



**AIRPORTS  
at the  
CROSSROADS**

1955

## MILESTONES

1911 - First aircraft flight in Territory of Hawaii by Bud Mars in the "Hawaiian Skylark" from Polo Field, Kapiolani Park. First flight at Hilo by pilot named Walker.

1917 - First Army planes brought to Hawaii.

1919 - An Army plane made first inter-island flight (Oahu to Hawaii).

1925 - Commander John Rodgers departed from San Pablo Bay, California for Hawaiian Islands. Fuel shortage caused landing at sea only few miles from destination -- crew and plane picked up on 11th day.

100 acres of land and \$ 10,000 made available by Legislature for first Hilo Airport.

\$ 45,000 appropriated by Legislature, contingent upon \$ 20,000 subscription by private citizens, for John Rodgers Airport at Honolulu.

1927 - Ernest L. Smith and Emory Bronte attempted first land plane flight to Hawaii from Oakland, California, in a Travelair monoplane "City of Oakland". Shortage of fuel caused forced landing on Molokai. Lts. Maitland and Hagenberger, flying U. S. Army tri-motor Fokker "Bird of Paradise" from Oakland, California, landed at Wheeler Field, Oahu, after 25 hours and 50 minutes in the air. This was the forerunner of other flights soon to be made.

Five airplanes took off from Oakland Airport for Wheeler Field, Oahu, in the historic "Dole Derby". Won by Art Goebel, pilot, with Lt. Davis as navigator, in a Travelair monoplane "Woolaroc"; time for the flight was 26 hours and 18 minutes. Martin Jensen, pilot, with Capt. Schluter as navigator, came in second. The other three airplanes in the race were never heard from. The tragic results of this flight put an end to further attempts at the 2400-mile over-water flight by single engine land planes until 1934.

Honolulu Airport completed and named in honor of Cmdr. John Rodgers who made first attempted trans-Pacific flight in Navy sea-plane.

Land set aside for Molokai Airport by Governor's Executive Order.

1928 - Capt. Kingsford-Smith landed at Wheeler Field in tri-motor Fokker "Southern Cross" en route to Brisbane, Australia, via Honolulu and Fiji. The flight from Oakland to Honolulu took 27 hours, 30 minutes.

Upolu Airfield on Hawaii first licensed.

Hilo Airport dedicated.

1929 - First commercial air service in Territory started by Inter-Island Airways, using Sikorsky amphibians.

First commercial air service to Molokai Airport.

First commercial air service to Maui.

First commercial air service to Port Allen, Kauai.

1930 - First commercial air service to Lanai.

1931 - Legislature appropriated \$ 35,000 for airstrip at Wailua, Kauai.

1934 - Mass Navy flight with six Consolidated seaplanes from San Francisco to Pearl Harbor. Flight was commanded by Lt. Commander McGinnis and all planes completed the trip without incident.

Kalaupapa Airport opened and served by commercial service.

Kingsford-Smith made first east-bound flight from Hawaii to Mainland as last leg of eastward crossing of Pacific from Australia, in single-engine Lockheed. 15 hours flying time - Honolulu to Oakland.

1935 - Amelia Earhart made first solo flight from Hawaii to mainland in a Lockheed-Vega. Time - 18 hours and 17 minutes.

First commercial flight across Pacific, San Francisco to Honolulu, Midway, Wake, Guam and Manila.

First commercial service to Hana Airport (Hamoia) on Maui.

1938 - Maui Airport (Puunene) opened, replacing Maalaea Airfield as the major airport on Maui.

1939 - \$ 9,000,000 federal grant for design and construction of Keehi Lagoon seadrome and other Territorial airports.

1940 - Special appropriation of \$ 3,300,000 authorized by U. S. Congress for dredging of Keehi Lagoon.

1941 - Additional \$ 1,900,000 authorized for development of John Rodgers Airport in conjunction with seaplane project.

Outbreak of World War II on December 7. Army began intensive development of John Rodgers airport.

1943 - Landplane area at John Rodgers Airport filled with spoil from seaplane

dredging. Three runways completed.

Navy began joint use of John Rodgers Airport with Army and started extensive construction program.

1946 - John Rodgers Airport returned to Territory by Navy following end of World War II. Name changed to Honolulu Airport.

1947 - Hawaii Aeronautics Commission created by Legislature.

1948 - New Lanai Airport officially accepted by Hawaii Aeronautics Commission and Civil Aeronautics Administration. It was the first airport in the Territory to be completed under the Federal Airport Act of 1946.

Kipapa Airstrip leased for use by private and student fliers.

Territory of Hawaii and War Assets Administration executed quitclaim deeds returning Maui Airport to the Territory of Hawaii.

1949 - Kona Airport officially opened.

Hawaii Aeronautics Commission accepted Kahului Airport lease from U. S. Navy on a revocable permit basis.

1950 - Lihue Airport officially opened.

New Hana Airport officially opened.

Old Hamoa Airfield, Maui, turned back to Commissioner of Public Lands.

1951 - By Legislative act, name of Honolulu Airport changed to Honolulu International Airport. Runway 8 lengthened to 13,104 feet, making it one of world's longest.

Decision made by HAC to move operations from Puunene to Kahului.

1952 - Kahului became primary airport on Maui.

1953 - New Kamuela Airport officially opened.

First Inter-Island Convair type service.

1966 - April 1, 1966 First DC-9 scheduled flight  
April 29, 1966 First BAC-111 scheduled flight

## HONOLULU INTERNATIONAL AIRPORT

By Act 176, Session Laws of Hawaii 1925, \$45,000 was appropriated for the acquisition and development of an airport on the Island of Oahu within a reasonable distance of Honolulu. The amount appropriated was not to be expended until the sum of \$20,000 had been raised by private subscription and paid into the Territorial Treasury. For the sum of \$27,410, an area of 119.3 acres of land and 766 acres of inundated land was acquired from the S. M. Damon estate as an airport site. A small area was cleared near the present location of the Hawaiian Airlines hangars, and the airport was dedicated March 21, 1927. The field was named in honor of the late Commander John Rodgers, who commanded the Navy's historical flight between the West Coast and Hawaii. This flight was the first attempt to span the Pacific by air.

