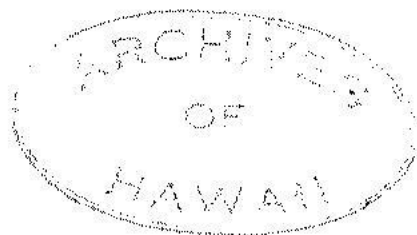

REPORT TO THE
GOVERNOR
TERRITORY OF HAWAII
BY THE
SUPERINTENDENT
OF PUBLIC WORKS
FOR THE YEAR ENDING
JUNE 30, 1937



PORTER PRINTING COMPANY, LTD.
HONOLULU, HAWAII

August 2, 1937.

Honorable Joseph B. Poindexter
Governor of Hawaii,
Honolulu, T. H.

Sir:

Herewith is submitted the report covering activities of the Department of Public Works, including the Territorial Highway Department, for the period July 1, 1936, to June 30, 1937.

Largely as the result of contributions from the Federal Government, it will be noted that activities of this Department, including highway extensions, improvements and maintenance, airport development and various accompanying operations entailed the expenditure of a new all time high record total of \$2,376,872.61, as compared with expenditures for the 1935-1936 fiscal period of \$1,694,871.76, or a grand total of \$4,071,744.37 for the 1935-1937 biennium, as compared with total expenditures of \$2,516,682.07 for the 1933-1935 biennium.

The largest item of expenditure during the period was that of \$1,065,776.75 from the National Recovery Highway fund, which aided materially in the construction or realignment of a total of 18.879 miles of completed improved highways during the year throughout the Territory. This mileage was segregated by islands as follows—Oahu, 4.882; Maui, 5.668; Molokai, 1.476; Hawaii, 2.959; and Kauai, 3.894. Under construction on June 30, 1937, and uncompleted was a total of 21.843 miles of these highways, segregated as follows by islands: Oahu, 14.377; Hawaii, 6.814, and Kauai, .752.

While the Territorial Highway Department formed the most important of the activities of the Public Works Department during the period, as far as expenditures were concerned, the latter department was charged also with construction and maintenance of public buildings, grounds, and airports, supervision of explosives, approval of all plans of county works utilizing Territorial credit in the flotation of bonds, and the Superintendent of Public Works also is ex-officio chairman of the Board of Harbor Commissioners, Secretary of the Territorial Board of Disposal, member of the Territorial Planning Board and of the Honolulu Board of Water Supply.

Expenditures of the Department were divided as follows:

Department of Public Works—

General Funds	\$ 90,301.18
Loan Funds	107,910.83
Revolving Funds	4,976.71
Special Funds	1,350.96
Trust Funds	4,686.48

\$ 209,226.16

Territorial Highway Department—

Construction Funds—

Loan	\$ 27,380.40
Special	86,815.01
Trust	639,492.92
National Recovery Highway	1,065,776.75
Federal Aid Contributions	211,359.69
	<hr/>
	\$ 2,030,824.77

Among the developments of the year was the visit to Hawaii of Mr. Robert L. Campbell, district advisor, airport section, Bureau of Air Commerce, Department of Commerce, for an intensive survey of civilian airports in the Territory. As the result of Mr. Campbell's recommendations designed to bring these fields in the Territory up to the present standards of the Department of Commerce, the Territorial Legislature appropriated \$200,000 to the Department of Public Works for the purchase of equipment, materials and supplies with which to carry out those recommendations. Prior to June 15, 1937, this work had been done largely by the Works Progress Administration, under Administrator Frank H. Locey, the organization which still supplies the labor for work on the airports. The 1937 Legislature also set up a special Territorial airport fund in which will be placed hereafter the proceeds from the fuel tax levied on gasoline for aviation use, estimated at \$15,000.00 annually, which is to be expended on improvement and maintenance of Territorial airports. It is anticipated that this new fund will be of great assistance to the Department in the future maintenance of these airports, once they are extended and constructed to meet the requirements of the Department of Commerce.

With the assistance of Public Works Administration grants the Department completed construction and equipping of three Territorial buildings with a fourth approximately 75 percent completed on June 30, 1937. Completed were the Honokaa, Hawaii, and Kaunakakai, Molokai, libraries, for which Territorial appropriations of \$10,000.00 each were available, plus a PWA grant of \$15,205.00 on both structures; and the Lihue Court House, for which Territorial funds of \$50,000.00 and a PWA grant of \$38,097.00 were made available. Soon to be completed is the Wailuku, Maui, armory under a Territorial appropriation of \$50,000.00 and a PWA grant of \$40,650.00.

