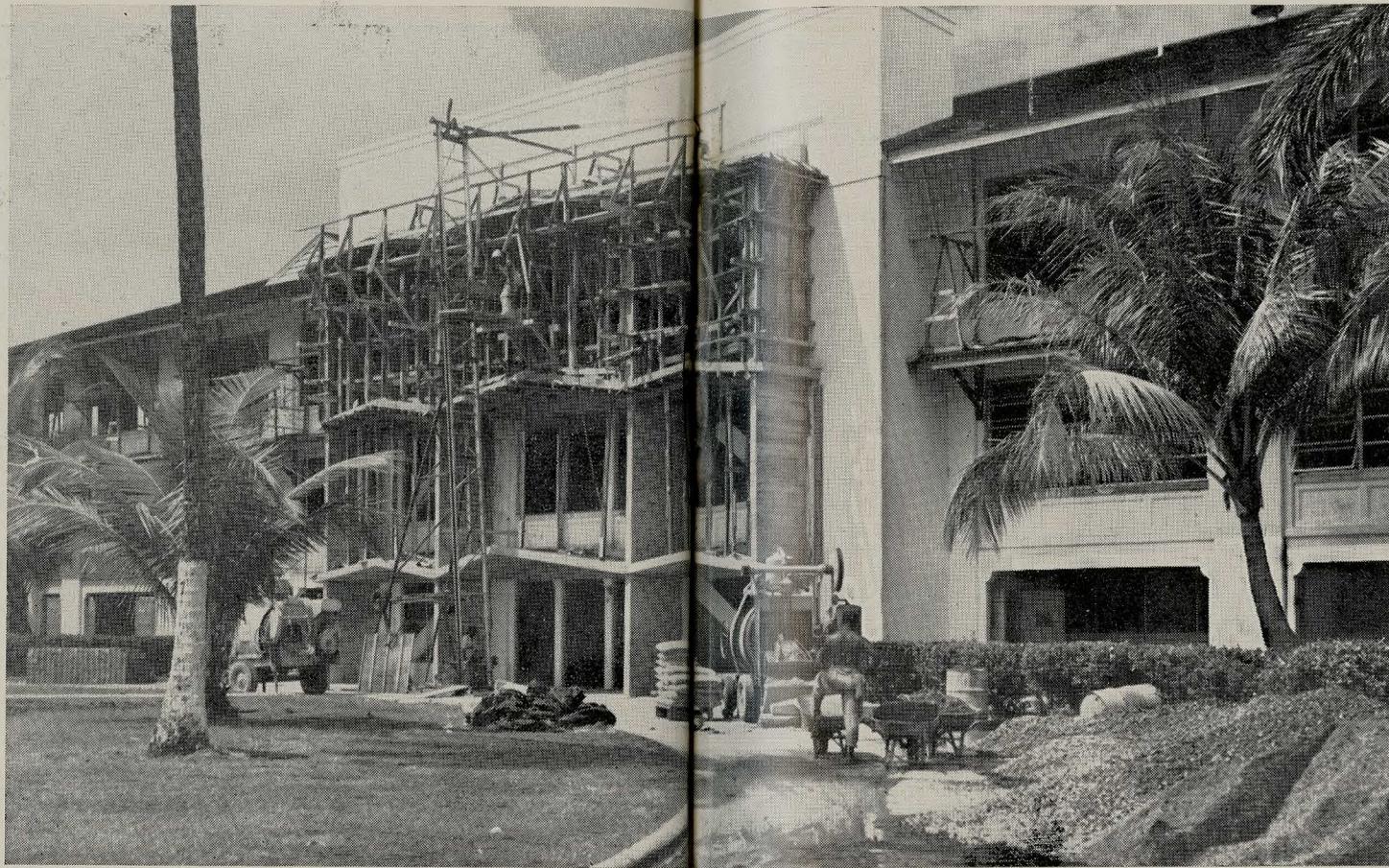
Representing an increase of one and one-quarter million dollars over the preceding year, the figure of \$24,000,000 is made up of actual direct expenditures on the part of the Company-Government.

It is by no means an all-inclusive tabulation. It does not include the \$1,930,000 annuity from the United States to the Government of Panama, the payrolls of other United States Government agencies in the Canal Zone, the purchases in Panama by these agencies, nor those of Canal Zone families.

It does include the Company-Government payrolls of those whose wages are tied to Canal Zone rates, the money value of Company-Government contracts held by local firms, the cost of construction materials bought in Panama by the Company-Government, and the amount spent in the Republic for consumer goods and services.

By far the largest of these subdivisions is the \$17,300,081 payroll for the approximately 10,000 men and women whose salaries are based on Canal Zone rates. The majority of these

The amount of eggs purchased in Panama this past fiscal year was almost double the egg purchases during the previous year.



Jobs for hundreds of workers were available through many contracts in this remodeling of a Navy barracks into the new Cristobal High School.

10,000 lives in the Republic of Panama and much of their take-home pay goes into shelter, food, clothing and other articles of day-to-day living. Those who are citizens of Panama pay income tax to the Republic, whether or not they live there or in the Canal Zone. This year's payroll figure exceeds by slightly over \$100,000 the payroll for these employees for the previous fiscal year.

The next largest subdivision of the \$24,000,000 in direct benefits to Panama's economy comes from contracts awarded by the Company-Government. During the past fiscal year work by local contractors totalled a little over \$5,000,000, about \$1,000,000 higher than fiscal year 1958.

Of the 60 capital-construction contracts for Company-Government work awarded during the past fiscal year, all but three went to local firms. They totalled, in money value, \$4,700,000.

Local contractors were also engaged during the past fiscal year on 26 of the 29 jobs carried over from the previous fiscal year.

In addition to the capital-construction projects, the Company-Government organization awarded 36 so-called "operations" contracts during fiscal year 1959. All of these, which had a money value of \$659,000, were held by local firms. Eighteen "operations" contracts were carried over from the previous year.

Painting, the principal work under the "operations" category, included an open-end contract for the interior painting of quarters, at a total cost of \$168,700.

Last year firms which held Company-Government contracts employed about 1,500 men who live in Panama and spend their money in the Republic.

There is no firm estimate on the amount spent by contractors on construction material obtained in Panama. During the past fiscal year, the Company-Government organization, however, did spend \$229,960 in Panama on materials such as

cement, concrete products, lumber, plywood, tiles, brick, etc. And while they are not produced in Panama, such items as stainless steel tables and cabinets, iron grillwork, and millwork (like doors and door frames) are assembled in the Republic and purchased there for Canal Zone construction projects.

The last of the three major subdivisions of the \$24,000,000 which the Company-Government's presence means in direct benefits to Panama's economy is the purchase of consumer goods and services in the Republic. Last year, these purchases totalled \$1,491,979, approximately \$30,000 more than during the previous year.

Inasmuch as such purchases include meats, seafoods, sugar, beverages, toilet articles, automobile parts and supplies, as well as many other similar items, they have a direct effect on the agricultural and commercial life of the Republic.