Act 238, Session Laws of Hawaii 1927, created a Territorial Aeronautical Commission. Act 257 of the same Legislature appropriated \$75,000 for the further development of John Rodgers Airport.

As a result of the policy adopted by the Legislature to foster aviation by the development of airfields, there was an incipient boom in aviation enterprises. To quote from the Star Bulletin of July 7, 1928: "In the past three months no less than six separate attempts have been made to launch the incorporation of inter-island air service. Promoters ranged from itinerant aviators to reputable business and transportation interests".

Inter-Island Airways was organized in 1929 and inaugurated service to the neighbor islands on November 11th of that year with three eight-passenger amphibians. Thus began the first dependable air transportation service in Hawaii at a time when pioneer air lines on the mainland were struggling for existence. In 1934, Inter-Island Airways received a contract from the Post Office Department to carry air mail. This was an important milestone in air service to the outlying islands.

On April 16, 1935, Pan American Airways made their first survey flight from San Francisco Bay to Hawaii in a Sikorsky S-42 seaplane. The flight to Pearl Harbor was made in 17 hours, 14 minutes. This flight was the beginning of an orderly development of Pacific air transportation. During the period 1934 to 1937, numerous successful flights proved the practicability of this mode of transportation.

After a series of proving flights, on November 22, 1935, scheduled air mail and passenger service was inaugurated across the Pacific. Postmaster General Farley came from Washington to witness what he characterized as "the beginning of the .... most significant achievement in the development of air transportation".

These early operations were conducted from a company base at Pearl City, on the shore of Pearl Harbor. The first service was provided by Martin "Clippers" which were augmented in 1941 by larger Boeing "Clippers."

Due to hazards presented by surface craft, and for security reasons, Pearl Harbor was not suitable as a base for commercial seaplane operations and planning was instituted for the development of a "seaplane harbor" at Keehi Lagoon. Prior to 1939 a Federal appropriation of nine million dollars had been authorized for this development, and for development of other Territorial airports. Three million three hundred thousand dollars was authorized by Congress in 1940 for dredging of Keehi Lagoon. In 1941 the sum of \$ 1,900,000 was authorized for the development of John Rodgers Airport in conjunction with the seaplane project. Layout of operating facilities for this combined airport and seadrome, as submitted by Mr. Robert Campbell, CAA Airport Engineer, was essentially carried out by the U. S. Engineers and the Navy in the war-development of John Rodgers Airport.

Upon the outbreak of war, all airports were taken over by the armed forces of the United States. All civil aircraft were grounded. However, within a few days the scheduled inter-island operator was making emergency flights under military direction carrying engineers, medicines, munitions, etc. to the outlying islands. Passenger priority supervision was exercised by the Army for security purposes and for expedition of war priority transportation. Gambo Flying Service was authorized by the Military to furnish emergency transportation of medical supplies, etc., direct to Kalaupapa Leper Settlement, in view of its isolation. All other private planes were impounded.

As Pearl Harbor became congested with ships in 1942, work was rushed on Keehi Seadrome so that seaplane transport operations could be removed from Pearl Harbor. The Navy joined the U. S. Engineers in expediting this project. In order to provide necessary shore facilities, the Navy, in June 1943, obtained from the Territory a permit to "enter and construct." In 1944, the Navy completed construction of a terminal building, control tower and maintenance hangars for landplanes operated by the Naval Air Transport Service. On the north side of the field the Navy built the Naval Air Station Honolulu to support the Naval Air Transport operations and house about five thousand naval personnel.

On November 16, 1945, Pan American Airways resumed commercial operations with their Boeing Clipper which had been leased to the Navy during the war. The present Overseas Terminal was used for the first commercial overseas air service to operate at Honolulu International Airport.

John Rodgers Airport and Keehi Seadrome, as constructed by the U. S. Engineers and the Navy, consisted of a total area amounting to 4,020 acres, with four paved runways 200 feet wide and with lengths varying from 6,150 feet to 7,650 feet. There were also three seaplane channels 1,000 feet wide, varying from 10,560 feet to 15,827 feet in length.

The airport was returned to the Territory by the Navy on October 1, 1946, for operation and maintenance. The Navy retained certain areas and buildings to service the operations of the Naval Air Transport Service. Operational control, as well as maintenance, of the seadrome was retained by them.

As John Rodgers Airport, by common usage, became known as "Honolulu Airport," the 1947 Legislature officially changed the name accordingly. Designation of airports by geographical location eliminates confusion in world-wide communications.

Shortly after the Territory assumed control of the airport, it was necessary to make improvements to accommodate the various airlines and governmental agencies. Contracts were let by the Department of Public Works for building alterations, painting, and rehabilitation of Runway 4-R for a total of \$ 110,665.

Due to the tremendous advances in air transportation during the War, there was an unprecedented urge to "get on the bandwagon" of the new air age. Veterans were encouraged by their priority in obtaining surplus aviation equipment.

Every available foot of frontage for fixed base operators at Honolulu Airport was optioned by mid-1946. Space in the overseas terminal appeared to be at a premium. Requests for space from prospective transpacific operators included the following:

Pan American Airways  
KNILM (Dutch Airlines)  
Far East Air Transport  
Transocean Airlines  
Samoan Area Airways  
Philippine Airlines

United Air Lines  
Australian National Airways  
Matson Navigation Company  
Pacific Overseas Airlines  
China National Aviation Corp.

