ALASKA DEPARTMENT OF AVIATION



Biennial Report Progress and Finance 1951-1952

Tony Schwamm --- Director
Anchorage, Alaska

We of the north country, pause to look back on the fifty years that changed the world--and to honor the pioneers of flight, in particular those hardy airmen, the Alaska bush pilots.

TL522 A4A3 1951-52

TERRITORY OF ALASKA DEPARTMENT OF AVIATION

January 24, 1953

Honorable Ernest Gruening Governor of Alaska

Dear Sir:

I have the pleasure to submit herewith, the biennial report of the Department of Aviation, of the Alaska Aeronautics and Communications Commission, for the period of January 1, 1951 to December 31, 1952.

In this year of the Golden Anniversary of Flight, it was thought that an outline of aviation progress in Alaska, which is so vitally necessary to the development of our territory, should be combined with the financial report.

The activities of the Department of Aviation have been greatly influenced by the accelerated progress of aviation; it is our desire to give the maximum service to this industry and its diversified supporting agencies, which have become the largest year-round employer in the Territory of Alaska.

Respectfully submitted

Tony Schwamm Director of Aeronautics

PROPERTY OF THE UNIVERSITY OF ALASKA 33779

Alaska Aeronautics and Communications Commission

SHELDON B. SIMMONS Chairman, 1st Division—Juneau

NEAL W. FOSTER 2nd Division—Nome

J. R. CARR Secretary, 3rd Division—Anchorage

ALVIN POLET 4th Division—Fairbanks

AERONAUTICAL REVOLVING FUND

The fund for the operation of the Department of Aviation are derived from a 2c per gallon tax, levied on each gallon of aviation gasoline sold within the Territory of Alaska.

DEPARTMENT OF AVIATION

DECLARATION OF PURPOSE. It is hereby declared that the purpose of this Act is to further the public interest in aeronautical progress by providing for the protection of persons and promotion of safety in aeronautics through appropriate measures not duplicating Federal controls but consistent with and supplementary to Federal aeronautics laws and regulations, with a view, however, to the least possible interference with aviation activity compatible with the general welfare; by encouraging and developing aeronautics and the establishment and operation of a territorial system of airports through cooperation with municipalities, and otherwise, including cooperation with the Federal Government and acceptance and utilization of Federal funds allotted for such purpose.

Section 2, Chapter 123, ACLA

Foreword

Alaskan aviation is unofficially twenty-nine years old in this 50th year of the anniversary of flight; in 1924 the first commercial flights were undertaken. Since then, the Territory has steadily replaced the dog team with the airplane; and this has been a tremendous project. Alaska, covers over half a million square miles, much of it trackless tundra and rugged terrain. Those interested in Alaskan aviation have gone a long way, particularly in the past three and one-half years, in conquering distances that once looked untameable by air. The Eskimo in the Arctic and Southeasterners alike can now be assured of regular mail service and medical care. These vital necessities were once luxuries, or impossibilities, and now the airplane has brought the miraculous to their doorstep.

Since 1949 the Alaska Department of Aviation has created and maintained scores of airfields and seaplane facilities which are already showing a marked effect on the economy of the Territory. The new airports at Kotzebue, Eagle, Valdez and Dillingham; the radio beacons and lighting facilities at Fort Yukon, Platinum and Kotzebue; the seaplane bases located at Wrangell and Sitka; these are vital factors in the opening up of Alaska. The construction season is short in the North; but concerted effort during the building months has resulted in remarkable progress.

The Alaska Department of Aviation foresees the time, and it is in the near future, when no part of the Territory can be referred to as "isolated." To the trapper, fisherman, miner and homesteader, it means convenience and a better living; to the airman and his passengers, increased safety and the expansion of operations; to the general economy of Alaska, an unlimited future.

We of the Alaska Department of Aviation—board members, planners, engineers, workmen—have a particularly satisfying job. This is still a business of pioneering; and every airstrip built, shows immediate results in increased traffic and a general benefit to those who use it. We have had a hand in building many of 360 airports and 73 seaplane facilities in the Territory. Soon, safe air travel to every remote corner of Alaska will be a reality, and it will merely be a matter of maintaining this vast network of airfields and bases.

In these pages we submit photographs, construction and an economic outline together with a financial report of the last two years' progress . . . evidence, we think, that the most air-minded territory of the world is quickly coming into its own.

Important Accomplishments

In 31/2 Years of Operation

- ☆ Office opened Anchorage, July 5, 1949.
- Construction above Arctic Circle of DC-3 length, Fort Yukon Municipal Airport, complete with boundary lights, radio communication and homing beacon.
- ☆ Constructed DC-3 length airport at Skagway.
- ☆ Construction of amphibious seaplane facility, Sitka.
- ☆ Construct DC-3 length airport, with homing beacon at Dillingham.
- ☆ Construction of DC-3 length airport, complete with modern boundary lights, Kotzebue, above the Arctic Circle.
- ☆ Constructed two DC-3 length runways at Palmer.
- Constructed 2000 foot runway and new type seaplane facility, Seldovia.
- ☆ Construct 2000 foot runway at Ninilchik.
- ☆ Construct DC-3 length airport at Valdez.
- Constructed airfields along Bering seacoast at Shaktoolik, Koyuk, Golovin, Elim, Solomon and Teller.
- Constructed airfields at Minto, Huslia, Copper Center, Lawing, Glacier Creek, Tyonek, Wasilla, Tazlina, Sheep Mountain, Big Lake, Joseph Village and Tok.
- ☆ Construct DC-3 length airport with radio homing beacon at Eagle.
- Constructed 4000 foot airport at Haines.
- ☆ Construction of large seaplane facilities at Wrangell, Hydaburg and Pelican.
- Construct (80 per cent complete) DC-3 length airport at Circle Hot Springs.
- ☆ Construct large seaplane facility at Juneau.
- ☆ Construction (90 per cent complete) DC-3 length airport at Quartz Creek (Kougarock).
- ☆ Construction of DC-3 length Seward Municipal Airport.
- Made available 20 100-Watt combination low/high radio transmitters with radio beacons for installation where needed throughout the Territory.
- ☆ Installed modern airport boundary lights at Platinum.
- Surveyed and designed plans for 1953 airport construction program, including airports for Beaver, Sand Point, Gambell, Point Barrow and Juneau.
- Supervised and reimbursed payment for snow removal and general maintenance of all Territorial airports and seaplane facilities.

Scenic Alaska



Glacial age yields its secrets to flying explorers.

May Be Seen Best By Air

Arctic Circle Chamber of Commerce AMERICA'S FARTHEST NORTH CHAMBER OF COMMERCE Kotzebue, Alaska

October 15, 1952

Mr. Tony Schwamm, Director, Aviation Board, Territory of Alaska, Anchorage, Alaska

Dear Mr. Schwamm:

Our Chamber has been rather inactive during the excessively busy months just passed, and all business has been held in abeyance until the members were again all in attendance, and not so involved in preparations for the winter. For this reason there has been a prolonged delay in extending the thanks of the Chamber collectively, and of each member, individually, to you for your co-operation in making buildings available at Cape Spencer for use in Kotzebue as a community hall.

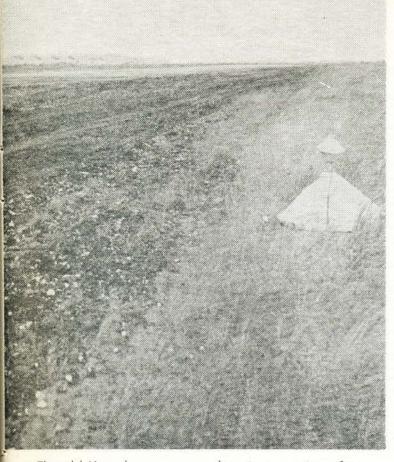
It was a great disappointment to all of us when an unexpected development in the operations of the local transportation company which was to bring the buildings north will not allow completion of this work until next spring. Jack Bullock, manager of the B & R Tug and Barge Company was authorized to make arrangements for this handling this fall, but as he has advised you, withdrawal of the only barge which could be used to move the buildings and the lateness of the season prevented the work being accomplished. We do not consider it the fault of the B & R, and the same Company will perform the work in the spring. This they are doing at cost.

In the meantime we are very grateful to you for your consideration and help. A great many people worked on this problem for months without arriving at a solution, and it has meant a great deal to have these buildings made available. There seems to have been some misunderstandings about these particular buildings coming to Kotzebue. If possible, we would like it made a matter of record that these two particular buildings are set aside for delivery to Kotzebue representatives.

Yours very truly,

Dr. E. S. Rabeau, President

MEMBER OF THE UNITED STATES CHAMBER OF COMMERCE

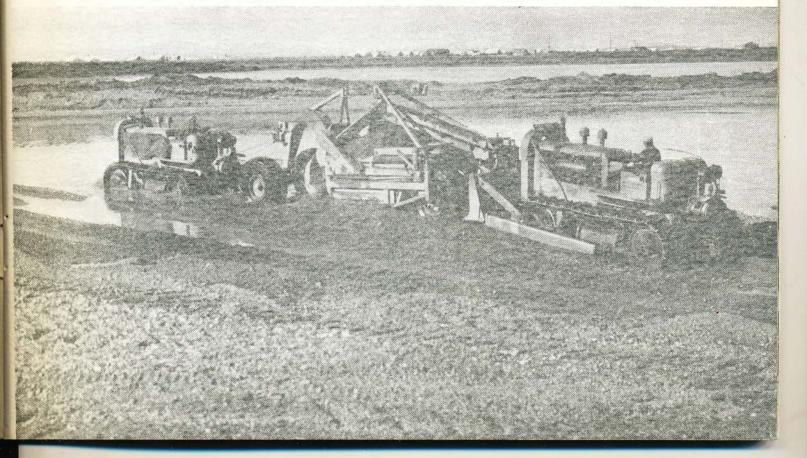


The old Kotzebue runway showing ruts in soft, muddy tundra of the Arctic.



The new Kotzebue Airport was constructed directly into the strong arctic winds and flight schedules greatly improved for military and civil aircraft.

Construction equipment in the Arctic is subjected to unusual conditions and the operators sometimes give up from the cold and in despair.





Gambell. Arrow points to winter strip, hardly an airfield, that is used to supply America's most northwestern weather station.

Gambell

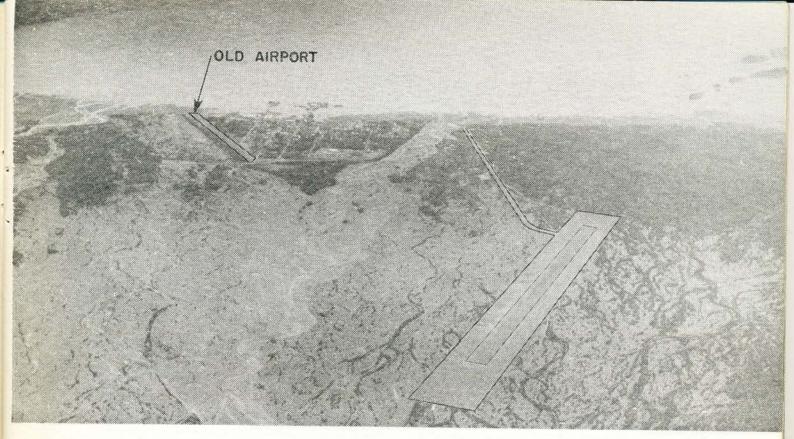
Gambell is located on the extreme northwestern tip of St. Lawrence Island, in the Bering Sea, about 175 miles west of Nome. It is the site of the most north-westerly weather station on the North American continent.