Completed with purely Territorial funds during the year were the boiler house improvements, fire protection system and laundry building at the Waimano Home.

Plans have been drawn and applications made for PWA grants on three other Territorial structures—the new Territorial Office building for which the 1937 Legislature made \$200,000.00 available, with an application pending for a PWA grant of approximately \$81,000.00;

structures at the Boys' Industrial School under a Territorial appropriation of \$75,000.00 and a PWA grant application pending for \$60,000.00; and improvements at the Girls' Industrial School under a Territorial appropriation of \$35,000.00 and a PWA grant application pending for \$25,000.00.

This Department would be remiss if it did not take this opportunity to acknowledge with thanks the hearty cooperation it has received at all times during the year from such officials as Jack Moskowitz, Principal Highway Engineer, Bureau of Public Roads, Department of Agriculture, Lieutenant Colonel R. C. Crawford, U. S. A. Corps of Engineers, acting PWA administrator for Hawaii, and Administrator Locey of the Works Progress Administration.

The report covering the activities of the Board of Harbor Commissioners has been submitted under separate cover.

Respectfully,

LOUIS S. CAIN,
Superintendent, Department of Public Works

AVIATION

During the past year, Mr. Robert L. Campbell, District Advisor, Airport Section, Bureau of Air Commerce, was assigned to report on the airports of the Territory of Hawaii, whose report to the Governor of the Territory of Hawaii, under date of January 7, 1937, recommended various improvements on the airports throughout the Territory.

The Bureau of Air Commerce, by its representative Mr. Campbell, in conjunction with the WPA, carried on grading and paving of the different airports until June 15, 1937, at which time the construction of airports was taken over by the Department of Public Works through Act 228, S. L. 1937, making available the sum of \$200,000.00 for the improvements thereof in conjunction with the WPA, of which \$89,000.00 was made available as of June 15, 1937.

Section 2021, Revised Laws of Hawaii 1935, was also amended by creating a Territorial Airport Fund whereby the gas tax collected from airplane use is to be used for the construction, repair and maintenance of Territorial airports or Territorial hangars. This fund will amount to approximately \$15,000.00 per year to be expended under the Superintendent of Public Works.

TERRITORIAL AIRPORTS

There are eight airports owned and controlled by the Territory of Hawaii: two on the island of Hawaii, two on the island of Maui, one on the island of Molokai, one on the island of Oahu and two on the island of Kauai, where a new field is proposed, for which negotiations for the purchase of the land have been started.

The Inter-Island Airways, Limited, uses all of the Territorial fields and five of them on regular daily schedule with passengers and mail. A rental charge is made for building areas occupied by them. Two hangars at John Rodgers Airport are occupied by private planes and aviation schools.

The Hilo airport, when completed, will consist of three runways—3,500, 3,300 and 3,500 feet long, with suitable reserve space for the approach of planes. Paved landing-mats, 300 feet wide, with 100 feet grading on each side of the mat, will insure the safe landing of planes.

The new construction will require the moving of the Inter-Island Airways, Limited, office and hangar to a new location on the field.

Grading on the field as of June 30, 1937, was approximately 20% complete—approximately 2,500 square yards of asphalt pavement was laid.

The WPA from September 1, 1936, to June 30, 1937, expended \$7,055.49 for materials, \$27,093.23 for labor, or a total of \$34,148.72.

The Upolu Point airport consists of one large runway in the shape of an hour-glass 3,500 feet long. This field, on account of its location on sloping ground, required heavy grading, which is about 50% complete, no paving having as yet been laid.

The U. S. Army Barracks and Radio Station will be required to

move to a new location, they having procured a new site.

The runway of the Upolu Field is to be paved 300 feet wide at center, 500 feet wide at each end with 100 feet of grading on each side of the runway. The WPA from September 1, 1936, to June 30, 1937, expended \$13,708.21 for materials, \$7,221.72 for labor, or a total of \$20,929.93.