In addition, space for federal agencies had to be provided. These included CAA Control Tower, Airways Traffic Control and Communication Center. Also U. S. Customs, U. S. Immigration, U. S. Department of Agriculture, U. S. Public Health and U. S. Weather Bureau.

The following local fixed-base, or non-scheduled operators applied for space during 1946 and began operation:

Andrew Flying Service  
Hawaiian Air Transport Service  
Cockett Airlines  
Island Flight Service  
Hawaiian School of Aeronautics  
Woolley Aircraft Co.  
Purdy Aero Repair Service

K-T Flying Service  
Trans-Pacific Airlines  
Trans-Air Hawaii  
Hawaiian Aermotive Repair Service  
Rainbow Airlines  
Aero Service Supply

The G. I. flight training program for veterans was the main source of income for fixed-base operators at Honolulu Airport.

Act 32, of the 1947 Legislature, created the Hawaii Aeronautics Commission. This Act transferred jurisdiction of all Territorial airports from the Superintendent of Public Works to the new Commission.

New rules and regulations for the Territorial Airport System were promulgated by the Commission and approved by Acting Governor Oren E. Long on June 2, 1948.

Upon assumption of operational control of the airport the Commission obtained the services, under contract, of CAA personnel to operate the control tower until Federal funds became available for this purpose. The Navy moved their crash-fire equipment from the south side of the field to their main fire station on the north side. The Commission with two pieces of equipment supplied by the Navy and personnel hired by the Commission provided a crash crew which functioned in coordination with the Navy.

A guard force was recruited to handle the public. This function continued until the guard force was replaced by members of the Honolulu Police force under contract arrangements.

In 1947, the Civil Aeronautics Administration moved their communication facilities to the third floor of the terminal building and the U. S. Weather Bureau established an airport weather station.

In June 1949, Trans-Pacific Airlines was certificated for scheduled passenger service. On November 2, 1949, scheduled air freight service was begun by Trans-Air Hawaii.

In January 1950, the Navy turned over to the Commission some 75 buildings in the Naval Air Facility reservation on the north side of the airport. These buildings acquired from the Navy have been a considerable source of income for the Commission.

#### FISCAL YEAR 1950-1951

The Korean War had a great impact on Honolulu International Airport. The number of aircraft landings increased from 6900 in June 1950 to 8600 in July 1950. The already inadequate overseas passenger terminal was taxed to capacity. Funds and labor were furnished by the Hawaii Aeronautics Commission to meet this emergency situation.

In March 1951, an area of about 104 acres of the Hickam reservation was leased by the Hawaii Aeronautics Commission for 20 years. This lease enabled the Commission to pave a 540-foot connecting link with the new Hickam extension to runway 8-26, making a runway 200 feet wide and 13,104 feet long. This runway, capable of handling the largest aircraft now in use, is one of the longest in the world.

During this period, Honolulu International Airport was in third place for the entire nation in aircraft operations.



## FISCAL YEAR 1951-1952

In August 1951 Hickam Field was closed to traffic and all military operations were diverted to Honolulu. This factor added to a step-up in operations on the Korean airlift, caused the traffic count to soar to 13,000 landings monthly. A steady decrease in requirements for the Korean airlift and the reopening of Hickam Field caused the traffic count to decline to 5,100 in May 1952. However, commercial aircraft operations continued their steady climb.

One of the projects completed during this period was the new lei sellers stands on airport property near the main entrance. This project had a twofold effect--it removed the lei sellers from the entrance road shoulder and added an attractive facility to the airport proper.

An extension from the lobby to the field side of the airport was started as a means of better accommodating overflow crowds.

On the recommendation of the Territorial Fire Marshal, a modern sprinkling system was installed in the overseas terminal building at an approximate cost of \$40,000.

Information published by the Hawaii Visitors Bureau indicated that nearly twice as many overseas visitors arrived by air as by surface transportation. Air travel to Hawaii was brisk as shown by an increase in overseas passengers from 63,055 in 1947 to 153,598 for the fiscal year ended June 30, 1952. The importance of this travel to the economy of the Territory needs little emphasis.

## FISCAL YEAR 1952-1953

Modernization of the runway lighting system continued as installation of high intensity lights for runway 8-26 was started.

Two land transfers took place; 106.345 acres of land were withdrawn from the airport for parks purposes by Governor's Executive Order 1561 and the Governor's Executive Order 1550 withdrew 11.087 acres for the Pacific War Memorial Commission.

Progress on the planning of a new terminal for Honolulu International Airport was retarded during the year due to land utilization problems.

In July a spectacular eruption of Kilauea Crater on Hawaii caused an increase of inter-island air travel. Continued volcanic activity in August pushed the figure to 74,713, a new peak for one month's travel.

New air tourist flights were inaugurated between Hawaii and the mainland in December, with more increases in March, adding impetus to the ever increasing tourist traffic and further taxing the facilities of the terminal building.

Convair 340 planes were put into inter-island service in January 1953. The increased size and capacity -- 44 passengers -- caused more problems for the airports. At Honolulu the runways were adequate but certain ramp facilities and passenger handling facilities were not. Extensive alterations to these areas have been necessary and are still going on.

Although total aircraft landings at Honolulu declined during this period by 3.4%, number of landings made by scheduled carriers increased 7.1%, continuing the upward trend.

#### FISCAL YEAR 1953-1954

Despite the phase-out of the Korean Airlift, there was an increase in many activities over previous years.

There were 127,690 aircraft landings compared to 97,062 the previous year. Contributing heavily to the increase was the movement of military aircraft.

Overseas passenger traffic increased 12.7% to 205,840 passengers, an all time high. According to all indications received from the overseas operators, this trend will continue as more hotel space becomes available on Oahu. Inter-island traffic also increased to a new high of 570,263, an increase of 2.8%.

Honolulu Airport continued to maintain its standing among the busiest in the nation, ranking 4th during the year.