A total of \$955,081 of the \$1,491,979 went to buy food and food products in Panama. Outstanding among these were 293,523 dozen eggs, worth \$171,491—enough to make a good many omelettes for every man, woman and child in the Canal Zone. The past year's egg purchases are a striking indication of the growth of some of Panama's industries. They were almost double those of the previous year and almost 25 times those of only five years ago.

Other major food purchases during the past fiscal year were 1,122,918 pounds of chilled beef, at a total cost of \$339,762; 2,228,189 pounds of sugar, worth \$189,261; and 488,000 pounds of brewer's grain, used for cattle feed, worth \$7,320. Additional major purchases by the Company-Government organization during the past fiscal year included beverages worth \$133,588, toilet articles worth \$25,907, and automobile parts and supplies, including batteries, worth \$15,602.

DIRECT BENEFITS TO PANAMA OF \$24,000,000

Aside from these direct expenditures, there is no way of accurately tabulating the many hundreds of thousands of dollars which flow into the Republic from the private buying of the people who live in the Canal Zone and from their individually employing maids and gardeners from Panama.

The sale of every automobile or air conditioner, string of pearls or bottle of perfume, suit of clothes or place setting of silver means a profit to a Panama businessman. When a Canal Zone family buys airplane tickets or makes travel arrangements in the Republic, when a family has dinner at a Panama restaurant, when someone buys lottery tickets or liquor, this money goes to bolster Panama's economy.

And there are other indirect benefits, too. Each year, approximately 4,200 former employees of the Company-Government, most of whom live in the Republic, draw a total of \$1,900,000 in disability relief payments. This money is spent in Panama.

If all of these, tangible and intangible, were added together, the total would far exceed the \$24,000,000 which the Company-Government books show in official expenditures.



These machines in the Payroll Branch process checks for over 10,000 Company-Government employees whose wages are based on C. Z. rates.



remodeling of a Navy barracks into the new Cristobal High School.

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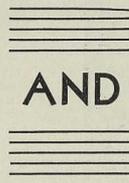
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PROMOTIONS



AND

TRANSFERS

August 15 through September 15

EMPLOYEES who were promoted or transferred between August 15 and September 15 are listed below. Within-grade promotions and job reclassifications are not reported.

CIVIL AFFAIRS BUREAU

Postal Division

James E. Harrell, Richard C. Hogan, to Finance Branch Superintendent.

Division of Schools

Aston M. Parchment, to Senior High Principal, Latin American Schools.

Mrs. Thelma N. Scott, to Clerk-Typing.

Mrs. Frances J. Coffey, Clerk (Typing), transferred from Power Conversion Project.

Carlos M. Antioco, from Dock Worker, Terminals Division, to Heavy Laborer.

David A. Speir, to Senior High School Assistant Principal.

Ruby G. Williams, Mrs. Elenor V. S. Edwards, to Clerk-Typist.

Agatha A. Linton, Kenneth Drayton, to Locker Room Attendant.

Joan A. Lynch, to Heavy Laborer.

Millicent T. Fredericks, to Elementary Teacher, Latin American Schools.

OFFICE OF THE COMPTROLLER

Mrs. Dorothy B. Huff, to Transportation Loss and Damage Claims Examiner, Claims Branch.

Fred L. Raybourne, from Theater Usher, Supply Division, to Time, Leave and Payroll Clerk, Accounting Division.

Kathleen M. McGuigan, to Administrative Services Officer, Office of the Comptroller.

ENGINEERING AND CONSTRUCTION BUREAU

William L. Brooks, from Administrative Assistant, Power Conversion Project, to Contract Administrator, Balboa Bridge Project.

Julian S. Hearne, from Supervisory General Engineer, Engineering Division, to Dredging Supervisor, Dredging Division.

Contract and Inspection Division

Charles M. Brandl, from Civil Engineer, Engineering Division, to Project Engineer.

Frank H. Robinson, Engineering Aid, transferred from Meteorological and Hydrographic Branch.

Bremer L. Jorstad, from Electrician, Dredging Division, to Electrical Equipment Inspector.

Maintenance Division

Kenneth George, to Painter.

Leonidas W. Urriola, to Helper Welder.

Winston V. Bell, to Accounting Clerk.

Engineering Division

Marvin J. Banton, to Supervisory General Engineer.

Norman L. Randall, Jr., to Structural Engineer.

Office of Director

Mrs. Faye C. Minton, to Administrative Services Officer.

HEALTH BUREAU

Gorgas Hospital

Mrs. Gloria L. Pierre, to Clerk-Typist.
Mrs. June A. Breneman, Virginia E. Dignam, to Staff Nurse (Medicine and Surgery).

Division of Sanitation

Margarito Murillo, to Decontaminating Equipment Operator.

MARINE BUREAU

Navigation Division

Jose N. Fuentes, from Palancaman, Meteorological and Hydrographic Branch, to Launch Seaman.

Thomas B. McAndrews, to Pilot-in-training.

Edgar C. Springer, to File Clerk.

Gilberto Escobar, to Clerk-Typist.

Raymond A. Nesbitt, from Substitute Window Clerk, Postal Division, to Marine Inspection Assistant.

Industrial Division

Richard L. Pennington, to Lead Foreman Machinist.

Elmer J. Moolchan, from Signalman, Navigation Division, to Welder.

John Jackman, to Stockman.

Locks Division

Amable G. Palma, to Helper Lock Operator.

Mortimer L. Scantlebury, Malcolm N. Francis, to Stock Control Clerk.

Alejandro Gerald, Cecil J. Dutton, to Timekeeper.

PERSONNEL BUREAU

Maria Q. Suazo, from Clerk-Typist, Canal Zone Central Employment Office, to Clerk-Dictating Machine Transcriber.

Employment and Utilization Division

Gloria M. Rodriguez, to Clerk-Typist.

Olga Y. Johnston, to Appointment Clerk.

Gladys E. Chang, from Clerk-Typist, Housing Branch, to Clerk-Dictating Machine Transcriber.

SUPPLY AND COMMUNITY SERVICE BUREAU

Alfred L. Curtis, to Sales Clerk, Sales and Service Branch.

Clifford A. Springer, to Waiter, Hotel Section.

TRANSPORTATION AND TERMINALS BUREAU

Motor Transportation Division

Maurice L. McCullough, to Supervisory Transportation Operations Officer.

Clifton O. Bailey, to Chauffeur.

Terminals Division

Lionel J. Duncan, to Leader High Lift Truck Operator.

Segundo M. Zambrano, to Winchman.

Philip A. Hale, Jr., to Supervisory Cargo Assistant.

Duncan Rook, to Leader Stevedore.

OTHER PROMOTIONS

PROMOTIONS which did not involve changes of title follow:

Clara A. Zapponi, Nurse Supervisor, Gorgas Hospital.

Albert S. Adams, Engineering Aid, Meteorological and Hydrographic Branch.

Mrs. Adelle W. Cooper, Service Center Supervisor, Sales and Service Branch.

Edward H. Bensen, Marine Traffic Controller, Navigation Division.

Mrs. Hazel V. Welby, Public Health Nurse, Gorgas Hospital.