Even under normal flying conditions, contact between Gambell and the mainland supply points was poor. In summer, it was impossible for any aircraft other than seaplanes to land at Gambell, because of the soft beach sand. This, in addition to the necessary long overwater flight, reduced the pay load of planes, and resulted in an extremely high freight and passenger rate for the town.

During 1952, a survey was made by the Territorial Department of Aviation, and a plan prepared for the major improvement of the Gambell airstrip. It will be necessary to install a surplus steel landing mat. This will be done on a "force account" basis by the Department, using local Eskimo labor.

Every effort will be made to accomplish this during the summer of 1953, but the completion of the project will depend upon water transportation of the steel mat to the site from the Nome area, which in itself is a difficult feat of logistics. The new Gambell airport will be constructed with the financial assistance of the U. S. Government under the Federal Airport Program.

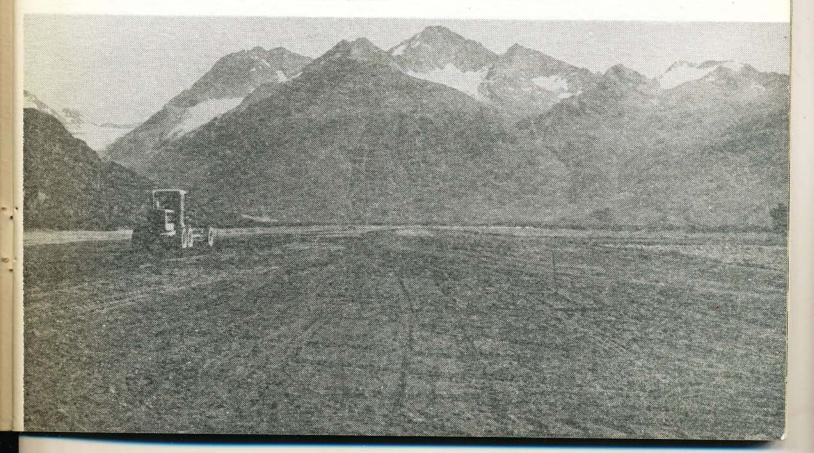
Year-around service by larger aircraft is a definite need at Gambell, and with the completion of the project as contemplated for 1953, this more frequent and lower-cost service will be made possible. At the present time. Gambell has a twice-monthly mail schedule from Nome via Alaska Airlines in the winter months only, due to lack of aircraft landing facilities.

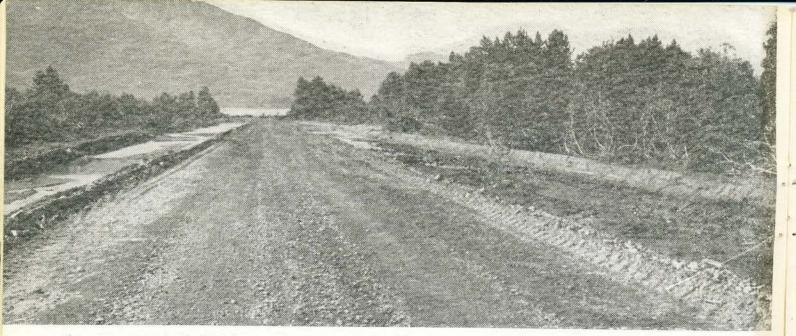


The new Municipal Airport and the access road were long needed in Valdez.

Valdez

The clear Alaska air makes these mountains look close. They are over four miles away. The airport surface is of glacial moraine gravel.





The access road of glacial gravel was constructed by cooperative agreement with the Alaska Road Commission.

Valdez

Located on one of the three year-around harbors available to serve the vast and freight-hungry regions of central Alaska, Valdez has traditionally played a key role in the growth of the Interior—a role of far greater proportions than the mere size of the town would at first indicate.

It would have been impossible for Fairbanks to have achieved its remarkable military and civilian expansion of the past ten years, without the large and ever-increasing stream of cargo passing through the port of Valdez. Although the northern bastion of our great Alaska defense line is also supplied through the ports of Seward and Whittier, still a major portion of the perishable food consumed in the Fairbanks area is handled through Valdez, as well as thousands of tons annually of general cargo, both civilian and military.

Valdez has remarkable natural advantages as a seaport, but unfortunately they are not matched by equal natural advantages as an airport. The town is situated on a glacial plain, surrounded by towering mountains and live glaciers. The topography of the immediate area imposes certain natural obstacles which may be entirely overcome only by fundamental technical changes in aviation itself.

None the less, the need of Valdez for improved airport facilities could not be denied. The economic importance of the seaport and the rapid growth of the town clearly justified a major airport improvement. Hence, Valdez was included in the National Airport Plan, even prior to the passage of the Territorial enabling act allowing participation in Federal Airport Aid.

Until 1951, practically nothing could be done for Valdez because of lack of funds; and because of the priority claims of other communities which were entirely without airport facilities. In 1951, however, a memorial introduced in the Territorial Legislature prompted the Aeronautics Board to coordinate their activities with the desires of the people, and an engineering survey was authorized.

This survey, conducted by the Territorial Department of Aviation, showed the following conditions:

- The old airstrip at Valdez was barely usable most of the year; it was located too near to the center of town, and allowed no room whatever for the necessary expansion, being limited on one end by salt water, and on the other by the main highway.
- High cross winds prevented landings much too frequently for satisfactory scheduled air service.
- Further complicating the situation, the old cross-runway had been taken out of service for use as a storage space during the military transportation boom.

After a thorough investigation, and with the full concurrence of the local airlines, it was recommended that a new strip be built, one and one-half miles from the center of town, on land taken from the public domain without cost to the Territory. The site was chosen to take best possible advantage of wind conditions prevailing in both of two nearby valleys. A possible location at Lowe River was rejected because of a mean-dering glacial stream subject to constant shifting, which would have increased both construction and maintenance costs.

A new airport was designed by the Territorial Department of Aviation, having a runway 3900 by 150 feet, aligned in relation to surrounding mountains so that an easy two-mile glide approach was provided.

Engineers of the Civil Aeronautics Administration approved the plan for Federal aid amounting to 75% of the cost. Upon advertising

for bids, it was determined that Oaks Construction Co. and Owen Butcher were low on a joint bid, as they were also on the Seward Airport project. They were notified to proceed on May 12, 1952.

Construction problems were greatly reduced by the discovery of a nearby deposit of beach gravels which proved on analysis to be ideal for the surface course.

Through this and other economies it was later found possible to extend the projected 3900-foot runway to a length of 4400 feet, while still remaining within the budgeted cost of \$100,000. In fact, the final expenditure was only \$94,516.

The lengthening of the runway was of special importance to the community because under favorable conditions and with light loads, the field may now be utilized by C-46's and DC-4's, as well as by military freight planes. The additional length provides an excellent safety margin for DC-3's, fully loaded; and the new field should also prove of great value as an emergency landing strip for the large passenger and freight planes passing through this area en route to the principal airports of Alaska and the Pacific Northwest.

The decisions making this additional length possible were entirely the work of Territorial Department of Aviation engineers, who were responsible for the design, plans and specifications, construction supervision, and final inspection. It is only proper that special mention should be made here of the work of Herman Porter, the engineer in charge of designs, and Carl Roberts, who was in charge of supervision and inspection. Both are Alaska-born young men, and both are graduates of the University of Alaska. The Valdez airport was the first project completely engineered by Territorial Department of Aviation employees.

The dedication ceremonies were of special interest and significance. They were combined with similar ceremonies held the same day in connection with the beginning of the new Cor-

dova highway, and the opening of the new airport at Seward.

At Valdez, the ceremonies were opened by a striking formation flight of CAA planes of the DC-3 class, led by Jack Jefford, Chief Pilot for the CAA, and by Jim Hurst, assistant Chief Pilot. Other planes landed a large party of distinguished guests, representing the Territory of Alaska, the Military, the cities of Anchorage, Fairbanks, Seward and Cordova; the CAA and CAB, the Alaska Road Commission and the Territorial Department of Aviation. Most of the distinguished guests made the complete circuit flight from Cordova to Valdez to Seward.

Joining the new Valdez airport with the town itself is a fine new access road, constructed by the Alaska Road Commission, using Territorial aviation gas tax funds, as the road is outside the property limits and could not be constructed under the Federal Airport Act.

The value and utility of these new facilities at Valdez will be greatly enhanced by the installation of a radio homing beacon station on Naked Island, located opposite Valdez Arm in Prince William Sound. This new devise is provided by the Territorial Department of Aviation, installed and operated by Cordova Airlines. With this navigational aid, a much greater flight frequency should be possible, by allowing an instrument let-down into the Prince William Sound area for flights bound for Valdez.

Already, there is a daily schedule from Valdez to Fairbanks by a four-passenger plane, via Copper Center and Big Delta, and it is anticipated that soon a DC-3 schedule joining Valdez with Interior points will be established.

Another logical result of these improvements was the announcement on October 28, 1952, of a new scheduled DC-3 service linking Anchorage, Valdez, and Seward by daily circuit flights. This has brought immediate benefits to all three cities by opening up new commercial possibilities, in addition to filling a long-felt need for connecting scheduled service between the points.

Dr. Will H. Chase, longtime resident of Cordova, addresses crowd at dedication of Valdez Municipal Airport.





One of the largest crowds ever assembled in Alaska was at the dedication of the Seward Municipal Airport. The transport type aircraft on runway can now serve this year-round seaport for civil or military needs.

Seward

A free moose barbecue was served at the Seward Airport by the local Elks and American Legion on the opening day. The C-46 in background is the largest plane to land at Seward.



Seward

Seward, known for fifty years as the Gateway City, was alert to the possibilities created by the National Airport Act of 1946. In fact, Seward was one of the very first Alaska cities to make application long before the passage of the Territorial Enabling Act of 1949, and prior to the organization of the Territorial Department of Aviation.

The people of Seward demanded, and unquestionably deserved, a better airport. Even the best of the famous Alaska bush pilots were frequently baffled at Seward by dangerous cross winds; by deep puddles that often assumed the proportions of small lakes; and by glare ice on the field during the winter. Yet the air traffic in and out of Seward was considerable, and small planes were making heroic efforts to maintain schedules on a daily-or-better basis.

Improvement of the Seward Airport was important to other towns and villages of the Kenai Peninsula. Scores of "mercy flights" were made annually, bringing injured or seriously-ill patients to the Seward General Hospital, or transporting Seward doctors to the scene. In addition, a large number of charter flights were being made from Seward to outlying points in all directions; carrying business men, prospectors, commercial fishermen, government officials, and hunting and fishing parties into areas inaccessible by other means of transportation.

In spite of Seward's rather special needs and early application, a scarcity of funds prevented derinite action until the summer of 1950, when an engineer from the Department of Aviation made a preliminary survey to determine the amount of land which had to be acquired by purchase from private individuals for a new and larger airport.