Despite gains in the volume of air passenger traffic, there was a substantial decrease in revenue from fuel tax collections--the major source of operating income for the Commission. Fuel tax receipts for the past year totaled \$ 993,906 a decrease of 28.6% as compared with the previous year.

The decrease was primarily the result of the 'phasing out' of the Korean airlift which officially terminated on March 31, 1954. Reduction of the aviation fuel tax rate from 4 to 3 1/2 cents per gallon, effective July 1, 1953, contributed to the drop in fuel tax income.

A new baggage claim counter was constructed to accommodate the larger number of passengers coming in as a result of the air-tourist service.

Automobile parking lots at both the overseas and inter-island locations were enlarged.

An addition to the Inter-Island Coffee Shop was completed.

Here, as at other airports, the Hawaii Aeronautics Commission participated in the Governor's Employment Program using the labor to landscape access roads and other areas.

Additions and improvements to Hawaiian Airlines baggage and passenger areas were completed.

## GENERAL LYMAN FIELD

The 1927 Legislature, by Act 257, appropriated funds for airport development, including \$ 25,000 for Hilo. In February 1928, Major Clarence M. Young, then Secretary of Aeronautics, U. S. Department of Commerce, came to Hawaii to inspect aviation facilities and promote commercial aviation in the Territory. On February 11, 1928, Major Young was flown to Hilo in the "Bird of Paradise" for the purpose of dedicating the new airport. This was the plane that Lts. Maitland and Hagenberger used in making the first successful flight to Hawaii on June 29, 1927.

Hilo Airport was developed on land belonging to the Hawaiian Homes Commission, and prior to 1937 \$ 34,148 in W. P. A. funds were expended on the landing area.

In 1937, an accelerated airport development program was undertaken with W. P. A. funds. From 1937 to 1941 an amount of \$ 261,613 was invested at Hilo Airport. In 1941, the Civil Aeronautics Administration contributed \$ 314,000 of National Defense Funds to this development. According to the Department of Public Works' Annual Report of June 30, 1941, \$ 125,243 of Territorial money had also been spent on the airport from 1927 to that date.

The expansion of Hilo Airport in 1938 required relocating the prison camp and the hangar and office of Inter-Island Airways.

At the outbreak of war, Hilo Airport was taken over by the Army Engineers, and an Air Corps fighter squadron stationed there. The Engineers constructed military installations and continued the expansion of runways, taxiways, and parking aprons. In 1943, the Navy occupied the field under agreement with the U. S. Engineers. The construction of a Naval Air Station was started with all the necessary facilities to base and train two full air groups. While the Navy had more extensive installations and greater use of the field, the Air Corps continued to operate the control tower, and, from their own reservation, serviced a sizeable transport operation conducted by the 19th Troop Transport Squadron. The Naval Air Station also serviced a similar naval activity. Civilian passenger service continued under the authority of the Army.

The name of Hilo Airport was changed to General Lyman Field by Joint Resolution of the Territorial Legislature on April 19, 1943.

After the war, military operations at Hilo Airport steadily decreased, and in September 1946 it was returned to the Territory for operation as a civil airport. However, operational control was retained by the Air Force. Pending cancellation of the existing lease under which the field was operated during the war, operation of the control tower was continued by Air Force personnel. This situation continued until October 1948, when operation of the control tower was turned over to the Hawaii Aeronautics Commission. Commission funds were appropriated for operation of the tower by Civil Aeronautics Administration personnel.

Difficulties were encountered in the release of this territorial-owned airport, but the Commission, with the help of the Delegate to Congress, succeeded in obtaining Congressional action to provide Federal funds for control tower operation commencing July 1, 1949.

No major projects were undertaken at General Lyman Field during the years 1948-1949 in view of the questionable status of the airport under the War Department lease. The Hawaii Aeronautics Commission used certain facilities under a thirty-day revocable permit. The Air Force still maintained personnel on its reservation at the airport and, at first, many jurisdictional problems arose because the Air Force operated the airport "on paper" while the Hawaii Aeronautics Commission operated the airport "in fact".

On April 8, 1952, the airport was returned to civilian control by the surrender of leases, easements, licenses and permits and improvements were transferred to the Territory by the Federal government.

In May and June of 1949 all suitable buildings on the airport were rented for the storage of a backlog of raw sugar created by the shipping strike.

During April 1951, extensive improvements to the main entrance and access road to Hilo Airport terminal area were completed.

In 1952 a new maintenance area, consisting of five buildings and a large maintenance yard, was constructed.

In July 1952 ground was broken for the new terminal at General Lyman Field, and a contract was let for installation of high intensity lights on runway 8-26.

In March 1953 bids were opened for the construction of roadways, aprons, and parking area, followed by the opening of bids in April for a freight terminal building. In May 1953 bids were requested to construct an airplane hangar.

On December 5, 1953, Hilo's terminal was dedicated with "pomp and ceremony".

The new freight terminal was completed in June 1954 and declared to be the finest freight terminal in the Territory.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## KONA AIRPORT

Prior to World War II construction of an airport at Kailua, Kona suitable for transport operations, had been advocated. An area parallel to the beach, previously used for small aircraft operations, and known as Kailua Airstrip, was determined to be the only suitable area in the vicinity. The 1947 Legislature, which created the Hawaii Aeronautics Commission, took cognizance of the need for an airport in this area by officially designating the proposed location as "Kona Airport".

The Kona project received high priority with the Hawaii Aeronautics Commission which held two hearings at Kona during its first biennium.

Surveys were made and plans prepared by the Department of Public Works, and in May 1948 bids were opened for construction of a runway 100' x 3500' and paving of other areas. The low bid was \$ 255,865 for this phase of the project. Work was started June 10, 1948, with a completion date of January 3, 1949. From the beginning, the project was plagued with delays due to many factors, some of which were no fault of the contractor.