RETIREMENTS

Retirement certificates were presented at the end of September to the following employees who are listed below, alphabetically, together with their birthplaces, job titles, length of Canal service and their future addresses:

Carl G. Breitenbach, New York; General Foreman, Docking and Undocking, Terminals Division; 12 years, 6 months, 28 days; San Diego, Calif.

Murrel L. Dodd, Oklahoma; Lead Foreman, Road Construction, Maintenance Division; 19 years, 9 months, 1 day; Project City, Calif.

Walter W. Fox, Texas; Automotive Machinist, Motor Transportation Division; 18 years, 5 months, 8 days; Miami, Fla.

Mrs. Thelma S. Rand, Michigan; Nurse Supervisor, Gorgas Hospital; 31 years, 5 months, 28 days; remaining on Isthmus.

Louis T. Schuberg, New York; Pipefitter, Industrial Division; 18 years, 5 months, 28 days; Florida.

Harry M. Witt, Texas; Repair Shop Foreman, Terminals Division; 32 years, 4 days; Texas.

Harold J. Zierten, Minnesota; Assistant Principal, Balboa High School; 30 years; St. Petersburg, Fla.

ANNIVERSARIES

40 Years

Cyril D. Atherley

As a clerk in the Balboa Port Captain's office, he makes daily reports on ship traffic. After working hours he is active in Boy Scouting and Civic Council work.

Gaspar G. Paredes

He was born in Panama City; has never worked for any other Canal unit except what are now known as the retail stores. He now is Stock Foreman in the Furniture Pools Inventory Records.

W. H. Esslinger

W. H. Esslinger, Chief Hydrographer in charge of the Meteorological and Hydrographic Branch, has been answering weather questions for 30 years. But water is his major preoccupation—water translated into reliable facts for the safe transit of ships from ocean to ocean, as well as to meet all Canal Zone needs. Mr. Esslinger was born in Gurley, Ala. He worked with the U. S. Weather Bureau at Broken Arrow, Okla., and New Orleans, La., before his service with the Panama Canal Company began in September 1927.



30 Years

Office of the Comptroller

Herman C. Bayne
Clerk

Engineering and Construction Bureau

Malcolm B. Perch
Oiler
Launcelot A. Peat
Helper Electrician
Jocelyn Decosta
Clerk

Supply and Community Service Bureau

John J. McCalla
Sales Section Head
Ernesto Rodriguez
Laborer
Stanley Green
Leader Laborer
Frank E. Barnett
Clerk
Lucille V. Nelson
Clerk

Health Bureau

David D. Facey
Laborer
Uriah W. Jones
Clerk

Transportation and Terminals Bureau

Gordon H. Thompson
Chief Foreman, Fuel Operations
Urville W. Wallace
Clerk

Marine Bureau

Abraham Daisey
Chief Engineer
Vivian M. Stewart
Laborer
Jose Martinez
Lock Operator Helper

Civil Affairs Bureau

Claude M. Aycock
Elementary and Secondary School Teacher
Thomas Richards
Swimming Pool Operator
Gladston M. Taylor
Cleaner
Curtis B. Darden
Customs Inspector

Office of the Comptroller

Maenner B. Huff
Systems Accountant
John Montanye
Supervisory Systems Accountant
Eduardo C. King
Bookkeeping Machine Unit Supervisor

Transportation and Terminals Bureau

Rupert L. Bovell
Wharfbuilder
Hubert Brown
Helper Liquid Fuels Wharfman
Albert W. Bramwell
Clerk
Isaac A. Price
Yard Locomotive Engineer
Donald C. Parker
Liquid Fuels Dispatcher
John M. Adonican
Supervisory Clerk

Health Bureau

Agnes E. Hannigan
Medical Assistant (Stenography)
Lillie W. Wood
Head Dietitian

Personnel Bureau

Robert D. Kelly
Retirement Clerk

20 Years

Marine Bureau

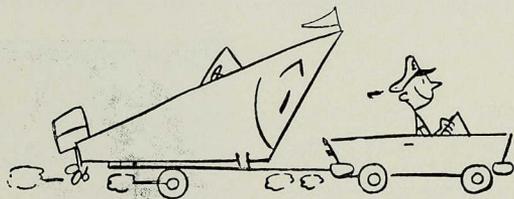
Cleveland A. Dennis
Lock Operator Helper
George J. Booth
Blacksmith
Hopeton W. Simms
Tailor
Ephraim J. Bonnette
Cement Finisher
F. G. Mitchell
Lock Operator Helper
Alfred C. Blackman
Chauffeur
M. DeJ. Chiquilani
Painter
Lloyd A. Gilkes
Deckhand
John F. Meehan
Pilot
Domingo Rodriguez
Launch Seaman
Frank J. Dolan
Control House Lead Foreman
Harry F. Willenbrock
Lock Operations Lead Foreman
Charles J. Sorrell
Control House Lead Foreman
Arnold Jones
Launch Operator
C. T. Swearingen
Control House Lead Foreman
Seymour A. Price
Painter
New York Operations
Andrew H. Page
Night Engineer
Lawrence G. Hofmann
Supervisory Accountant
Thomas Ender
Supervisory Contract Specialist
Engineering and Construction Bureau
Harris W. Hardy
Roofer

Frank E. C. Thompson
Clerk
George M. Clarke
Maintenance Man
Herbert G. Kelly
Leader Electrician
Martin L. McNaughton
Helper Electrician
Harold L. Titus
Truck Driver
Ariff O. Ennever
Maintenance Man
Stephen H. Roach
Saw Filer
Kazimierz Bazan
Electrician
Augustus C. George
Seaman
Harmodio Gutierrez
Leader Boatman
Gordon O. Small
Oiler
Jose A. Griffith
Pipelayer
F. C. Treleven
Paint and Varnish Maker
George Varsier
Water Meter Reader

Supply and Community Service Bureau

Winston S. Johnson
Warehouseman
Ivan K. Wade
Service Station Operator
Victor E. Bailey
Watchman
Fitz H. Grant
Clerk
Victor Morris
Laborer
Percival Dowman
Warehouseman
George M. Standard
Laborer
Orton Harding
Laborer
Enid Hyacinth
Clerk

THE SAFETY ZONE



BOAT TRAILERS

WHILE SPACEMEN shoot for the moon, American earthlings are beating a super-octane track to the water. By the time they launch jet-styled boats, don water skis, "lungs," and goggles and grab fish spears, they look like something spacemen might meet on the moon. But they're having fun.

Biggest boon to the outboard skipper who can't afford, doesn't want or can't have a mooring spot for his craft is the boat trailer. It will get his boat from the back yard to the water. If you are now—or plan to be—an outboard skipper, you should know these basic facts of boat trailing.

A Perfect Match

MATCH YOUR TRAILER to your boat and your car. Look for the Outboard Boating Club of America weight capacity rating and if your boat comes within 100 pounds of it, for added safety, get the next larger trailer. Remember, you'll probably load your boat with a motor, luggage and extra gear.

Equipping And Loading

CHECK YOUR TRAILER with requirements of the Canal Zone vehicle laws, par-

ticularly with regard to lights, brakes and safety chains or cables.

Ready—Contact!

HOW TO GET your boat trailer hitched without later losing it on a hill or down a river bank.