About this time, "Chris" Christensen, veteran bush pilot, appeared personally before the board of the Alaska Aeronautics and Communications Commission, to urge a change in the angle of the proposed airport. "Chris" had flown regularly between Anchorage and Seward for more than ten years, having made during this time over 4,500 flights between these points.

After weighing this and much other testimony, a new airstrip was approved, aligned in a northwest-southeast direction, 3,800 feet by 150 feet; plus an extension of the old runway, 450 feet by 150 feet. It was also necessary to rehabilitate the old runway, because of poor drainage, frost-heaves, and frost-boils, particularly during the spring thaw.

Much of the additional land needed for the new Seward Airport was privately owned, and before bids could be advertised or contracts awarded, a lengthy but unavoidable period of delay ensued, which was nevertheless a very busy and trying time for the personnel of the Aviation Department. Options on property had to be secured; title searches instituted; negotiations entered into with property owners and heirs of deceased owners. Appraisals of land and buildings had to be made by qualified and disinterested parties; deeds prepared and payments arranged.

During the course of these steps toward acquiring the necessary additional land, a flaw was discovered in the title to the property of Mr. Dufresne, and a further delay resulted. Negotiations with Mr. Dufresne were difficult to conclude, because his health was poor and he had retired to a small town in Washington state. It was necessary for Mr. Dufresne to return to Seward in order to complete these arrangements.

Fortunately, the majority of the property owners were resident in Seward, and they were cooperative even to the point of personal sacrifice in order to make the new airport possible. Special appreciation is due Mr. Herman Leirer, Mr. Peter Huglin, Mr. Hedley Davis, and Mrs. Petrovitch for promptly transferring their land to the Territory at prices below the actual market value. They, and many other Seward citizens, notably former Mayor Gene Lanier, who worked extremely hard on the project, showed a very high degree of community spirit.

After advertising for and receiving competitive bids, it was determined that the contract should be awarded on a low bid basis to the Oaks Construction Co. and Owen Butcher, who had also submitted the lowest bid on the Valdez Airport.

Difficulties did not end with the securing of the land and the award of the contract. In the process of stripping old underbrush and topsoil, dozers uncovered subsurface springs, one after another, which spouted fresh water over the new surface and flooded the construction equipment out of the area. This necessitated a change in the original plans, to include the installation of subsurface drains. A dragline had to be brought in, and the amount of steel culvert pipe greatly increased over the initial estimate.

This extra culvert pipe became strike-bound in transit, and the work was brought to a virtual halt. Since this occurred through no fault of the contractor, it was deemed fair to extend the deadline for the completion of the project.

Another extension of time had to be granted because a combination of extraordinarily heavy rainfall and seasonal high tides interfered with the normal drainage of the airport area, and made it impossible to obtain the correct mixture of gravel and fine materials for the foundation. Hence the engineer in charge, with the concurrence of the CAA engineers, granted an additional extension of time in the interests of obtaining a more substantial airport surface than



Aerial view of old Seward runway which was too short for transport aircraft.

would have been possible had the work been continued under the extreme wet conditions.

On September 14, 1952, the airport was complete and ready for dedication. This event was combined with the dedication of the Valdez Airport and the beginning of the Cordova Road, into what was without a doubt the most impressive ceremony in the history of Alaska aviation, attended by the largest group of aviation enthusiasts ever gathered together in the Territory.

Speakers and honored guests included Governor Ernest Gruening; Lieutenant General William E. Kepner, Commanding General, Alaska Command; Federal and Territorial officials, including those of the Civil Aeronautics Administration, the Alaska Road Commission, the Alaska Railroad, and many others; officials of leading private airlines; and the Mayors of Anchorage, Valdez, Cordova, and Seward.

Following the ceremonies, the guests were tendered a moose barbecue sponsored by the Seward Post, American Legion, and the Seward Elks Lodge.

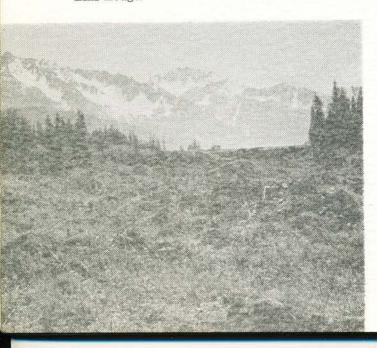
With the completion of this project, Alaska's greatest seaport, whose annual port tonnage will soon pass the half-million ton mark, is now no longer under a handicap for the lack of modern air facilities. The days of the "missing links" in Seward's transportation, so well-remembered by the pioneers of the town, are at an end. The bitter disputes of a generation ago, over the location of roads and railroads, have taught the people of Alaska—that any form of artificially-maintained monopoly in transportation helps no one; that the widest possible extension of competing modes of travel tends toward the general prosperity of all.

As pointed out by Col. J. P. Johnson, general manager of the Alaska Railroad: "The new airport will add to, rather than detract from, the facilities already provided."

Valdez, Seward, Cordova, and Anchorage, once in heated rivalry over means of transportation, are today drawn closer together than at any time in Alaska's history, through the progressive sharing of each other's advantages.

The establishment of daily DC's air service between these communities, with daily return flights, will further cement this new friendship and provide new opportunities for private enterprise, both large and small. The potentialities for new commercial development in connection with the improved Seward Airport are great, and in no way limited by the fact that Seward already has outstanding advantages in water, rail, and highway transportation, For example, freight flights are already being planned from Seward to Kuskokwim points, such as McGrath, thus linking steamship with fast, economical air transport to interior Alaska points.

Site of New Seward Runway showing large trees and heavy brush that had to be cleared under heavy rainfall conditions.





A plane that over-shot the small Tazlina Airport runway, barely missing an automobile on the highway.

7azlina

Tazlina emergency airfield after lengthening. Shows proximity to highway, fuel and lodging accommodations.





Koyuk

The Eskimo has accepted travel as a necessary part of everyday life for a far longer time than his white brother has covered in written history. In the old days, the Eskimo was undaunted by the extreme hazards in the quest for whale, walrus, and polar bear; and accepted travel risks which would make a white man shudder.

Nevertheless, the Eskimo is essentially safetyminded. His ideology places a high value on human life. It was natural, therefore, that the people of Koyuk should appeal for assistance to the Territorial Department of Aviation. The two old airstrips at Koyuk, both more or less "homemade," had not only deteriorated physically, but had been rendered inadequate because larger planes, bearing larger loads, were now The new Koyuk Airfield was cut out of barren tundra.

attempting to use these strips more frequently. The people of Koyuk were concerned, not only for their own welfare, but for the safety of the pilots and passengers of visiting aircraft.

The entire population of 83 joined in a written request, penned by the Native postmaster. "We don't want mail plane to crash," they wrote.

Bush pilots confirmed the existence of extraordinary hazards at Koyuk, which is located 130 miles southeast of Nome, at the head of Norton Bay. Hummocks of tough Arctic grass made the fields extremely rough, and during the summer rains they became marshy or even flooded. Biweekly plane service to the village would have to be discontinued unless these conditions were promptly corrected.

A survey by the Territorial Department of Aviation confirmed the fact that it was not merely the Native trapping and fishing economy which was being threatened by inadequate and unsafe airport facilities at Koyuk. This village is also the only practical point of entry and supply for the Haycock mining district, some fifty miles to the north of the little town. Thus the livelihood of an additional 300 persons was at stake.

After adequate engineering studies, includ-(Continued on page 50)

Golovin

Golovin is one of Alaska's oldest villages, established by the Eskimos long before the first Russian explorers visited Norton Sound in 1822. In 1881, it was the scene of the first attempt to mine tin in the Territory.

Golovin is remote and difficult to reach by any modern means of transportation. Nevertheless, it is an important center in the life of the Eskimo people. A Native Service School, a C.A.A. Communications station, and a post office are located there. The Native reindeer industry is one of the main occupations of the people. Hunting, fishing, and trapping also help its residents to gain a livelihood.

The old 2000-foot airstrip at Golovin was flooded during a considerable portion of the year, and at such times unusable by any type of aircraft. Yet Golovin was greatly dependent on regular air transportation as its principal means of contact with the world.

Aviation gas tax funds were used to rebuild the existing field. Sand, combined with the proper amount of fine material to form a firm surface, was used to raise the level of the entire airstrip above high water. A total of 9000 yards was used, and the cost, including grading, was \$12,000. Work was performed by the competitive low bidder, the Lee Brothers Dredging Company, of Solomon, Alaska. Engineering services were provided by the Territorial Department of Aviation. The original dimensions of the airfield, 2000 feet by 75 feet, remain unchanged; but the raising of the surface now permits year-round use.

Golovin is served by scheduled bush pilot operators and by scheduled flights of the Alaska Airlines. It should be greatly benefitted by the improved regularity and dependability of these flights.

Elim

Elim is an Eskimo village on Norton Bay, approximately 80 miles southeast of Nome; it was established in 1912 as a mission village. The population of 150 is engaged in hunting and fishing, and a few also obtain seasonal work at Nome or in the canneries to the south. The village has a store and an Alaska Native Service school.

In the past, transportation to Elim consisted mainly of dog team and tractor overland, with small private boat service from Moses Point during the summer months only, At freeze-up and break-up time, it was almost impossible for Elim to receive either mail or supplies, except by a long and difficult trip afoot. Few places in the Territory needed a new airport more badly than

The Territorial Department of Aviation surveyed the area and prepared plans for an airstrip 2,000 feet long and 75 feet wide, to be constructed entirely with Territorial Aviation Gas

Bids were legally advertised, but all bids received were far in excess of the engineer's estimate. Hence, the work was done on a negotiated basis, by Lyman Madden, by means of rented equipment.

A total of 13.7 acres was cleared, and a new field located 1,200 feet from the Native Service school was constructed of local materials, consisting of mixed gravel and organic matter. The total cost, including barge and tug service and fuel oil, was \$4,307.09. Engineering and supervision were provided by the Territorial Department of Aviation.

Since the completion of this project, Elim is now served regularly by scheduled bush planes of the Alaska Airlines, and by other bush operators out of Nome. Regular transportation is now maintained to this community.

Shaktoolik

The Eskimo village of Shaktoolik, located on Norton Sound near Cape Denbigh, approximately 150 miles east of Nome, is a supply point for recent mining activity. Its residents engage in seasonal fishing and trapping; and the manufacture of Native art and craft items has also become quite important to the local economy.

Shaktoolik is entirely dependent on air transportation, being without roads or water facilities of any kind. The original field, built by the Natives themselves on a purely voluntary basis, was no longer serviceable. It was made of sand and surface silt, had a "washboard" surface, and was extremely soggy in rainy weather. Mail service to the village, scheduled on a three-timesper-week basis, was being seriously interrupted.

The improvement of the Shaktoolik airfield presented a very special type of problem; one which was encountered also at Elim, Golovin, Koyuk, and other points on Norton Sound. There was no way to transport heavy equipment into

the area, either by water, land, or by air. Existing fields were unsafe for the larger cargotype aircraft, and there were no facilities for economical water or overland transportation.

Finally, through the encouragement of the Territorial Department of Aviation, the Lee Brothers Dredging Co. of Solomon purchased a beach landing craft which made it possible to move heavy equipment at moderate cost to these points, where in the past no contractor would even bid on a job.