Bids were first opened for terminal building construction on January 7, 1949. The low bid of \$ 49,000 was considered too high and was rejected. On March 12, 1949, a bid of \$ 27,234 was accepted for this project and construction started April 1, 1949.

Opening ceremonies for the new Kona Airport were held on July 10, 1949. All scheduled and non-scheduled airlines within the Territory participated along with Air Force, Navy, Civil Air Patrol, and many private plane owners. The entire Kona community joined with the Hawaii Aeronautics Commission to make the occasion a success. Others represented were the Civil Aeronautics Administration, Territorial Department of Public Works, several of the overseas airlines and many of the Territorial Legislators who were responsible for the appropriation of funds with which the airport was constructed.

In May, 1950 approximately 5,000 linear feet of fencing was installed to keep cattle off the operating areas.

Work was started June 21, 1950 to extend the runway to 3,800 feet. Grading and paving of the extension and additional areas were completed at a cost of \$ 166,411.

In February, 1951 temporary runway lights and a rotating beacon were installed and the runway extension completed.

The accessibility to Kona provided by air service through the airport stimulated tourist travel there, with attendant development of hotels. Air freight service provided a market in Honolulu for Kona produce. The unprecedented development of the area created a demand for a longer runway to accommodate larger aircraft.

## UPOLU AIRPORT

In the early days of aviation in Hawaii, Upolu Airport was an airstrip known as Suiter Field. The U. S. Signal Corps maintained a communication station there. Inter-Island Airways used the field as an emergency stop on their route to Hilo, as well as to provide air service to the District of Kohala.

Suiter Field was maintained by the Territory with FERA and WPA funds prior to 1937. From 1937 to 1939, additional WPA funds were expended in extending the runway to 3,500 feet and in making other improvements to the installation.

During World War II the Navy occupied Upolu Airport, establishing a weather and communication station there. The facility was used as an auxiliary field to the Naval Air Station, Hilo, for field-carrier-landing practice and other training of carrier pilots. The runway was extended to 4,000 feet and housing provided by the Navy for military personnel operating the airport.

Upolu Airport was returned to the Territory by the Navy after the war, and air service provided by scheduled and non-scheduled operators. Buildings formerly occupied by the Navy were rehabilitated for use as a terminal and for other purposes.

In 1950, the Civil Aeronautics Administration installed a "VOR" beacon near the field. The Hawaii Aeronautics Commission installed temporary runway lights in June, 1950 and constructed a rotating beacon which was placed in operation on June 26, 1950.

The Upolu airfield always presented a problem in maintenance, as the subsurface drainage was inadequate, causing the run-off from the slopes above to be trapped in the clay foundation. This condition continually caused settling and breaking up of the runway surface.

In December, 1950, the Commission undertook extensive repairs to the airport to put it in safe operating condition.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## KAMUELA AIRPORT

During World War II the Marine Corps built a small airstrip near Kamuela, Hawaii, consisting of a graded and oiled strip 3,000 feet long on land belonging to the Parker Ranch. It was designed for use by liaison aircraft in connection with their training operations on Hawaii. This facility was known as Bordelon Field.

In order to provide air service to the Waimea district after the war, the area on which this airstrip was situated was leased from the Parker Ranch by the Hawaii Aeronautics Commission. Service to Kamuela was supplied by a number of non-scheduled operators. The first freight service fully demonstrated the economic feasibility of an airport at Waimea. This field was not adequate for scheduled passenger service which was felt to be essential to the welfare and development of the area.

As Bordelon Field was not suitable for development as a modern airport, a new site was needed. For a year prior to January 1950, a wind recording instrument was used to obtain data for the location and alignment of the proposed runway. From September 1949 to September 1950 data on ceiling and visibility were accumulated. This was desirable because the elevation and meteorological conditions caused much low-cloudiness. This study of terrain and weather was completed in August 1950.

Preliminary plans for the new airport were approved by the Hawaii Aeronautics Commission in April 1951 and in October of that year bids were called for the first phase of construction, to include grading, paving of runway, fencing, and a water main to the airport. On February 20, 1952, construction was started.

In April 1953 construction began on a combined passenger and freight terminal.

Scheduled air service to Kamuela started on July 2, 1953, with three flights weekly. Freight operations were inaugurated in May. On August 30, 1953, after final completion of the terminal, the airport was dedicated with appropriate ceremonies. This airport has been developed entirely with Territorial funds and without Federal aid.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## SOUTH CAPE (MORSE FIELD) AIRPORT

This airport was constructed by the military on territorial land. After World War II it was declared surplus and on January 16, 1948, a right of entry from the U. S. Army to the Territory was approved. It was not until August 30, 1952 that the property was finally restored to the Territory by Executive Order.

This was an earth field with Marston Mat (steelgrid) runway and was constructed as a temporary facility. Cost of maintenance was such that conditions became increasingly worse until, in July 1953, the field was condemned as unsafe and was closed.

In the meantime, a new Federal Aid Highway project has been completed into Hilo, which caused the entire community to look to the Hilo Airport for their transportation needs. As a result, traffic into the field came to a standstill.

The nearest settlement to the airport, Naalehu, is 16 miles by road and it has been estimated that the population in the vicinity of Morse Field is only about 174 persons.

Estimates for proper rehabilitation run as high as \$ 54,637.

On October 22, 1954, the Director of Aeronautics addressed a letter to the Regional Administrator, Civil Aeronautics Administration, requesting abandonment of the airport.

Reasons given are quoted below:

"Surplus to the Needs of the Community Because -

1. The continued increase in frequency of schedules into Hilo Airport made it gradually more desirable to travel and ship from Hilo.
2. On March 10, 1953 Federal Aid Highway Project No. F18(5) unit 1, was completed, offering an excellent highway direct to Hilo, which caused the entire community to look to the Hilo Airport for their transportation needs.