★ For maximum safety use a frame hitch instead of a bumper hitch. The Society of Automotive Engineers recommends use of frame hitch for trailers with a gross weight over 2,000 pounds, but says a bumper hitch is adequate for trailers under that weight.

★ All couplings should be securely mounted by bolting, welding, or riveting. Don't take a chance on a make-shift arrangement.

★ The SAE also recommends that couplings be equipped with hand locks which won't come apart during travel, and that the hitch be designed so it can be disconnected regardless of angle of trailer to towing vehicle.

(This is the first of a two part series on small boat safety.)

ACCIDENTS

FOR
THE MONTH
AND
THE YEAR
AUGUST



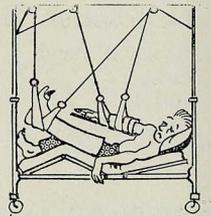
FIRST AID
CASES

'59	'58
215	176
1,842	3,278



DISABLING
INJURIES

'59	'58
8	5
86	85



DAYS
LOST

'59	'58
6,065	130
8,900	14,704

ALL UNITS
YEAR TO DATE

CANAL HISTORY

50 Years Ago

DESPITE the heaviest rainfall in the Cut since work began, excavation of the Panama Canal passed the halfway mark 50 years ago this month, when the 87,494,537 cubic-yard mark was reached. At Empire there were 21.23 inches of rain during the month; Pedro Miguel had 10.55 inches in 10 days; Cristobal was drenched with 6.03 inches in a little over an hour and a half. At Cucaracha one workman was killed and seven

others stunned when lightning hit the signal tower, and at Ancon the heavy rains started a slide below the new rock-crushing plant on the west slope of the hill.

25 Years Ago

In a surprise maneuver, 88 ships of the United States Navy, ranging from aircraft carriers to submarines, converged on Cristobal for immediate transit late in October 1934. Led by the cruiser *Dallas*, the fleet began to transit less than two hours after arrival in Limon Bay. Although there were heavy fogs in the Cut and minor accidents at the Locks—where the carriers *Lexington* and *Saratoga* bowled over three lampposts apiece—the fleet finished the transit in 42 hours.

10 Years Ago

PRESIDENT Harry S. Truman signed two bills 10 years ago this month providing pay raises for several hundred Panama Canal employees. Due for higher salaries as of November 1 were classified employees, firemen, policemen, and teachers.

A fleet of trucks shuttled back and forth between Balboa Heights and the Civil Affairs Building on October 27, 1949, as the Canal Zone Library moved its 100,000 volumes to their new home.

One Year Ago

SOME 9,000 non-U.S. citizen employees were blanketed into Civil Service retirement a year ago this month. At the same time the last of 4,600 retirements under the 20-year old Disability Relief Act took place.



THE TURBULENT FIFTIES

This is the third and last of a series of articles on the Turbulent Fifties, the frenetic decade between fiscal years 1959 and 1960. Again this month the story is told mostly with pictures—this time on the capital improvements of the past ten years, particularly those on the waterway itself.

THE TURBULENT FIFTIES were not only a time of innovations, some not always welcome, and of transitions; they were also a period of expedited improvements of most of the elements that make up our existence. At no time since the end of the construction period has so much money been laid out in a ten year period as it was during the past decade. Much of this spending was due to the age and decrepitude of quarters and facilities which dated back to the construction days.

Between fiscal years 1950 and 1960, the Canal organization spent \$86 million on capital improvements.

In layman's language, a capital improvement is a major expenditure which results in some betterment. It differs from maintenance in that the latter

means simply keeping what you have in working order.

A new car is a capital improvement for the average family. So are new curtains for the living room. A paint job on the old car, to keep it from being eaten up by rust or to improve its appearance, is not. Neither is a dye job on the faded old curtains.

A capital improvement, a little more technically, is something which has the effect of increasing the capacity, efficiency, span of life, or economy of operation of an existing fixed asset and which brings improved morale.

This immense outlay of money paralleled the greatest increase in traffic in the Panama Canal's history. During the fiscal year which ended last June 30, this figure had jumped to 9,718—an increase of approximately 78 percent. It was natural, then, that many of these \$86 million should go into capital improvements for the waterway itself (page 18) and the Locks (page 20).

Ships were getting bigger and bigger and from all indications they are continuing to do so. Bigger ships need more room for safe sailing. Together, bigger ships and more ships meant that

the Panama Canal, and especially the Cut, was going to have to be widened and straightened and turned into a two-lane operation.

Much of the Locks equipment was obsolete. Some of its cranes, for instance, were of the 1912 vintage. Corrosion was threatening metallic structures. Something had to be done to permit the periodic overhauls to be accomplished in much less than the time they had previously taken.

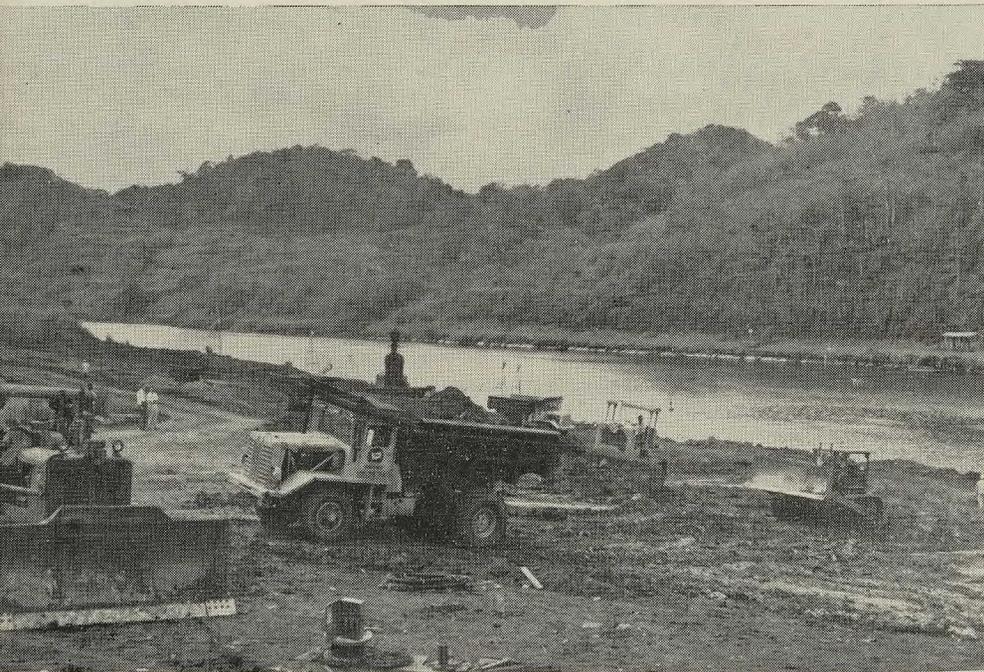
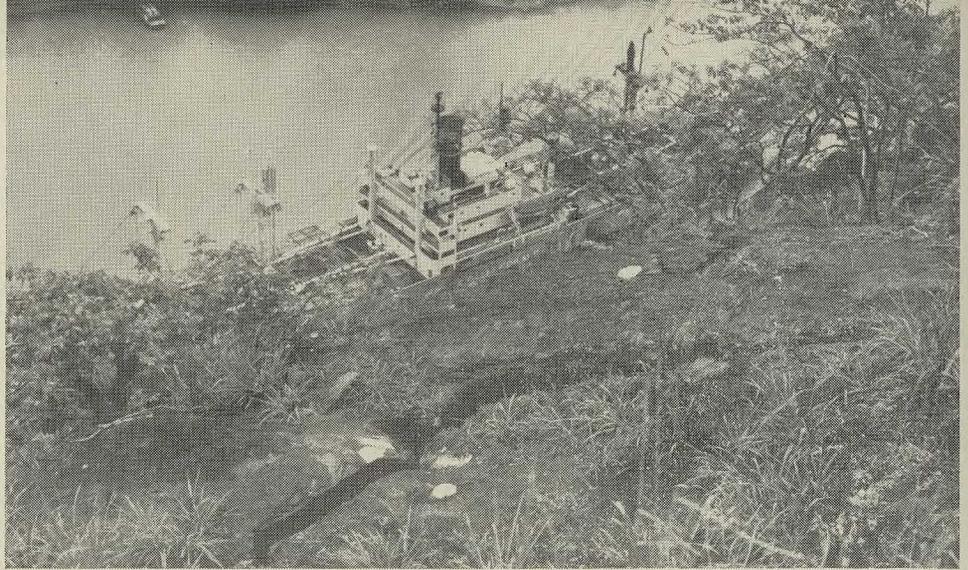
Many of the Canal's buildings had had no major improvements since the Canal was first opened to traffic, or soon thereafter. Streets were too narrow for the increasing traffic. Sewage systems needed a thorough going-over.