With this workable equipment, the Lee Brothers Dredging Company submitted the low bid, after legal advertising, and was awarded the contract. Heavy equipment was landed during the summer of 1952, and by the fall an airstrip 2000 by 75 feet was completed, thanks in part to a warm autumn and a late frost. The old surface was cut away and filled with nearby beach gravels.

Regular mail service by air should be available to Shaktoolik from now on.

Solomon

Solomon is an alternate or emergency land ing field for the Nome airport. Nome is the headquarters of the Second Division, the seat of the Federal Court and other important government offices, and the hub of commercial activity for a vast region comprising most of the Bering Sea coast and much of the Alaska Interior. Only a few boats reach Nome during the summer, and nearly 100 per cent of the passenger traffic in and out of Nome is carried by planes.

In fact, the entire Second Division of Alaska is dependent upon air transportation for normal travel and supply. Its few short roads do not afford connections with any of the main Alaska highways. Its harbors are closed during the long winter months, and even during the open

season for navigation, all water-born freight must be handled by lighterage. Hence, no other part of Alaska can present a greater need for modern airports than the Second Division.

Nome is the center of aviation in the Second Division, yet weather conditions at Nome proper are frequently unfavorable. Persistent patches of fog sometimes hover over the Nome airport for many hours, or even days at a time, preventing landings of incoming craft. Also, sudden northwest winds at Nome proper, sometimes create a safety hazard that arises without much warn-

An alternate or emergency landing field, as near to Nome as possible, was highly recom-

(Continued on page 39)



Merrill Field, one of the world's most active airports, is close to the downtown section of Alaska's metropolis, Anchorage.

Anchorage

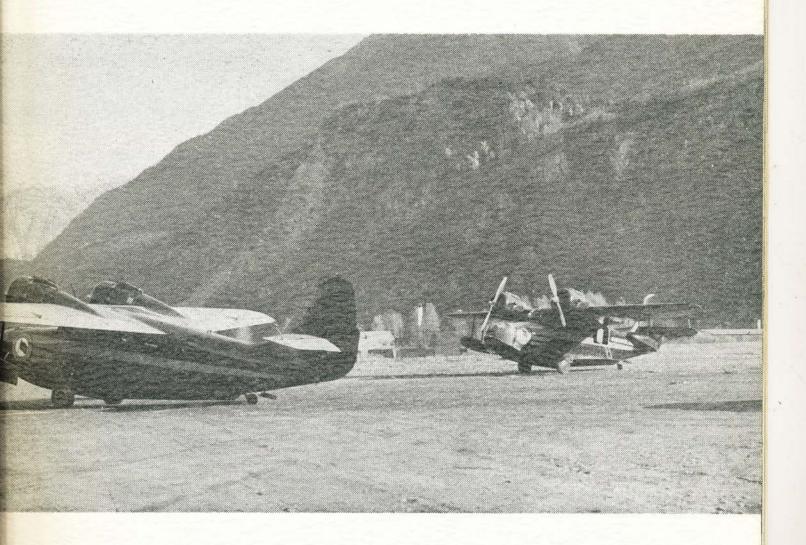
There are more seaplanes based at Lake Hood, Anchorage, than anywhere else in the world. Last summer nearly one hundred were moored at one time.



Air Travel Over Alaska's Rugged Terrain Is A Necessity

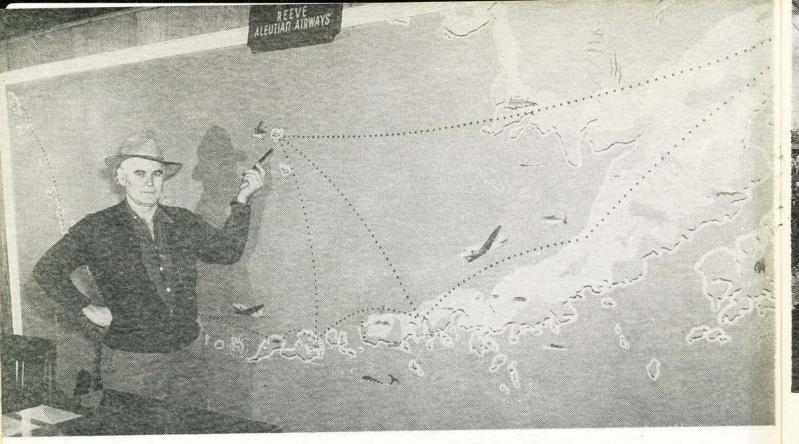
"Every person who turns his eyes on Alaska as the land of opportunity, seems to see something different—nuggets along its placer creeks, pulpwood from its stands of timber, fish in its waters, fur-bearing animals in its forests, crops from fields on which the summer sun shines around the clock."

Croil Hunter, Pres. NWA



Skagway

This famous gold-rush town is closest to the site of the proposed \$400,000,000 Alcoa plant. The only passenger transportation here in winter is by air. The new Municipal airport was completed in early 1951: A Federal Aid Airport project.

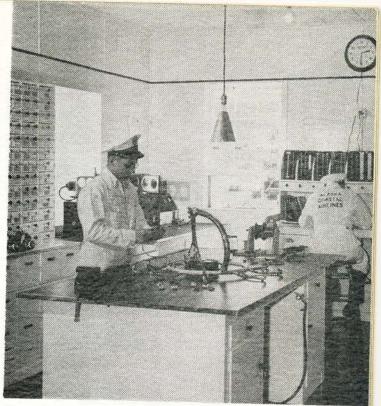


Reeve Aleutian Airways fly regular schedules out the fog shrouded Aleutian Island "Chain" and to the home of the Alaska fur seal, the Pribilof Islands. This route is noted for the worst flying weather in the world.

For work or pleasure, everyone flies in Alaska. Here, a fisherman and his family are landed at one of the many thousand remote lakes in Alaska.





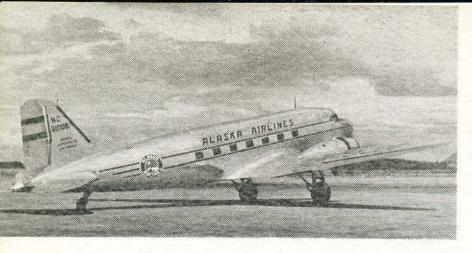


Mechanics in general have ideal working conditions in Alaska. Equipment and surroundings such as this are reason for the outstanding safety record of Alaska operated airlines, which often fly under adverse conditions.

Modern ticket counter and passenger waiting facilities at the seaplane terminal, Juneau, Capital of Alaska.

Alaska Coastal Airlines, at Juneau, has one of the largest seaplane operations in the world. Last year Coastal carried 36,052 seaplane passengers.

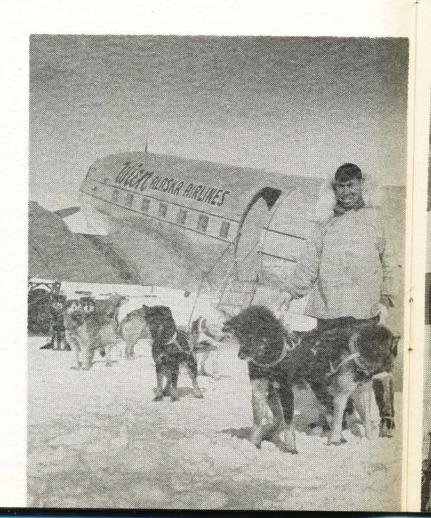




Alaska Airlines, besides its regular bush operation, connects the Territory with the Outside in daily scheduled flights to Seattle and Portland, from Fairbanks and Anchorage. Inter-Alaska flights include a two-daily schedule between Anchorage-Fairbanks and daily Anchorage-Nome.

Air transportation to Alaska hit a new high in 1952. Last year an estimated total of 350,000 passengers were flown within Alaska and between the Territory and the States. Alaskans are the most air-minded people in the world; the increase in air traffic over the last twenty years has been phenomenal; about a thousand per cent!

These are still places in the frozen north that rely on a mode of transportation ages old. Wien Alaska Airlines has established a meeting point between air transport and dog team. This is a typical scene at Kotzebue.





Northern Consolidated Airlines' Seabee scouts waterways for sternwheelers. Typical scene on one of Alaska's big rivers.

Paul P. Jenkins, native born Alaskan, learned to fly and received his pilot's license at United Airmotive Flight School in Anchorage under the GI Bill.

Paul was in the army during World War II, and although had only three years of formal education, from an Alaska Native School at Sitka, passed his examinations with top honors.

His village of Tundra, near Bethel, was so proud of Paul Jenkins that the residents got together and purchased him a Super Cruiser so that the village would have some transportation when emergencies arose.

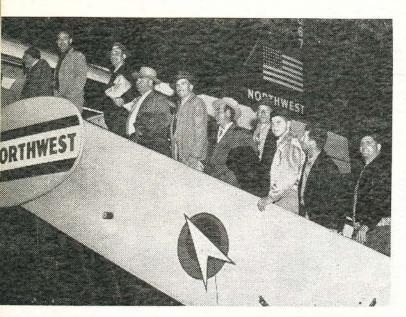
Many native Alaskans, including Eskimos, have made excellent pilots, and there is considerable activity in flight schools throughout Alaska, particularly in the Anchorage, Fairbanks, Juneau and Ketchikan areas, where there are people that can fly but cannot drive a car.



In six years of Alaskan operation, Northwest Airlines has flown 200,000 passengers and over 96,000,000 ton miles of freight. NWA payroll and other expenditures within the territory exceed \$2,300,000 annually.



No. 2 attraction in President Eisenhower's inaugural parade — Charley Cannon's Alaskan dog team, shown here just prior to boarding NWA plane at Anchorage, for Washington, D. C.



Fishermen and cannery workers bound for Bristol Bay now fly DeLuxe — no more slow, storm-tossed days across the Gulf of Alaska and fog bound Aleutian passes. It's more economical, too!

Northwest helps U. S. Air Force move troops to Korea, via Alaska. Men rotating home like to fly this shorter route.



aradise Like This Can Be Reached Only By Plane



laskan fisherman knows such a spot. He is inclined not to publicize it; and the traveler thrill of a lifetime from flying into the trackless hinterland to find one of his own.

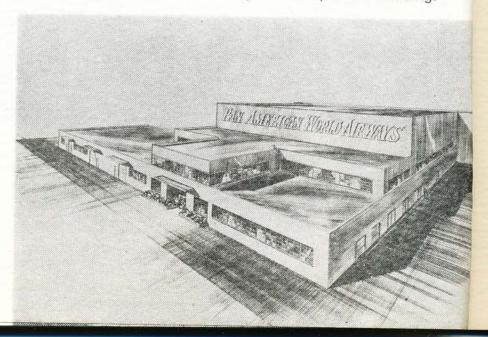


A nightly "produce airlift" keeps interior Alaska cities supplied with fresh meat, milk, dairy products and produce all year long, something unheard of 25 years, or even 15 years ago. Pan Am freighters deliver foodstuffs to Fairbanks, 1520 miles from Seattle, overnight—merchants in the interior have it on their shelves as soon, or sooner, than retailers get truck delivery within the trading radius of Seattle itself.