"Uneconomical to Rehabilitate and Operate Because -

1. It serves such a small number of people.
2. Not strategically located to best serve these people.
3. Extreme weather conditions make it expensive to maintain.
4. Impractical even as an emergency field because of its isolated location, lack of communications and transportation.

"Unsafe for further Operation Because -

1. An airstrip subjected to these extreme conditions over a long period of time must be maintained continuously and this proved impossible because its limited use, even in the peak year of 1951, precluded an elaborate maintenance program."



## KAHULUI AIRPORT

The Kahului Airport story starts in 1927 when the Legislature appropriated \$ 15,000 for acquisition of land for an airport site on Maui. The site chosen was at Maalaea and property was purchased from Hawaiian Commercial and Sugar Company.

On November 11, 1929, the first scheduled air service from Honolulu to Maui was inaugurated. Planes used were eight-passenger Sikorsky S-38 Amphibians.

Maalaea Airport was a level dirt field near the sea and was unusable in wet weather. In 1935 the airline began adding sixteen-passenger Sikorsky S-43's to its fleet and, although they operated from Maalaea, it was realized that the field was too small and too close to the mountains to meet desired safety criteria.

In September 1936 the W. P. A. conducted wind studies on a new site which was later to become known as Puunene Airport.

In January 1938 the Chief Inspector, Bureau of Air Commerce, Washington, D. C. condemned Maalae. For an interim period commercial airlines were granted a temporary permit for continued operation of only the smaller types of aircraft.

Construction did not start on the new Maui (Puunene) Airport until June 1, 1938 and as a result, Maui was left without adequate or satisfactory air service until this project was completed.

During the time between June 30, 1939 and December 7, 1941, the field was gradually enlarged and improved--some areas being paved. A small Naval Air Facility was established at the airport by the U. S. Navy.

Immediately after December 7th the military took control of all air fields in the Territory and began the expansion of Maui Airport, Puunene.

The demands of the war were such that the Navy found it necessary to establish another large air station on Maui. Accordingly, a site was chosen near the town of Kahului and, after purchase of some 1,341 acres of cane land, construction was started in 1942 on what was to become Naval Air Station, Kahului. This facility later became known as Kahului Airport under the jurisdiction of the Hawaii Aeronautics Commission.

October 1, 1946 marked the entrance of the Territory into full-scale commercial operation of airports. Puunene Airport was taken over under a permissive agreement with the Navy. In December 1948 the airport reverted to the Territory under Quitclaim deed from the U. S. government. A program to dispose of surplus buildings and materials was launched and is still being carried on today.

No major improvements were made to Puunene Airport since it was planned to move commercial operations to the former Naval Air Station at Kahului, which was considered much more desirable for commercial airline operation.

It is interesting to note that, according to the following table, the Federal government reports having expended over \$ 11,000,000 on Puunene from 1938 through World War II. The Territory contributed \$ 44,079 between 1938 and December 7, 1941.

Maui (Puunene) Airport

WPA (Up to June 30, 1941)		\$ 251,202
CAA (DLAND) Docket #904-52-3		1,002,900
CAA (DLAND) (Admin. & Mat'l Acct.)		30,575
Navy (from Navy Inventory Report):		
Runway Paving	\$ 2,547,000	
Facilities, Bldgs., Etc.	6,804,000	9,351,000
Land		620,000
Army (from Corps of Engineers)		600
		<hr/>
	TOTAL	\$ 11,256,277
		<hr/>
Territory		44,079
		<hr/>
	GRAND TOTAL	<u>\$ 11,300,356</u>

Many of the facilities constructed, although necessary to the war effort, have no utility in commercial airport operations.

As pointed out above, it was intended, as long ago as 1947, to move all operations to Kahului. In December 1947 the Navy turned over jurisdiction of Kahului Airport to the Territory and the Hawaii Aeronautics Commission assumed control on a custodial basis pending formal transfer.

The history of Kahului Airport is one of extensive negotiations. Therefore, it was not until May 25, 1951 that the Commission took definite action to transfer all airline operations from Puunene to Kahului. Accordingly, a program of modernization was immediately undertaken.

Much work was necessary before Kahului could be made usable for commercial airline operations. A joint passenger terminal was constructed out of surplus materials, an old shop building remodeled into an air freight building with refrigeration facilities, a new passenger protection fence, rotating beacon, temporary runway lights installed, necessary obstruction lights erected, the lighted tetrahedron repaired, and paving repairs made as necessary. Paving of a new convenient entrance to the automobile parking lot was completed. Three large two-story quonset huts were remodeled into small plane shelters, one of which was turned over to the Hawaii National Guard for use of two liaison-type L-19 aircraft.

June 1952 saw the start of full commercial airline operation from Kahului and the virtual abandonment of Puunene which, although not used, will be kept on a standby status until title to Kahului becomes vested in the Territory and full CAA communications and weather facilities can be moved from Puunene.

Meanwhile, a bill was introduced in Congress authorizing the Navy to grant title to Kahului to the Territory. This bill was finally passed in June 1952 but to date title has not yet been transferred. There is good reason to hope actual transfer will take place in the near future.

Improvements since June 1952 have consisted mostly of painting war-time buildings and spot repairs to runways and plane parking areas.

Many improvements are needed to bring the airport up to desired standards. A partial list of these includes permanent runway lighting, an adequate standby power system, a combined control tower, communications, and weather station, satisfactory small plane tee hangars, resurfacing of runways, installation of additional wind socks and, ultimately, a permanent passenger terminal.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## HANA AIRPORT

The original Hana Airport was a small grass field located at Hamoa. It was served by Inter-Island Airways with 8-passenger amphibians from May, 1935 to the start of World War II. Further developments brought the use of 16-passenger amphibians and 24-passenger land planes, which were too big to use the field. Scheduled service was discontinued and the entire Hana area fell victim to technological development and became dependent on the infrequent service of small unscheduled aircraft.