Capital expenditures can cover a multitude of things. The 1955 budget included two typical items: Widening of a portion of Gaillard Cut to 500 feet at a cost of \$1,213,300, and the replacement of a sterilizer and hot water heater for the Division of Veterinary Medicine at a cost of \$50.

Whatever the amount of the capital expenditure, it meant, in some way, better operating and working and living conditions for the Canal force.

Speedy steps were necessary when a deep crack was discovered on Contractors Hill during the Turbulent Fifties.

The hill was terraced and some widening done at a cost of \$4,000,000.

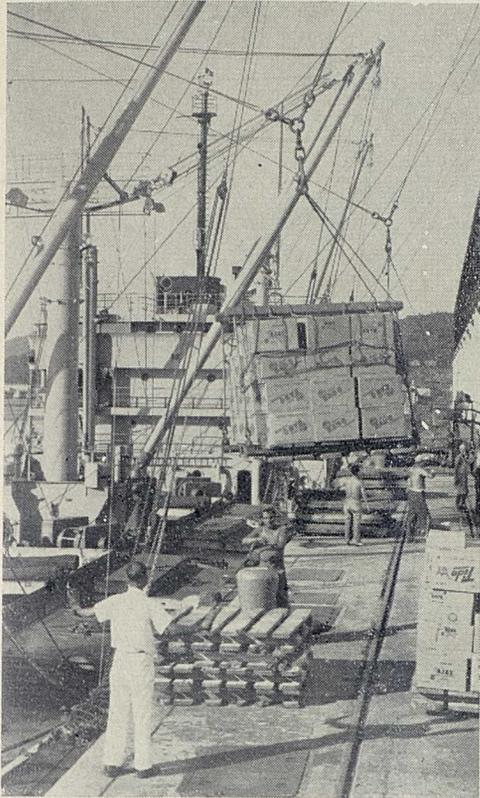


Almost continuously through the past decade, dredges, bulldozers and other equipment have been at work along the banks of the Canal, turning the waterway into a two-way street for traffic.

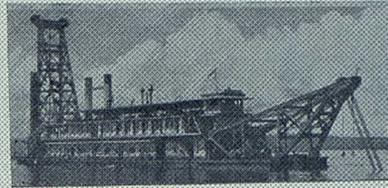
As the Turbulent Fifties ended work was well under way on the \$20,000,000 bridge across the Canal, a Treaty commitment. This is the west approach as grading was going on.



THE TURBULENT FIFTIES



The Fifties were an active period. The piers got new cargo equipment. Big shovels worked on excavation.



ALTHOUGH MANY OF THE capital improvements to the waterway proper are not obtrusive, anyone who transits the Panama Canal these days can see that things have been going on.

He might not know that part of the Cristobal anchorage has been deepened to 40 feet—a \$2,475,000 project—or that the electrical distribution system on the piers at Cristobal and Balboa has been modernized—another \$1 million or so—or that the piers had new cargo-handling equipment—at a cost of some \$125,000, but he could see that the Canal itself has been and is still being widened in its most obviously narrow spots. And at the Pacific end, even the most casual observer can now trace out the line of the \$20 million high level bridge.

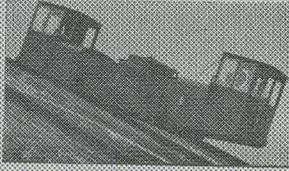
The Turbulent Fifties saw the end of a Canal improvement project which dated back to 1934, although in a sense this project is now continuing. It called for the widening to 500 feet of Culebra Reach in Gaillard Cut to eliminate danger from slides and provide increased maneuverability for shipping. During the first part of the past decade expenditures on this project (which cost in all approximately \$18 million) totalled close to \$4 million.

Another \$4 million was spent, in the mid-fifties, to cut back the steep rock face of Contractors Hill which was in imminent danger of breaking off and toppling into the Canal far below.

As ship traffic increased during the Turbulent Fifties far beyond any estimates, it became evident that immediate steps would have to be taken to enable the Canal to handle more and bigger ships. In 1958 and 1959, over \$1,600,000 was budgeted for the removal of the Paraiso Curve, one of the trickiest sections of the Canal, and another \$1,350,000 went into the 1959 budget for a mooring station at Paraiso.

As the Turbulent Fifties ended, additional improvements were underway. These included a system of lighting in the Cut which would allow for night transits of practically all vessels, a new ship traffic control system, and drilling preparatory for further widening of the narrow reaches of the Cut. At Contractors Hill, contractors were again cutting back the rugged face of the hill while near the Canal level equipment as big as six-cubic yard bucket shovels and a 12-cubic yard dredge were at work on the Paraiso-Cucaracha Reach.

THE TURBULENT FIFTIES



INASMUCH AS THE Panama Canal Locks quite appropriately hold the key to Canal traffic, a good part of the \$86 million spent on capital improvements in the past years has gone to these stairsteps over the mountains. Other than the disappearance of the emergency dams, an original part of the Locks, few of these improvements are visible.

As the Turbulent Fifties began, the Locks were just embarking on a six-year, \$5 million program to modernize their electrical distribution systems. For the most part, the transformers, high voltage and protective equipment dated back to the opening of the Canal. Much was obsolete and replacement parts unavailable. This project was begun in 1949, completed in 1955.