Pan American Airways is undisputed pioneer for regular air transport between Alaska and the States. In 1932 Pan American carried 6,637 passengers in Alaska; twenty years later, the number swelled to 65,915. They carried more than eight million tons of cargo in 1952. The daily Pan American passenger service includes a Seattle-Ketchikan-Juneau schedule and a non-stop passenger service between Seattle and Fairbanks. Regular extra flights in the summer accommodate fishermen, contractors, construction workers and tourists.

This ultra modern, concrete-and-glass structure at the Seattle-Tacoma International Airport will become a new \$750,000 headquarters for Pan American's Alaska operations late in 1953. A conviction that Alaska has only begun to realize her potential growth spurred the usually conservative company to invest so heavily in a permanent Alaska Region headquarters building.

Jorthwes orea, via





One of Cordova Airlines' planes at the new International Airport, Anchorage.

Cordova Airlines is the newest among Alaska's scheduled airlines. This service owes its existence to two new DC-3 length airports at Seward and Valdez. Cordova Airlines schedules two round trips from Anchorage to Seward each day, and another daily Anchorage-Valdez-Cordova flight. Another daily trip connects Valdez and Fairbanks. Regular bush flights are scheduled to the Copper River, Chitina and Yakataga areas.

Cordova Airlines P. O. Box 1499 Anchorage, Alaska

January 17, 1953

Mr. Tony Schwamm Territorial Department of Aviation Glover Building Anchorage, Alaska

Dear Tony:

You will probably be pleased to know that we have our DC-3 aircraft in operation utilizing the Seward and Valdez airports. The number of passengers from these two towns shows considerable increase in traveling over the same months of previous years. To me, this represents a need for this type of service into these two towns and also shows how the people appreciate the larger aircraft and are utilizing the service.

Last week, for example, we flew twenty-eight basketball players from Valdez to Cordova. To my recollection every winter for the past five years we have attempted to fly a basketball team to or from Valdez but never succeeded with the smaller aircraft. Having an airport built by the Territorial Department of Aviation capable of handling DC-3 equipment, we were able to give this service this year.

Having a larger field in Seward has allowed us to lower our fare between Anchorage and Seward, which I am sure is much appreciated by the traveling public between these two towns. The fare reduction was approximately \$8.00 on a round trip between Anchorage and Seward, and on such a short trip this is no small item.

In behalf of myself and my organization, I should like to express our appreciation to yourself and the Territorial Department of Aviation for your efforts in building these two airports.

Best personal regards,
CORDOVA AIR SERVICE, INC.
By /s/ Merle K. Smith
President

Cordova Airlines' new passenger terminal at Anchorage, Alaska.





Ellis Air Lines at Ketchikan "the first city," site of the proposed new fifty million dollar pulp mill in Alaska, has a new passenger terminal building on piling, expensive to construct and maintain. Last year Ellis flew 40,511 passengers in Alaska with amphibious aircraft.

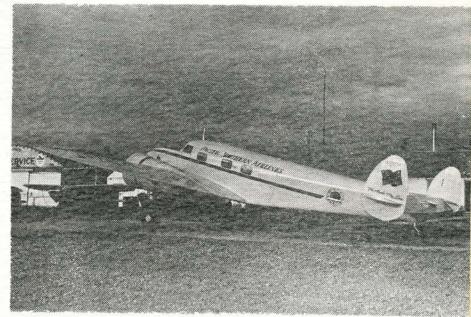
Northern Consolidated Airlines fly men, lumber and equipment to frozen lakes in the winter to construct their noted fish camps in the newly opened Katmai Volcanic area of Alaska, reached only by air. Sport fishermen there never have to lie about size and number of their catch.

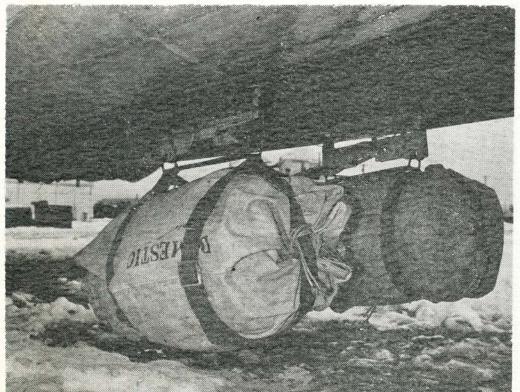




Pacific Northern Airlines' new passenger terminal was the first at the new International Airport, Anchorage.

Pacific Northern Airlines has daily schedules between Alaska and Seattle-Portland, Anchorage to Juneau, Anchorage to Kodiak, and to the Bristol Bay area. This airline service was founded by Art Woodley in 1932.





PNA uses a Lockheed for bush operations from Anchorage.

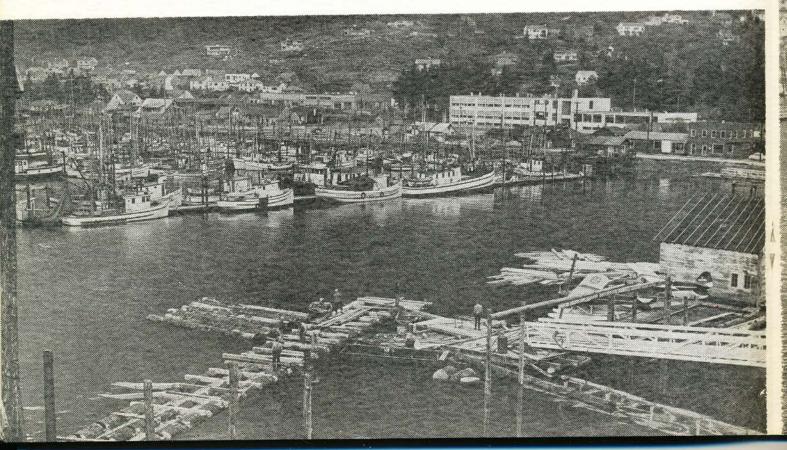
Reeve Aleutian Airways has developed a unique method for dropping mail in isolated areas from a DC-3.

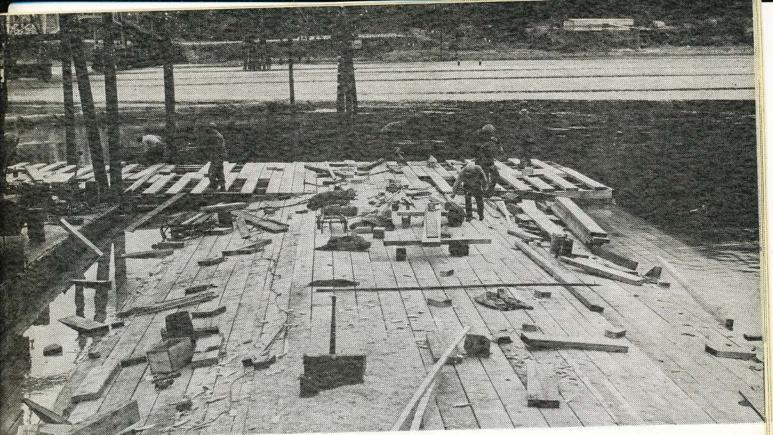


Start of construction on a new seaplane float at Juneau, using local spruce float logs and timbers. The primary structure is built on the beach between high tides which reach a height of twenty-six feet.

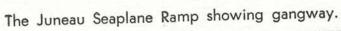
Juneau

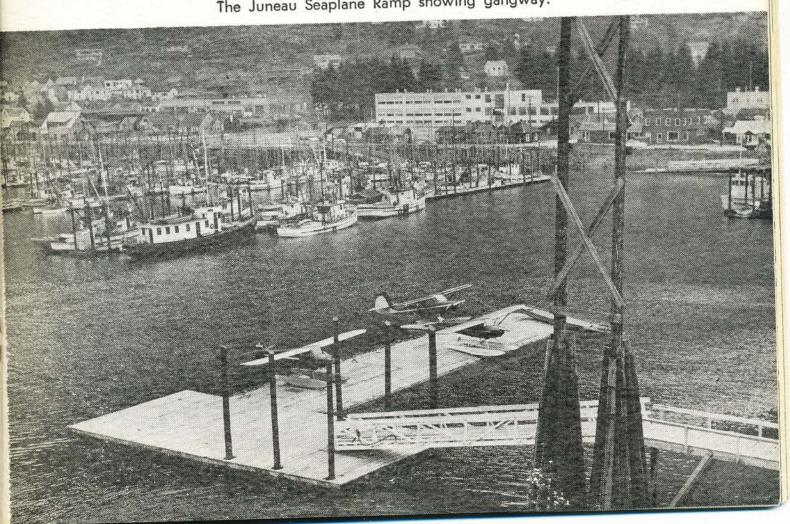
Floating the new structure into place, the old inadequate ramp at right.





Decking the Juneau Ramp and surface. Making the entire structure float level, takes water-front construction know-how.

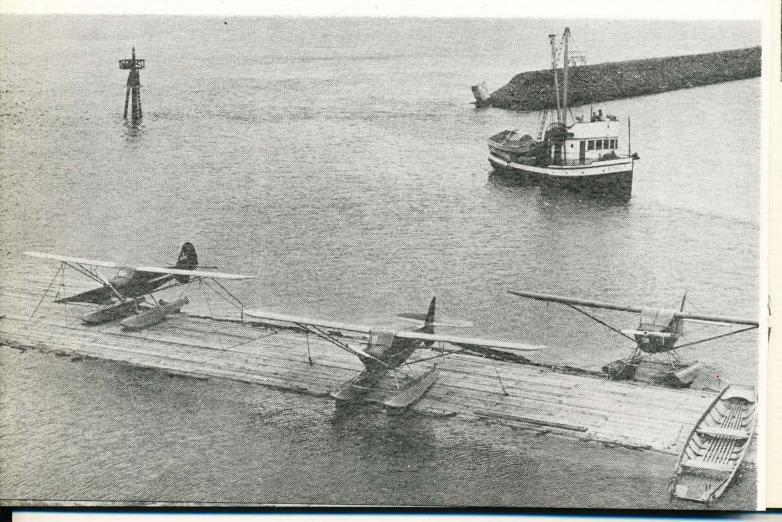




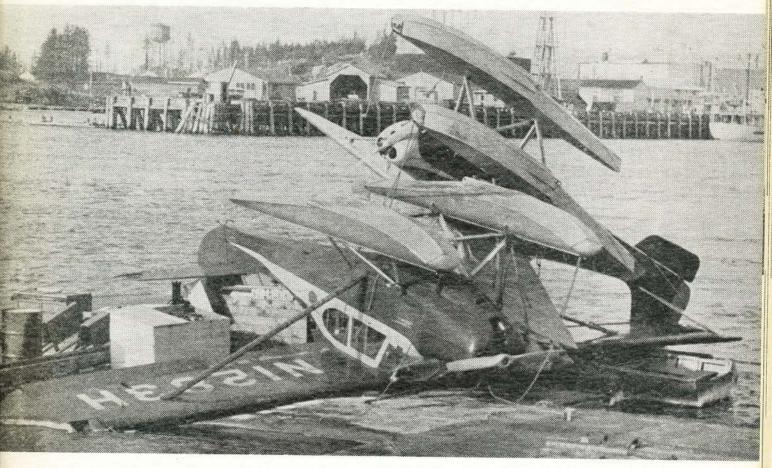


The old Juneau Seaplane Facility that was hazardous both for planes, pilots and passengers.