Although Hana is only approximately 55 miles from Kahului by road, it is a strenuous drive of 2 1/2 hours. It was felt that the time involved in travelling on the highways, plus the increase in population and the growth of Hotel Hana-Maui, justified scheduled airline operations into the area.

A new airport was therefore constructed and opened to scheduled traffic on November 11, 1950. The land was owned in part by the Territory, the balance donated by Hana Ranch Co.

The Federal government, through the CAA, participated in the cost of developing the facilities.

It is probable that the DC-3 will gradually become obsolete and will be replaced by aircraft of the Convair 340 type. It will then be necessary to lengthen the runway an additional 1,400 feet.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## MOLOKAI AIRPORT

On December 15, 1927 the Governor signed an Executive Order setting aside an area of 204.8 acres of Territorial land for an airport at Hoolehua.

Inter-Island Airways started scheduled operations to Molokai on November 11, 1929.

Between the years of 1927 and 1942 the W. P. A. aided the Territory with funds to gradually enlarge and improve the field which was originally a dirt strip.

During 1940 there were 14,695 acres set aside for the use of the Navy. This area is still maintained and used by them.

The U. S. Army established a radio station on the airport in 1935. This station was moved to a new location in 1938.

During 1938 the Territory exchanged with the Hawaiian Homes Commission 27.23 acres of unused land on the west side of the field for 20.78 acres at the southwest corner of the field, for an extension to the runway.

Immediately after December 7, 1941 the armed forces assumed control and operation of all Territorial airports. During this period the U. S. Army made extensive improvements. Some of the improvements were beneficial to the increased civilian use to come, but others were unnecessary and in some cases even undesirable from a civil aviation standpoint.

Beneficial items consisted of paved runways, taxiways, plane parking areas and lighting of the present runway 5-23. However, it has been found necessary to perform extensive repairs to the paved surfaces and to replace the inadequate and obsolete runway lighting system.

Undesirable features included earth revetments and air raid shelters, some of which have had to be removed because they were hazards to aviation.

The sewer, water and power systems were hurriedly constructed and were excessive to commercial needs. It is planned to remove all old temporary buildings and construct a modern joint passenger and freight building to meet the needs of the public on Molokai.

By agreement with the U. S. Army, the Territory assumed responsibility for the operation and maintenance of the airport early in 1947. However, most of the permanent improvements were delayed because "title" to the property did not revert to the Territory until April 15, 1952. Some items, critical from a safety standpoint, could not be delayed but expenditures were held to a minimum.

For example, HAC proceeded with repairs to the existing runway lights, installation of a revolving beacon, obstruction lights, and three flashing hazard beacons on prominent hills in the vicinity of the field.

Location of this field is such that, in the past, during heavy rains excess mud and water flowed onto the operating area, sometimes necessitating closing the field until an emergency crew was able to clean up. A system of drainage ditches was designed and completed in September 1953 to alleviate this condition.

Runway resurfacing was performed in 1952 and additionally in 1954.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the next pages.

## KALAUPAPA AIRPORT

Kalaupapa Airport was opened to operations in 1934 and was served by Inter-Island Airways, now Hawaiian Airlines, with Sikorsky S-38, eight-passenger amphibious aircraft. Service was discontinued by Hawaiian Airlines because the field was too small and too rough for use by Sikorsky S-43's and Douglas DC-3's. During the war, Gambo Flying Service was authorized by the Military to furnish emergency transportation of medical supplies, etc., direct to Kalaupapa.

After the war, Andrew Flying Service and Cockett Airlines began serving Kalaupapa on a daily basis with Beechcraft and Cessna planes.

Although Kalaupapa peninsula is under the jurisdiction of the Board of Health, it was agreed that the Hawaii Aeronautics Commission would accept responsibility of airport maintenance and operations. These problems have been extensive but are gradually being solved.

In 1951, a small passenger terminal with rest house was completed. Up to that time there were no passenger facilities available.

The field was sod on sand and, as a result, was very rough, causing discomfort to passengers and excess wear to aircraft using the area. It was hoped that this situation could be alleviated by maintaining a good stand of grass. Accordingly, water storage tanks and a pipe line with hose bibs were installed. Although this proved helpful, it was not sufficient to counteract poor nourishment in the sandy soil and erosion from high winds and propeller blast.

Accordingly, in 1951, a small paved warm-up apron was constructed. This eliminated the trouble at the warm-up or down-wind end of the landing strip, but was of no help on the rest of the area.

In 1954, a paved runway with sodded shoulders was completed. The field is now in satisfactory condition despite the fact that grassed areas are still rough and difficult to maintain.

Although the number of people at Kalaupapa is small and ordinarily would not justify such an airport, it must be borne in mind that air service is now almost the only means of transportation between the peninsula and the outside world.

Barge service is irregular, there being only about three barges a year, and all daily needs, such as mail, bread, vegetables, newspapers, etc. are supplied by air.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following page.

## LANAI AIRPORT

In 1930, Inter-Island Airways, now Hawaiian Airlines, began operations into Lanai with Sikorsky S-38, 8-passenger amphibious planes. The field in use was sod and owned by the Hawaiian Pineapple Company.

During 1935, the airline started to replace the S-38's with 16-passenger Sikorsky S-43's and in 1941 this equipment was being replaced by 24-passenger Douglas DC-3's. The field in use was not big enough to accommodate this type of equipment; and since the last of the S-38's were put out of service shortly after the start of World War II, air service to Lanai came to a halt.