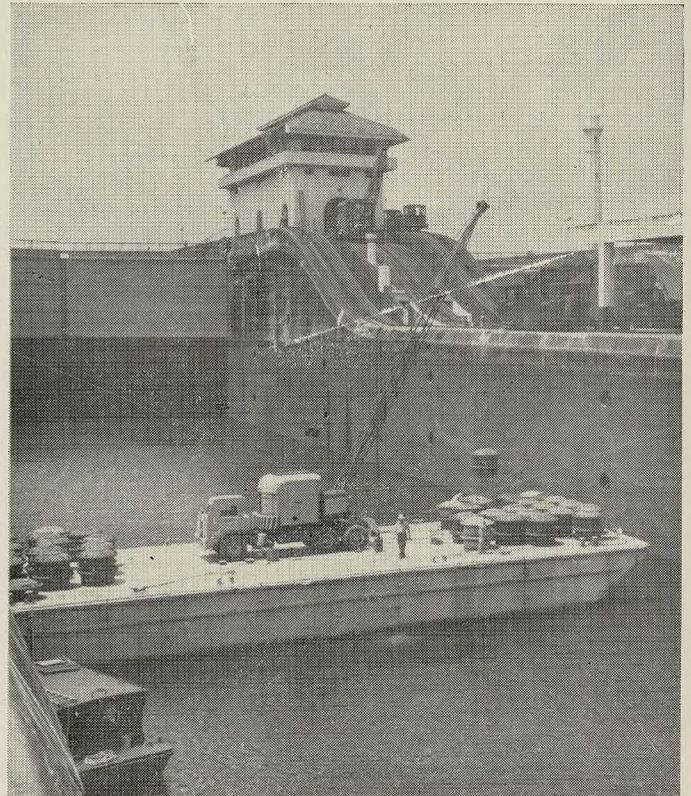
Another major expenditure for the Locks was the replacement of the vehicular crossing at Gatun. Designed originally to accommodate a limited number of official vehicles, it became, as the years went by, a bridge for anyone who wanted to cross and an important link with Colon for the people of such villages as Salud and Piña. In 1953, at a cost of approximately \$200,000 the old crossing was replaced by swinging spans.

The same year, the Locks Division was authorized to spend \$600,000 on ten 20-ton cranes to replace 13 such machines, some of which were over 40 years old.

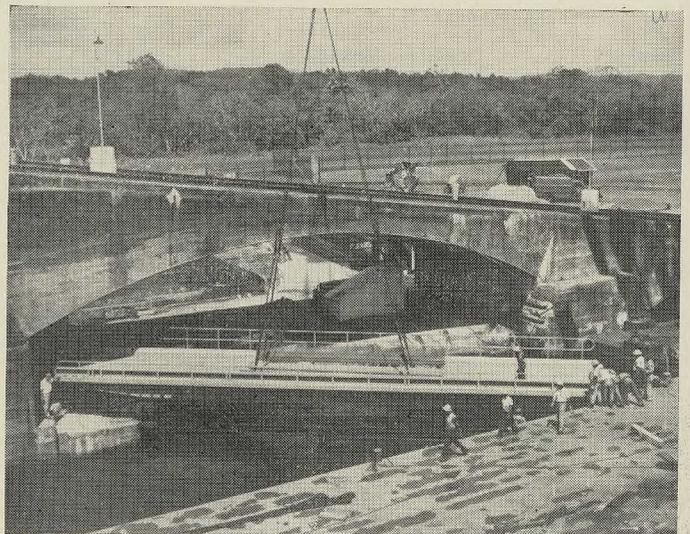
In the mid-fifties, the Locks began what was known as Phase I of a program to speed up transits during overhaul. This three-year, \$780,000 program began in 1954. It provided means for unwatering and overhauling valves in the center wall culvert while both locks were in use. When it was completed it increased the dependable capacity of the Locks by six lockages a day.

One of the more costly of the Locks improvements, during the past ten years, was the conversion of all frequency-sensitive machinery for 60-cycle current. The job, started in 1956 and just completed, cost in the neighborhood of \$2,980,000.

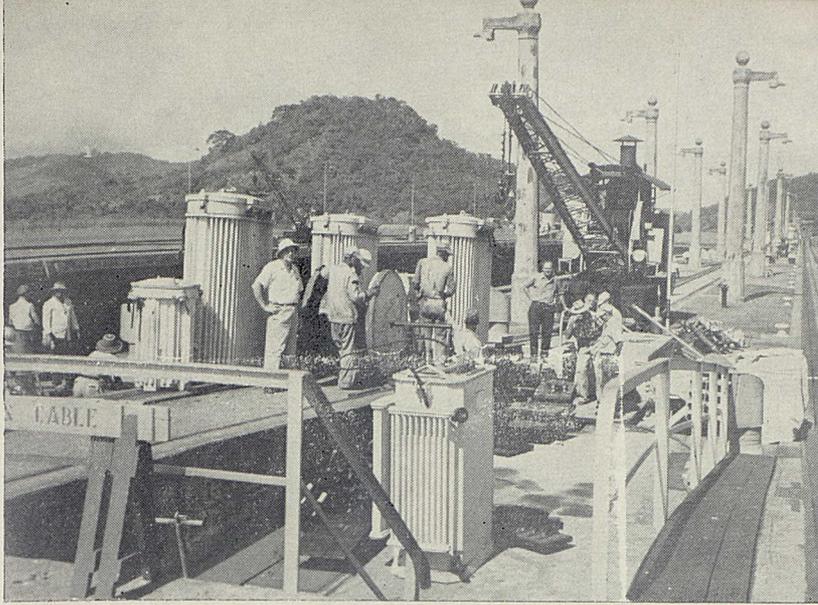
As the decade ended, two other major improvements were about to become a reality. Bids were asked for more powerful towing locomotives and for daylighting for the Locks, to permit 24-hour operations.



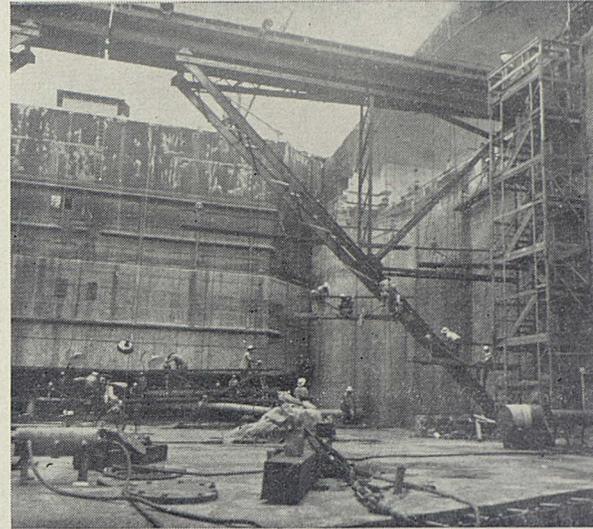
Plugs like this installed in the culverts at the Locks speed up the overhaul, increasing the dependable capacity by six vessels per day.



The old vehicular crossing at Gatun Locks was replaced by swinging spans, one of which is being set into its place by a powerful crane.