The Maalaea Airport, on the Island of Maui, is a dangerous field on account of its proximity to the mountains and the short runways. While the Territory has maintained this field during the past year, the Inter-Island Airways, Limited, maintaining an office, it is proposed to exchange this field with the Hawaiian Commercial and Sugar Company for a new location at Pulehu, about three miles to the Northeast, where a suitable site of three hundred acres is available. Three runways will be provided: 4,000, 4,000 and 3,200 feet in length, to be paved 300 feet wide with 100 feet of grading on each side of the runways. Construction has not been started as yet, awaiting the transfer of the land. The WPA established a wind-gauge and expended, from September 1, 1936, to June 30, 1937, \$312.68 for materials, \$350.80 for labor, making a total of \$672.48.

The Hana Airport has been enlarged by eliminating a very bad hazard projecting into the center of the field consisting of about one-half acre, which was accomplished by the Territory of Hawaii acquiring the land and the WPA clearing, grading and fencing this section. This field should only be considered an emergency field, although the Inter-Island Airways, Limited, will make stops for passengers. Rock pinnacles on the South end of this field should be eliminated so as to give a safe approach from that direction as well as additional grading along the West side of the field. This field is maintained by the Territory of Hawaii, and a caretaker is employed.

Molokai Airport consists of three runways—4,000, 2,600 and 2,600 feet long, 300 feet wide with 100 feet of grading on each side. The WPA has granted approximately 50% of the runways at a cost of \$5,982.15 for materials, \$6,329.75 for labor or a total of \$12,511.90.

The U. S. Army maintains a radio station and the Inter-Island Airways, Limited, a Station House at this field.

John Rodgers Airport houses the main shops of the Inter-Island Airways, Limited, and is patronized extensively by amateur fliers. The Territorial Airport Superintendent, Emil Williams, resides at this field. Two hangars house the planes used by private fliers and two aviation schools.

A concession is rented in a portion of the cottage of the Territory for serving lunches and soft drinks. This office has requested the Commissioner of Public Lands to procure some 66.22 acres as an enlargement to the present field, which will give two runways, 4,000 and 3,500 feet long, to be paved 300 feet wide with 100 feet of grading on each side of the runways. Considerable work has been done by the WPA in the extension of the runways at a cost of \$8,733.14 for materials,

\$24,973.33 for labor or a total of \$33,706.47. This department has applied 100,000 gallons of crude oil from Pearl Harbor on the runways for laying the dust. No immediate large construction is contemplated on this field until a location of a Seaplane basin is finally decided upon. Dredgings therefrom, if located near the John Rodgers Airport, will be used for the improvement of the field.

Port Allen Airport consists of two runways, 3,600 and 2,600 feet long and approximately 89% of the grading has been completed with about 25% of a stabilized base course laid. The WPA has expended up to June 30, 1937, \$14,233.69 for materials, \$36,277.16 for labor, making a total of \$50,510.85.

During 1937-1938, greater progress will be made in developing the Hilo, Upolu Point, Pulehu, Molokai and Port Allen Airports, in view of the fact that the WPA will supply labor and the Territory of Hawaii will supply equipment, etc., from the \$200,000.00 appropriated under Act 228, S. L. 1937.

DEPARTMENT OF PUBLIC WORKS

WAIMANO HOME

(1) Alterations and Additions to the Boiler House of the Girls' Unit at Waimano Home, Pearl City, awarded to W. S. Ching for the sum of \$2,174.00. This contract was satisfactorily completed.

(2) Fire Protection System installation of water mains, and hydrants about the grounds of the Girls' Unit at Waimano, Pearl City, awarded to W. S. Ching for the sum of \$4,038.00. This contract was satisfactorily completed.

(3) Furnishing and installing in the Laundry Building of the Girls' Unit at Waimano Home, one Trojan Washing Machine, awarded to The von Hamm-Young Co., Ltd., for the sum of \$2,920.00. This contract was satisfactorily completed.

HILO LIBRARY

The construction of a branch Library at Honokaa, equipped with furniture, provided by General Appropriation, Act 142 S. L. 1935, was awarded to K. Takimoto for the sum of \$13,936.00, of which \$6,668.00 was contributed from Federal funds, known as PWA Docket T. H. 1038D—Unit B. This contract was satisfactorily completed.

MAUI COUNTY FREE LIBRARY

The construction of a branch Library at Kaunakakai, Molokai, equipped with furniture, provided by the General Appropriation Act 142 S. L. 1935, was awarded to J. V. Marciel for the sum of \$15,764.50, of which \$8,637.00 was contributed from Federal funds, known as PWA Docket T. H.—1038D—Unit A. This contract was satisfactorily completed.