The completed Juneau Seaplane Float constructed under the Federal Aid Airport Program at a cost of \$16,000.00.

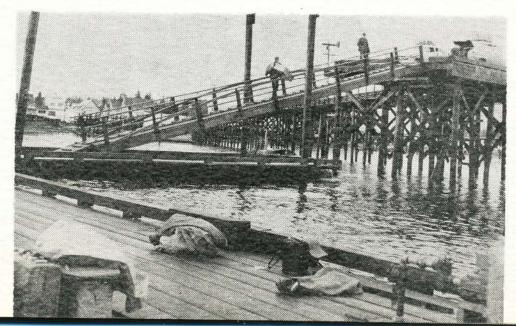


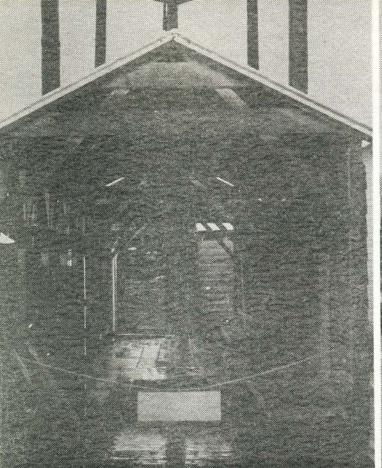
Seaplanes Need Bases 700!

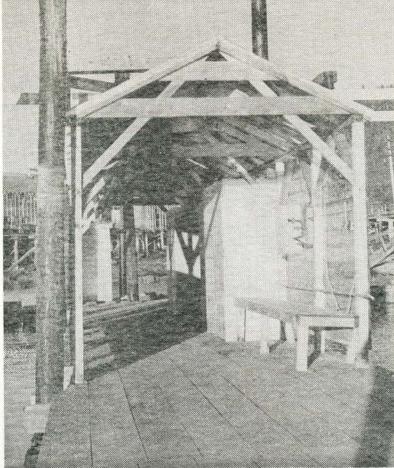


Damage to seaplanes is the result of strong winds and lack of tie-down facilities at Sitka.

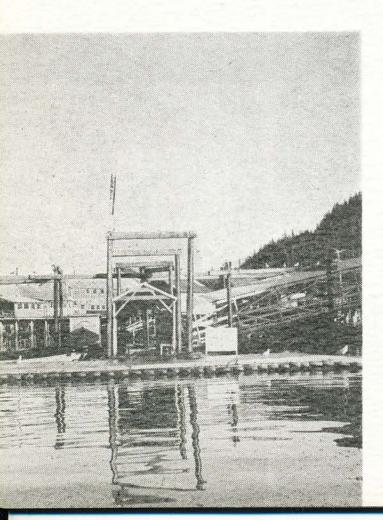
Petersburg needs more automobile parking space on seaplane dock due to increased air travel.







Wrangell



Above left, old Wrangell Seaplane dock. Note water in walkway (ice in winter) due to general deterioration.

Above, new seaplane walkway with telephone, lockers and restroom at Wrangell.

Left, rubber bumper float and approach at Wrangell.

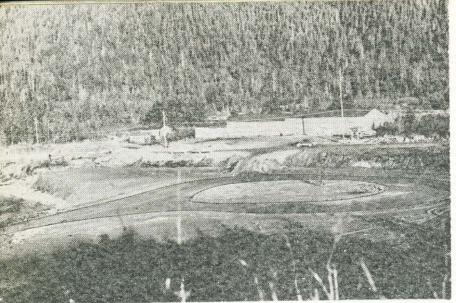


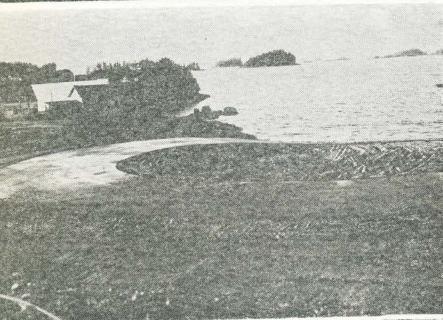
Seaplane ramp of Alaska design will accommodate two airplanes of the Grumman Goose type.

Wrangell

Gangway at Wrangell Seaplane dock is covered due to seagull hazard.



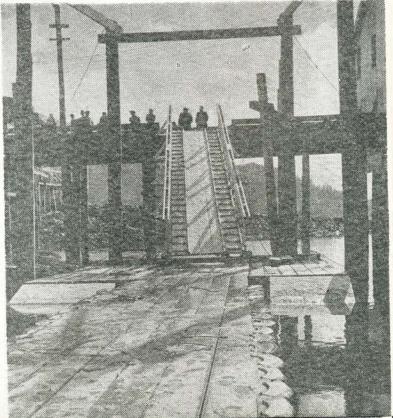




Sitka

New concrete amphibious pull-out at Sitka. Allows planes such as PBY to lower the wheels in water and taxi up circular ramp to discharge heavy loads of passengers and freight, then taxi back to water. Federal Aid project cost \$60,000.00.

Hydaburg. New seaplane ramp and gangway constructed under Federal Aid program at a cost of \$5,000.00.



Joseph Village

During the past quarter century, the transportation pattern of the Yukon River basin has changed completely. Today, we find the bush plane and the scheduled airline taking the place of the river boat, the dog team, and the "cat" trains of the past. While occasional shipments are still made by surface routes, these are the exception rather than the rule. The normal manner of travel and supply along the upper Yukon is by air, and Fairbanks has long been the center of this activity.

The Fortymile and Chicken mining districts, some 200 miles east of Fairbanks, are among the more important mining regions supplied from the Fairbanks area. In order to reach these mines, planes must select one of several passes through the mountains surrounding the valley of the middle fork of the Fortymile River. In the event of adverse weather conditions in these passes, the pilot formerly had to return to one of the landing strips near Fairbanks, nearly 150 miles away.

An emergency airstrip had long been needed

in the valley, and the site chosen was an abandoned Native settlement, called Joseph Village. Here a project using territorial funds was developed and a suitable airstrip, 2600 by 75 feet, was completed in 1952.

The Joseph Village emergency strip presented rather interesting construction problems. Wanigans and heavy equipment had to be sledded over the snow to the site, during the winter of 1951-52, in preparation for the spring construction work. Consequently, during the winter of 1952-53, this same gear will have to be returned to the town of Chicken, a distance of nearly fifty miles. Obviously, the equipment could not be used on any other project by its owners during the summer.

Yet the result fully justifies the steps taken. Pilots flying from Fairbanks to the Fortymile country will now be able to land at Joseph Village and wait for the weather in the mountain passes to clear, rather than being forced to fly all the way back to Fairbanks as in the past.

Huslia

Following a series of severe floods, it became necessary for the entire population of the former Native village of Cutoff to seek a new home. Approximately 140 residents moved to a location some sixteen miles away, on the Huslia River, a branch of the Koyukuk, during 1950.

The new village of Huslia is almost exactly midway between Kotzebue and Fairbanks, and is some 75 miles north of the town of Koyukuk. It is just south of the Arctic Circle, and the center of an excellent trapping area. Huslia has two stores and a school built by the Episcopal Church.

Needless to say, Huslia was entirely dependent on air transportation, as is the case with many similar villages of the Arctic.

By means of Territorial Aviation Gas Tax funds, an airfield was constructed during the summer of 1952, 2800 feet long and 75 feet in width. Engineering and supervision were provided by the Territorial Department of Aviation.

The new village is not only supplied with material necessities by means of bush planes, but Mission work is conducted by plane also. Bishop Gordon of the Episcopal Church flew there during the first week of 1953, and reported the field in excellent condition. The trapping activities, too, should be greatly facilitated by the new airport at Huslia, which is now served on a regular airmail schedule from Fairbanks by Wien Airlines.

Solomon

(Continued from page 19) mended by the Aviation Board Member for the Second Division, preferably one from which overland transportation to the city would be possible, in the event of continued unfavorable weather at Nome. This was concurred in by all others concerned, and a plan was prepared by the Territorial Department of Aviation for a new airport at Solomon, about 35 miles from Nome.

There is a road from Solomon to Nome, although the route is slow and difficult and must include ferry service across the lagoon. Yet, in an emergency, passengers and freight bound for Nome could be transported overland from Solomon, or outgoing passengers loaded there At other times, planes temporarily unable to land at Nome for any reason could find a nearby safe haven at Solomon, where they could re-fuel and "wait out the weather."

Upon legal advertising, the following bids were received on the Solomon project:

 Madden-Nelson
 \$14,375

 P. L. Reader Co.
 \$18,000

 Lee Bros.
 \$14,370

The contract was accordingly awarded to the Lee Brothers Dredging Co. of Solomon, and the work was completed by them during the year 1952. The new airport at Solomon was 2000 feet long and 75 feet wide.

This airport provides not only a valuable emergency or alternate field for the Nome traffic, but is an important new link in the chain of inter-related airports of the Seward peninsula and Norton sound region; Golovin, Elim, Shaktoolik, Quartz Creek—Kougarok, and Teller.

In view of the unusually large amount of air traffic in this region, the entire area should benefit by this new airport at Solomon.

A Steel Airfield For The Arctic



Air view of Teller field.

7eller

Located on a waterway opening into the Bering Sea, the town of Teller is one of the most important settlements on the Seward Peninsula. It is not only a source of manpower for government contractors, but the center of highly strategic tin mines, which have recently become very active.

Teller has a Mission school, a radio communications station, a post office, and several stores

to supply the area. It is a former center of the Native reindeer industry, and its Eskimo population engages in fishing and Native handicraft production.

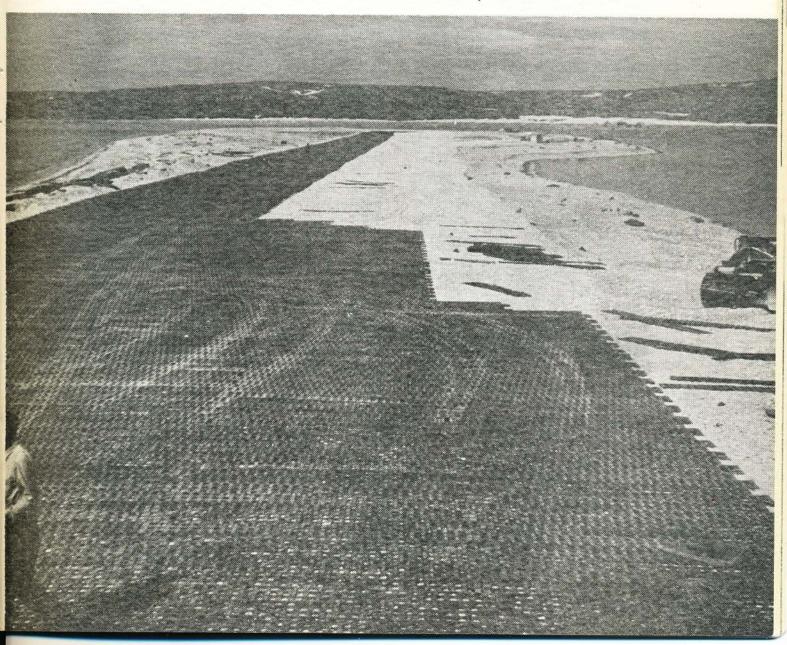
The old airstrip at Teller was short, narrow, and soft. It had been built on a narrow sand-spit, and the base for the old field was local beach sand, which lacked sufficient fine material to combine with the gravel to form a firm surface. The field was so soft, in fact, that heavily-loaded planes were often unable to gain enough speed for takeoff; yet in spite of these draw-backs, Teller was receiving mail twice each week; and an average of 8 flights per day were being made by bush pilots, carrying freight and passengers, under these severe circumstances.