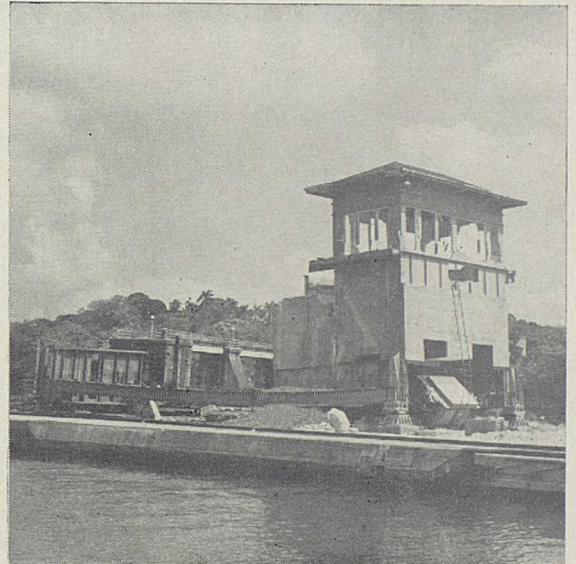
Electrical distribution systems were revamped at all of the Panama Canal's Locks in the first half of the past ten years. The six-year project cost \$5 million.



Installation of cathodic protection was a costly project during the past decade. It helps prevent corrosion.

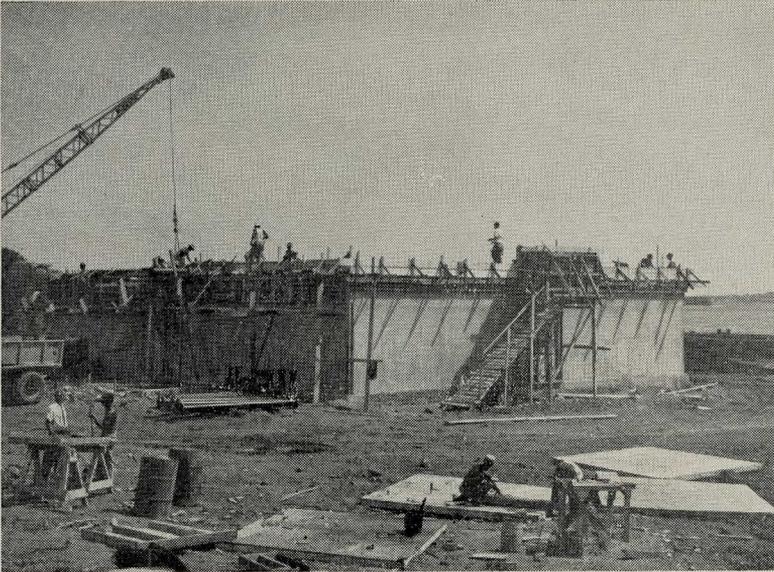


Experiments during the last part of the decade showed that the Locks could be lighted to prevent shadows, improving the handling of transiting ships.

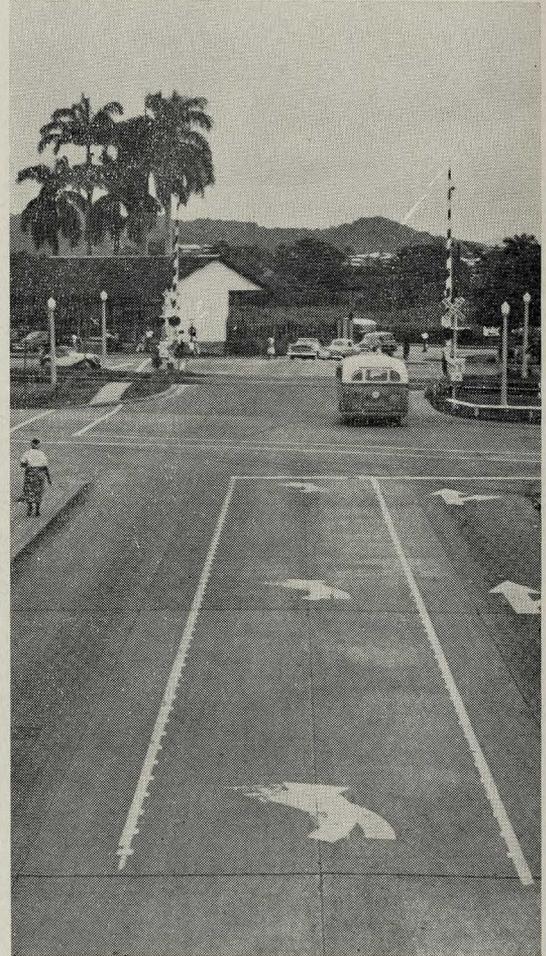


The emergency dams, part of the original design for the Canal were removed during the mid-fifties.

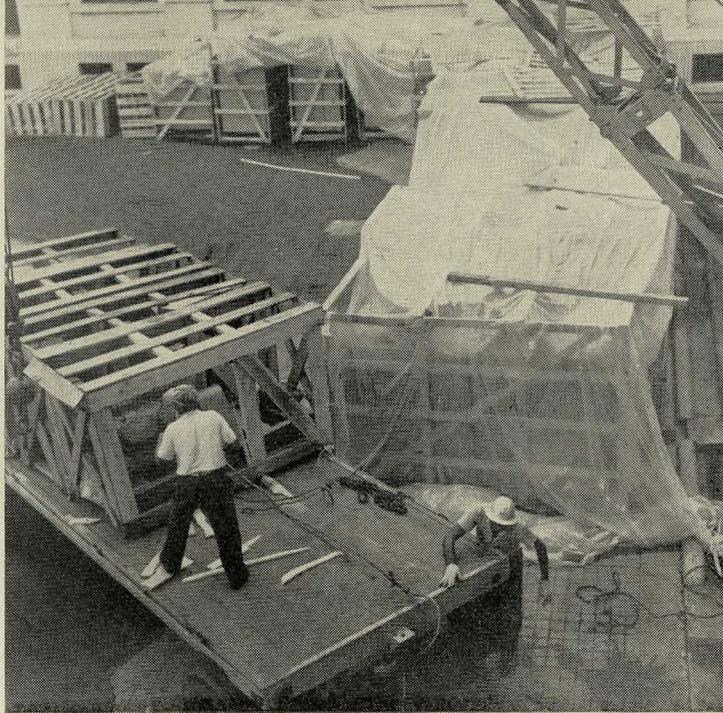
THE TURBULENT FIFTIES



The sewage disposal project was one which continued almost throughout the past ten years. The Rainbow City sewage disposal plant, above during its construction, and the laying of new mains in Balboa were two important parts of this multi-million dollar project. Some work is still to be completed.