It was not until 1946, when a new airport site was chosen and the land donated to the Territory by the Hawaiian Pineapple Company, that air service was resumed. On September 18, 1946, Hawaiian Airlines began operations into Lanai with Douglas DC-3's. The field was an unpaved sod strip and as a result was practically unusable in wet weather and almost untenable due to dust and dirt in dry weather. In view of these conditions, air service was not reliable, and it was therefore decided to pave the runway and taxiway in 1948. It is interesting to note that this field was the first one constructed by the Hawaii Aeronautics Commission with the assistance of Federal funds appropriated under the Federal Airport Act.

Subsequently, it was found that erosion caused by high winds and plane propeller blast was damaging the field, so a warm-up pad was constructed and the taxiways were widened.

In 1952, an air freight terminal building was constructed.

It is the opinion of aviation authorities that the Douglas DC-3 will ultimately become obsolete and will be replaced by larger types. When this becomes an accomplished fact, Lanai will again be without scheduled air service if the present field has not been lengthened and improved to keep up with aircraft design and development.

A modern passenger terminal building is needed.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.



## LIHUE AIRPORT

Air service to Kauai was inaugurated on November 12, 1929, with two flights weekly to Port Allen, Kauai. Fifteen thousand dollars was appropriated for purchase of land at Port Allen to establish this airport. The Army Air Corps named the installation "Burns Field."

In 1931 the Legislature appropriated \$35,000 for an airport more centrally located at Wailua. Inter-Island schedules were increased to three weekly, serving both Wailua and Port Allen. Upon inauguration of service with larger aircraft, operations were transferred back to Port Allen. S-43 amphibians and DC-3 aircraft were serving Port Allen when World War II closed that airport. During the war, Kauai was served through the Air Force Field at Barking Sands.

At the outbreak of the war, Port Allen was taken over by the military and, as a safety precaution, the runways placed out of service. After the war, this airfield was used by non-scheduled operators; however, scheduled airlines under CAA regulations, were required to continue service from Barking Sands. Port Allen has continued to be used by non-scheduled operators and fixed base operators located there. A total of \$33,457 was spent on rehabilitation of the runway system.

Land was acquired near Ahukini for the purpose of constructing Lihue Airport. A contract for grading and paving a 3750 ft. runway was let in 1948 for \$359,627. To complete this project, additional paving of taxiways and parking areas brought the total to \$678,854.

On September 1, 1949, the airport was opened to limited operations while the terminal building was under construction. This building was built at a cost of \$97,223 and was dedicated January 8, 1950. Water had to be brought to the airport from Lihue and contract for a water main was let in October, 1949. The water system for the airport represents an expenditure of \$55,564.

Upon completion of rotating beacon and obstruction lights on Kalepa and Carter's Point, night schedules were started on April 4, 1950.

In August, 1950, contract was let for the construction of a freight terminal and airport maintenance shop. Temporary runway lights were replaced by medium intensity runway lights and a fully automatic emergency generating system in September, 1951. Prior to introduction of Convair 340 airplanes by Hawaiian Airlines, it was necessary to lengthen the runway and taxiways from 3,750 feet to 5,100 feet. The runway extension was completed in October, 1952, at a cost of \$178,697.

Immediately on the opening of Lihue Airport in January, 1950, passenger traffic started a rate of increase beyond all expectations and the continued rise in 1951 taxed the facilities of the terminal building. Plans for enlargement of the building to provide for traffic, CAA and Weather Bureau needs were drawn and contract let in July, 1952. Total cost for these alterations and covered concourses was \$110,122.

The location of baggage claiming facilities was designed for maximum convenience to the airlines in expediting their turn-around time, but has proven unsatisfactory to the public by requiring them to carry their luggage through a crowded lobby to the street. Plans are now being drawn by the Public Works Department to construct separate baggage claiming enclosures on the street side of the terminal for each airline. These facilities are to be connected by a canopy over the entire loading zone in front of the building, offering protection in bad weather to both incoming and outgoing passengers.

The parking lot at Lihue Airport has reached its capacity on normally busy traffic peaks and, with the increasing traffic, must have high priority for enlargement.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the following pages.

## PORT ALLEN AIRPORT

Port Allen Airport, formerly known as Burns Field, was used in the "twenties" as a landing facility by the U. S. Signal Corps, which was the aviation section of the Army at that time. A Signal Corps reservation adjoining the airstrip housed personnel operating a communication station on the airfield.

The first passenger air service to Kauai was inaugurated by Inter-Island Airways on November 12, 1929, on a twice weekly schedule to Port Allen Airport.

As the demand for air service increased, an airport closer to the center of population was desirable, and in 1931 the Legislature appropriated \$35,000 for development of an airstrip at Wailua. Upon completion of the airstrip in 1933, Inter-Island service was increased to three flights weekly, serving both Wailua and Port Allen. In 1938, the Civil Aeronautics Administration restricted the use of Wailua declaring it unsafe for larger aircraft, and Inter-Island Airways moved their operations back to Port Allen. The Wailua land was turned over to the County for use as a fair ground.

Inter-Island augmented their service with larger 16-passenger, S-43 amphibians in 1935 and 1936. These planes, together with DC-3's which were placed in operation in 1941, served the Island of Kauai through Port Allen Airport until that field was closed at the outbreak of World War II.

Prior to the war \$127,100 had been spent on various W. P. A. projects in clearing, grading and paving at Port Allen Airport. After release of the airport by the Military in 1946, the runways were rehabilitated at a cost of \$33,457, of which the Federal Government contributed \$17,500.

During the war, operations were scheduled from the Air Force field at Barking Sands. After the war, operations were resumed at Port Allen, which was served by various non-scheduled operators.

Economic pressure gradually forced the non-scheduled operators to suspend operations, and by 1954 only two continued to serve the airport.

Numerous private planes are based at Port Allen, among which are aircraft used for aerial photography and to assist commercial fishermen in spotting fish.

Other than the landing areas and a public waiting room with toilet facilities, the physical improvements include three privately owned hangars and an office building.

Operational statistics, construction costs and estimated cost of needed improvements will be found on the next page.