Employing Territorial funds provided by the aviation gas tax, the Department of Aviation undertook to lengthen, widen, and grade the field during the summer of 1952. Because of the lack of local fill materials, and the extreme expense of importing them, a surplus steel landing mat was laid using local Eskimo labor, after a difficult time of transporting the sections by barge from a nearby surplus military airfield.

The safety and utility of the Teller Airport has been greatly improved thereby. The people of the village may look forward to more frequent flight schedules and lower freight and passenger rates to this area, which has become very active since the opening of the tin mines in the adjacent region.

Planes of the small twin-engine type, such as twin-engine Beechcraft, Cessna, Grumman "Goose," and Widgeon type have used this new landing mat with excellent results, according to information received from local pilots.

Surface of Teller airfield constructed by Eskimo labor.





Dillingham airport and access road showing relation to the well-known salmon center.

Dillingham

Throughout its fifty years of existence, the town of Dillingham, in the center of the Bristol Bay area, has experienced a degree of municipal development altogether too small in proportion to its economic importance. Primary reason was the extreme seasonality of the fishing industry, coupled with the lack of dependable year-around transportation.

In past years, Dillingham was visited only by small fishing boats and cannery supply vessels during the summer, and by occasional mail boats at other times of the year. Bush flights connected Dillingham with Anchorage and other Alaska cities at other times of the year, but these were strictly limited in frequency and loads by frequent unfavorable weather and ground conditions for landing and takeoff. Dillingham definitely needed better transportation in order to grow.

Today, Dillingham is beginning a new life, since the completion of a three-year airport construction program. The Dillingham airport now has a runway 3750 feet long and 150 feet wide, aligned to take best advantage of prevailing winds. It was constructed under the Federal Aid program of the National Airport Plan, with the aid of Territorial Aviation Gas Tax funds, at a cost of \$164,621.06.

The project was so planned to permit limited DC-3 operation immediately after the first season's work. DC-3's used the strip during the winter of 1950-51, but in the spring of '51, the tundra base was unduly soft because of severe thawing action of several spots of perma-frost. This resulted in the field becoming unusable during the early summer of that year.

Gravel is at a premium in Dillingham, as the entire area is boggy muskeg, and a great deal of surveying was necessary before enough additional material could be located. Six thousand more yards of gravel were found and applied during 1951, and final improvements were concluded in 1952, including erosion-control and radio navigational aids.

The erosion control measures are of rather special interest. The material underneath the Dillingham airstrip is very fine, and the heavy rains cut into it deeply and dissolve it like sugar in coffee. In order to correct this, a full DC-3 load of Alaska seed oats from Palmer was flown in, and planted along the sloping sides of the airfield, together with a proper combination of blue grass seed. The resulting turf protects the sides against erosion by heavy rain.

Boundary lights for the Dillingham airstrip are at the location, and will be installed, together with a rotating beacon, in the summer of 1953. Another very important improvement at Dillingham is the radio homing station, provided by the Territorial Department of Aviation, and installed and operated by Northern Consolidated Airlines.

With these improvements, the airport at Dillingham will comply with all CAA requirements for scheduled airline operation.

Heavy and bulky cargo, not practical to ship by air in the past, will now move to Dillingham at all times of the year. Reduction of fares and freight rates will be possible by this large ship operation, as has been proved in many other areas of Alaska.

It is expected that most of the so-called "Fishermen's Airlift" will be landed at Dillingham during this coming season of 1953.



Quartz Creek. At left, first year's construction with drainage ditches in this tundra country.

Quartz Creek

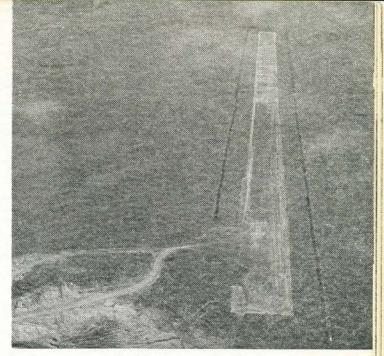
The site of this project is an important and steadily-producing gold district in the interior of the Seward Peninsula, which is supplied from Nome, about seventy miles to the south. Since there are no less than five "Quartz Creeks" in Alaska, it was necessary to adopt the hyphenated official designation "Quartz Creek-Kougarok" in order to avoid confusion.

In the past a railroad maintained by the Alaska Road Commission connected this area with the City of Nome. The railroad could be operated only in the late summer because of ice and snow conditions, and experience proved that maintenance and other costs of the railroad, applied against the limited tonnage possible under the peculiar conditions of the region, resulted in an excessive rail freight rate. Transportation by air is known to be more economical and more dependable in this instance.

During the years of seasonal operation of the railroad, roads had been constructed from the railhead to the various mines. There was, however, no road to Nome or any other supply point.

Hence, the most practical method of transportation was the flying of passengers and freight to the old railhead and crossroads, a point on Quartz Creek, in the foothills of the Kougarok Mountains. From there, it was easy to arrange transportation by surface vehicles to the various mines, as the Alaska Road Commission had constructed forty miles of access roads in the past three years, and has already planned for an additional twenty miles of road in the near future.

The Quartz Creek-Kougarok Airport was developed as a Federal Aid Project, the U. S. Government supplying 75 per cent of the cost. A new



Right, same airfield after second year of construction.

- Kougarok

airport, 3,400 by 150 feet, was designed and approved. Bids were advertised, and low bidder was the Grant Mining Co. The contract was awarded and the work began on September 4, 1951.

Progress was extremely slow because the ground was thawed only three to six feet below the surface, even at the end of summer. This made it slow and difficult to develop a local supply of gravel. On October 13, 1951, it was necessary to suspend operations for the winter. Work could not be started again until late in the summer of 1952 because of freezing conditions. The project is still incomplete, with only an estimated three weeks work remaining for 1953.

During the construction season of 1953, the remaining work will be completed; the field extended to 3,450 by 150 feet throughout, and a parking apron, 300 feet long, is to be provided, 175 feet from the center line.

The new airport should meet all practical needs of the Kougarok mining district. Fuel for dredges and other mining equipment can now be flown in from the seaport of Nome to the Kougarok area, and this can be accomplished considerably cheaper and more dependably than by the antiquated railroad, as in the past. This can also be done earlier in the season. (In 1952, for example, the first trip possible on the old railroad was made August 1st, delayed by cold weather.) Now, however, it is possible for the companies with mining property in the region to make definite plans for regular fuel transportation, which is their greatest need.

Deliveries of fuel oil can be made at regular intervals without expenditure of stock-pile supplies. By solving this problem, the new airport should encourage further mining activities in the Quartz Creek-Kougarok area.



Left, draining tundra at Quartz Creek, start of construction.

Copper Center

Close cooperation between the Territorial Department of Aviation and the Alaska Road Commission made it possible to secure an excellent landing facility at Copper Center, at very low cost.

On learning that the Alaska Road Commission was preparing to abandon a straight section of road in this area, the Department of Aviation initiated proceedings to acquire legal title to the old strip of road, which was in good condition and suitable for an airport.

In July, 1952, work was completed on a 3,000 foot runway using a portion of this abandoned road. Cost was at a minimum.

Copper Center is on the route of a scheduled daily mail flight between Valdez and Fairbanks by the Cordova Air Service, and this new airfield should greatly improve the tourist travel into this historic mining area, which is also a growing trading center, as well as a very picturesque tourist spot for all those fortunate enough to visit the community.

Copper Center. Abandoned road was widened to create airfield.





First year's construction, Ruby airfield.

Ruby

Ruby is a small town situated on the Yukon River, approximately midway between Fairbanks and Nome; and it serves as a primary supply point for several surrounding mining districts.

For years there was a hazard to pilots and aircraft flying in and out of the Ruby Airfield, caused by poor alignment of the old strip, and an awkward dog-leg or sharp bend in the landing and take-off area.

Originally, Ruby was included in the National Airport Plan for a major development under the Federal Aid Program, and a project had been planned costing \$207,000. But the plan was not approved by the Military, due to nearby installations, and the application was accordingly withdrawn.

Nevertheless, the Territorial Department of Aviation was able to devise a plan for greatly improving the Ruby airstrip, at a cost less than one-tenth that of the Federal project. Bids were advertised, and the low bidder was the Iver Johnson Company of Ruby, a firm which was already operating heavy equipment in the area. During 1952, improvements to the value of \$10,000 were completed on September 25th.

The old strip was lengthened and the center line considerably straightened, providing a satisfactory strip 2200 feet in length. Although the project is still only half complete, the field is already much more safe than in the past. Additional stage construction is scheduled for 1953, and by the end of that year, the people of Ruby should have scheduled DC-3 service to the community.

Engineering, supervision, and inspection were all provided by the Territorial Department of Aviation, and funds for the improvement came entirely from the Territorial Aviation Gas Tax.

Minto

This community, thirty miles from Nenana, has been served in the past by river boats and seaplane flights from Fairbanks. The Department of Aviation constructed an airstrip immediately adjacent to the town during the summer of 1952. This new airfield was constructed upon the site originally selected during the middle thirties by the CCC.

Minto now for the first time, can be reached at all times during the year; previous to the construction of the new airfield, it was impossible to reach the town during the spring and fall when the river was freezing and thawing. Although seaplanes are available for travel from Fairbanks to Minto during the summer months, the use of land ships and the new field saved the residents of this village about one-third on transportation costs. The construction work was accomplished by a contractor from Fairbanks and the local residents undertook the clearing of the approaches to assure safe operation of aircraft from the new 1800 foot field. The construction of the Minto Airfield was in compliance with House Memorial No. 33 of the Legislature of the Territory of Alaska 1951 session.



Aerial view, Fort Yukon. New long runway compared to old diagonal strip.

Fort Yukon

Gravel for surfacing is scarce in Fort Yukon area.



Fort Yukon

Fort Yukon, just above the Arctic Circle on the northernmost point of the Yukon River, is unique among all Alaska towns and cities in many respects. It was the first settlement in Alaska made by English speaking people, the site of a post of the Hudson's Bay Company in 1847. In 1850, the first gold discovery in Alaska was made within a few miles of Fort Yukon, and for more than 100 years the place has been a center for fur trading and gold prospecting. In 1869, perhaps the first positive act of American soverignty in Alaska, was the removal of the Hudson's Bay Company settlement by Lieutenant Raymond of the U.S. Army Engineer Corps, following astronomical measurements made by him which proved that the settlement lay in U.S. territory.

Fort Yukon was the first interior post of the Alaska Commercial Company (parent of the present Northern Commercial Co.) when Moses Mercier, a trader employed by the A. C. Company, established himself here in 1873 after a trip upriver from St. Michael.

In climate too, as well as in history, Fort Yukon has claims of very special interest. The highest official temperature ever recorded in Alaska was observed at Fort Yukon as well as the lowest official temperature (-78 degrees F.) recorded in any land under the American flag.