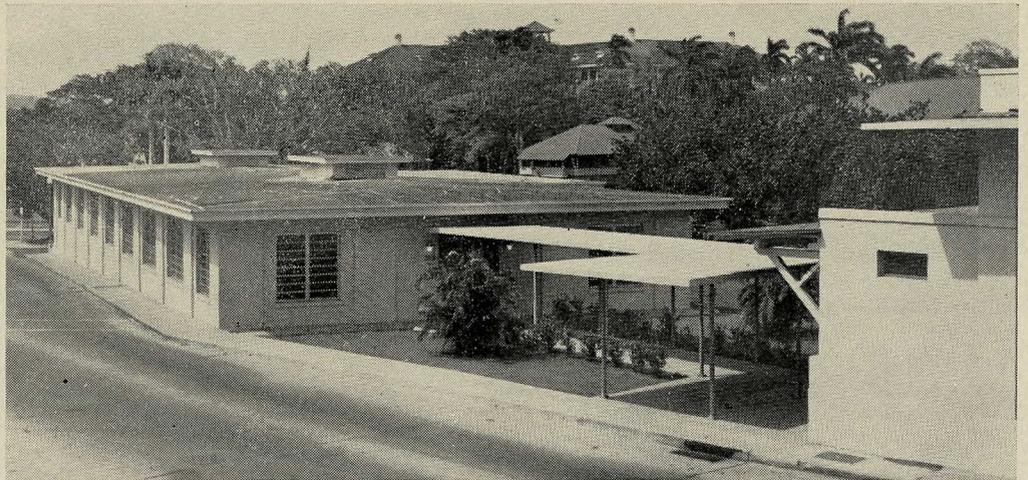


The Canal Zone highways moved out of the horse-and-buggy stage in the Turbulent Fifties. Much wider streets and traffic lights prevent congestion.



With the advent of 60-cycle power, air-conditioning became a possibility for the Canal's office buildings. Shrouded in protective coverings against the rain, these great machines were ready for installation at the Administration Building.

Office buildings went modern in the past ten years. The old Ancon commissary became headquarters for the Personnel Bureau.



WHILE ALL OF THESE DOLLARS were being invested in the waterway proper and its terminals, things on land were not being neglected. In addition to the \$45 million which went for power conversion, new houses, new schools, improvements to the hospitals, retail stores and service centers—described in the previous "Review"—many more millions were also being spent on other capital improvements.

Major among the improvements of this nature was a sewage disposal program, started in 1950 and originally estimated at over \$9 million. This figure was later reduced considerably when a portion of the costs was allocated to the military services. The sewage disposal program was planned by a firm of consultants and encompassed both sides

of the Isthmus. It involved the construction of sewage treatment and disposal plants, pump stations and new mains.

The Canal Zone's highways, too, came in for attention during the past decade. Well over a million dollars has been spent in the past ten years in widening and repaving much-travelled thoroughfares. Among these were Gaillard Highway and La Boca Roads on the Pacific side, and Bolivar Highway and Espave Avenue on the Atlantic side. Traffic lights, a novelty here ten years ago, became commonplace.

Central office buildings, such as the Administration Building at Balboa Heights—over \$1 million was spent here—and the Terminals Buildings at Cristobal—this was a \$50,000 project—were modernized, and work on other public

structures is either planned or underway. Air-conditioning made working hours a lot more pleasant for hundreds of Zonians and others will soon be enjoying it.

Some buildings were remodelled for purposes far removed from their original use. The old Ancon commissary became the up-to-date and colorful headquarters for the Personnel Bureau. In what used to be the restaurant section of the old Ancon Clubhouse, payroll machines are now busily at work.

The \$86 million which has been spent in capital improvements during the Turbulent Fifties did much to make the confusion and change of these years more bearable. That Dreary Decade is now over and done with. One can hope that the improvements, capital and otherwise, will continue.

SHIPPING

New Feeder Service

A NEW FREIGHT service which will link British and Continental ports with the Canal and the west coast of Central America is being started this month by the British Royal Mail Lines and the Holland America Line. Four new freight ships, running for what is to be known as the Central American Line, will make fortnightly trips from London and after transiting the Canal will call at ports on the Central America west coast as far north as Guaymas, Mexico. The service is being inaugurated by the *Somers Isle*, which sailed from Europe September 28 and is due at Cristobal in mid-October. The *Somers Isle* will be followed by the *Sommaroe*, *Eleuthera*, and the *Cienfuegos*, all freight ships formerly on a European-West Indies service.

"Bremen" Making Cruise

THE NORTH GERMAN Lloyd Liner *Bremen*, largest vessel in the West German merchant marine, will make three trips to Cristobal during the coming winter cruise season, it has been announced here by the Continental Shipping Corporation, agents for the line. The German vessel, which entered the North Atlantic service in July, will call at Cristobal January 25, February 14, and March 3 as part of her regular Caribbean cruise schedule.

This will be the first visit to the Canal of a North German Lloyd Line

TRANSITS BY OCEAN-GOING VESSELS IN AUGUST

	1958	1959
Commercial.....	777	888
U.S. Government.....	13	15
Total.....	790	903

TOLLS*

Commercial.....	\$3,668,186	\$4,114,427
U.S. Government..	57,763	86,331
Total.....	\$3,725,949	\$4,200,758

CARGO (long tons)

Commercial.....	4,086,206	4,452,454
U.S. Government..	78,627	104,819
Total.....	4,164,833	4,557,273

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

Bremen since 1939 when her famous predecessor, the 52,000-gross-ton *Bremen*, made the southbound transit as the largest commercial ship ever to make the Canal passage. This record still stands.

The new *Bremen*, the fifth in company history to carry that name, is the former French liner *Pasteur* which was used as a troop transport during the war. She was purchased from France and rebuilt at the Bremer Vulkan yard. Including the purchase price, the liner cost \$25,000,000. Air-conditioned throughout and equipped with stabilizer fins for smooth sailing, the *Bremen*

is designed to return the North German Lloyd to its pre-war position as a luxury ship operator.

New Commodore

THE NEW ZEALAND Shipping Company represented here by Norton Lilly and Co. has announced the appointment of Capt. Robert G. Rees, skipper of the company's passenger liner *Rangitane*, as the new Commodore of the New Zealand Shipping Company fleet. Captain Rees, who has been making regular visits to the Canal for the past several years aboard the *Rangitane*, made his first transit as Commodore last month. A veteran employee of the company, Capt. Rees replaces Capt. W. E. Lettington, skipper of the New Zealand line's *Rangitiki* who retired from service last month.

Grace Fleet Increases

THREE NEW CARGO passenger container-ships are being built by the Grace Line for the Atlantic-West Coast of South America service. Bids on the new vessels will be opened in Washington this month and the ships should be ready for service by 1962.

Built under the terms of Grace's subsidy contract with the Federal Maritime Board, the new ships will be the latest word in passenger cargo design. They will have an approximate gross of 10,000 tons, a speed of 20 knots, and accommodations for 57 passengers in air-conditioned staterooms. The ships will stop at Canal ports on their way to and from Buenaventura and Guayaquil. Panama Agencies, local agents for Grace, has announced that arrangements will be made here for the handling of container cargo.



Norwegian Ore Ship

THE "SIGBORG," a Norwegian-registered ore ship which carries 35,000 tons of iron ore on each trip from San Juan, Peru, to Baltimore has been a regular Canal customer since early this year. Together with her sister ship the *Sigvik*, the super-carrier makes the Canal transit either north or southbound on an average of twice a month. The *Sigborg*, the former *Rio Grande*, was built in Germany in 1958, has an overall length of 657 feet and a beam of 87.3 feet. She is operated by the Transworld Carriers and is owned by Berge Sigval Bergesen. Payne and Wardlaw are the agents here.