Although the population of Fort Yukon is small, it is the trading and transportation center of an immense hinterland, the sparsely-populated and little-known northeast quadrant of the mainland, more than 60,000 square miles stretching north of the Porcupine and Chandalar Rivers to the Arctic Ocean. For example, the only medical facilities in this vast region is located at Fort Yukon.

Since 1915, the Hudson Stuck Memorial Hospital, maintained by the Episcopal Church, has provided for the medical and surgical needs of the area. On numerous occasions, human life has hung upon the possibility of a difficult landing at the old Fort Yukon airstrip.

This old landing field was not only deteriorated, but too short, too rough, and poorly aligned with respect to the strong north winds. Even under good weather conditions, the old airfield was difficult and expensive to maintain. Furthermore, it was severely damaged by the flood in 1946. Primarily because of poor landing conditions, scheduled flights to Fort Yukon were completed less than 50 per cent of the time.

In addition to the need for better transportation for trappers and prospectors, and for patients, personnel, and supplies of the hospital, the tourist potential at Fort Yukon is one of the best in the Territory, and waited only upon the improvement of air facilities. Many tourists from distant outside points feel that their Alaska excursion is not complete without a trip above the Arctic Circle, and Fort Yukon offers the most comfortable, practical, and inexpensive terminus for such a tour.

Wien Alaska Airlines, serving Fort Yukon, has greatly stimulated this type of tourist travel by issuing handsome engraved certificates to each of the passengers crossing the Arctic Circle, duly signed by the pilot of the plane. Needless to say, these certificates are highly treasured souvenirs, and at the same time very effective advertising for future tourist business.

The historical background, as well as the geographical position, of Fort Yukon adds much to its travel attractions.

Under the direction of the Department of Aviation, plans were prepared for the construction of one of the finest rural airports in Alaska at this community. Plans provided not only a re-located and much longer airstrip, but the installation of boundary lights and a radio homing beacon. The key importance of these landing aids is clear when one recalls that the typical mid-winter "day" at this northern latitude is limited to an hour or two of dim twilight occurring about noon.

By the end of the construction season of 1952, the work was completed, and Fort Yukon had a new municipal airport 3750 feet long and at a cost of \$139,176.19, constructed under the Federal Aid Airport Program. The new boundary lights outline the field during the long Arctic nights and greatly increase the number of safe landings that can be made during a given week. The radio homing station, provided by the Department of Aviation, and installed and operated by Wien Alaska Airlines, further improves the safety and frequency of flights during periods of darkness and poor weather.

Since the operation of the new facilities, which were financed by the Federal Government and the Territorial Aviation Gas Tax, Fort Yukon is now served by regularly-scheduled year-around DC-3 flights. The cost of freight and passenger transportation has been very markedly reduced. Already, the Hudson Stuck Memorial Hospital has reported a saving in its operating expense, because of lower-cost and more dependable transportation for patients, personnel and supplies. Fort Yukon and the airlines serving it are looking forward to a very notable increase in the tourist trade during the year 1953 and far into the future.

The following is an excerpt of an article in NC Co.'s publication Flag, December, 1952:

"Of prime importance to Fort Yukon residents is the improvement in the landing field just now being completed. The Alaska Department of Aviation has just installed a set of field lights (Tony Schwamm is director of this department), which, coupled with the "H" marker now in use, will enable DC-3 operation in almost any weather. C. Masten Beaver, a former NC Co. employee and now Wien Alaska Airlines agent, operates the "beam." E. D. (Ed) Toussaint is looking after maintenance of the field and supplying power for the lights.

WIEN ALASKA AIRLINES

ALASKA'S FIRST AIRLINE • FAIRBANKS • ALASKA

January 9, 1953

Alaska Aeronautics & Communications Commission Department of Aviation Glover Bldg. Box 2215, Anchorage, Alaska

Attention: Mr. Tony Schwamm, Director

Dear Tony:

On a recently completed annual airport and airfield inspection of the airport and airfield installations used by our company, several interesting facts were brought to light which it occurred to me might be of interest to you.

The Territorial airports of Kotzebue and Fort Yukon which less than three years ago were listed operationally as our worst airports on our scheduled operation, now are rated as number 2 and 3 respectively. This has been due to the Territorial Aviation Commission under your direction, which has changed runway directions, graded, lengthened, equipped and maintained these fields.

The field lights installed at Ft. Yukon and Kotzebue, being of the latest approved types, have needed no maintenance and have provided a 100% improvement in operational safety. The new runway at Kotzebue, having been built with due consideration to prevailing winds, has practically ended the snow removal problem and has notably lessened our flight interruptions caused by excessive snow and excessive cross wind components.

The Northern Radio "H" facility navigational aid installed by your organization at Fort Yukon has made possible scheduled multi-engine operation into this town. Wien Alaska Airlines has three multi-engine schedules per week to Fort Yukon, two of which are at night, thus increasing our aircraft utilization and improving regularity of service nearly 40%.

Statistically, Wien Alaska Airlines' percentage of trips scheduled and completed was 96.77% for both Kotzebue and Fort Yukon, for December. This is a great improvement over any previous year, and this record was made possible by the improved airports.

We would like to take this opportunity of expressing our appreciation to the Alaska Aviation Commission and particularly to yourself, for making such performance records possible.

Here's to the best of success in the coming year, to you and your staff!

Sincerely,

WIEN ALASKA AIRLINES, INC. Richard B. Webb Assistant Secretary Assistant Operations Manager



This airfield parallels the highway.

70k Airfield

The airfield at Tok was originally planned for construction in 1950, but due to the indefinite site location for the U. S. immigration and customs stations, either at Tok or the Alaska boundary, decision had to be made before construction could be started. When it became positive a new station at the Alaska border was not forthcoming in the foreseeable future, it was decided due to the urgency to construct an airfield for the use of small aircraft at Tok Junction, adjacent to the customs and immigration station established there by the U. S. Government. This project was completed during the summer of 1952 through the cooperation of the Alaska Road Commission, who performed the actual construction which had been financed by the Department of Aviation. Small aircraft flying to and from Canada are now able to stop at the airfield for customs and immigration clearance which will simplify entry and departure. This airstrip will also serve the new townsite recently established at Tok Junction; the strip is 2000' 75'.

Radio Homing Beacons

The Alaska Department of Aviation has purchased, upon recommendation of the board, 20 radio beacon homing facilities that incorporate, together with the beacon, a five-channel high frequency 100 Watt transmitter, plus one receiver and space for a second receiver.

These transmitting units are leased to various airlines throughout the Territory at a monthly rental of \$10.00 per unit. As these radio homing facilities are privately owned and not operated by the CAA, these facilities are made available only by prior contact or arrangement with the operator. These units were purchased to coordinate use of private homing facilities on off airways airport localities, and these private radio beacons offer highly valuable assistance to nonairline pilots; their limitations should be thoroughly understood before any attempt is made to use them. The CAA Airways Traffic Control does not supervise traffic in these off airways zones, so that the pilot will have no way of knowing what other planes may be in the vicinity at the time. These radio homing facilities are irregular in their operation and subject to shut-down without prior notice. Airlines make use of these facilities for approaches under instrument conditions. The installation of these radio homing facilities at airport locations such as Fort Yukon, has greatly increased the flight operations into the Upper Yukon Valley for let down at Fort Yukon. Previous to this installation, the pilot of the aircraft and without an automatic direction finder would not know when to let down when he arrived over the Fort Yukon station. The same can be true of Dillingham where the visibility is normally poor but the surrounding territory is conducive to safe flying due to the flat terrain. Other installations at Port Heiden and Sand Point, in the Aleutian Chain, will allow an instrument let down into this normally fog ridden area. A radio homing beacon has been delivered Pan American Airways for installation on the Juneau-Fairbanks route in the Haines Junction vicinity, which will enable the Pan American Clippers, on their through flights to Fairbanks, to cut off the dogleg between Juneau and Whitehorse, and make it possible to go directly to the airways beacon at Snag. This should save approximately one hour flying time on each straight through flight to Fairbanks. However, this project is only in the installation stage. Another radio beacon has been set up on Point Mendenhall, at the north end of the Juneau Airport which will assist in guiding aircraft into the Juneau area. Other locations at which this service will be installed are Nyac, Marshall, Platinum, Hope, Naked Island and Nunivak Island. All of these installations will greatly facilitate the safety of flight in the so-called off airways areas, and at the same time give a good reliable transmitter for transmitting aeronautical frequency needs such as weather, departure time, freight and passenger reservations and at the same time leave frequencies for communication with the Alaska Native Service, ACS, or any other facility that may seem necessary.

In purchasing these units, which would have been a considerable financial outlay by the airlines, it was considered of prime importance that if radio homing beacons were installed, other than CAA, that these units be of good quality and standardized throughout the Territory. Therefore, the Alaska Aeronautics and Communications Commission authorized the purchase of these units through legal advertising to the lowest bidder. The airlines are held responsible for the cost of installing, operating and maintaining these radio units, while the Territory will receive the monthly rental, which should fully amortize these units at the approximate time that they should become obsolete for use in the Territory.

Koyuk

(Continued from page 18)

ing consultation with local pilots, the Territorial Department of Aviation decided to develop a new airstrip at Koyuk, 2000 feet long and 100 feet wide, aligned to take best advantage of local topography and prevailing winds, and located nearer to the village than the two old strips.

Legal advertising failed to bring forth acceptable bids on this project, therefore the Territorial Department of Aviation negotiated an agreement with the Lee Brothers Dredging Company of Solomon to perform the work for \$22,870. The Lee Brothers Company is an organization thoroughly experienced in this type of operation, and also had satisfactory heavy equipment located not too far from Koyuk.

This equipment was moved from Solomon to Koyuk and the work satisfactorily completed during the summer of 1952.

Flight schedules are now maintained regularly, and although there is still a natural hazard from high winds in the area, safety conditions have been greatly improved. The people of Koyuk can now put their minds more at ease about the safety of the mail plane.

With the completion of new airstrips at Koyuk, Shaktoolik, Solomon, Golovin, Elim, and Teller, a new route of established airfields has been provided for the rest of the Norton Bay and Bering Sea region. The plan of the Territorial Department of Aviation is to continue the improvement of airfields along the Arctic coast as far north as Barrow.

Civil Air Patrol

The sum of \$3683.63 was allocated to the Civil Air Patrol for construction of a small building for winter airplane equipment storage and office equipment for the Fairbanks unit; radio equipment and gasoline for the Anchorage unit.

Flight Schools

Another duty of the Director of Aviation has been the approving of Flight Schools throughout the Territory before contracts for flight instruction, under the Korean GI Bill, can be issued by the Veterans Administration.

Two serious flight violations were filed during the past two years by the Director of Aviation. The first incident in 1951, involved a private plane being flown at a dangerously low altitude in the Anchorage area. The pilot was fined \$100.00 in the U. S. Commissioner's Court.

In the second violation in 1952, two separate complaints were filed by the Director, with the United States Attorney. Both complaints involved the same pilot. The first offense was the taking of an aircraft without the owner's consent. The second occurred on the same trip when the pilot flew from Anchorage to Seward, and in the early morning flew extremely low many times over the town of Seward causing unnecessary noise and hazard to the residents and the community. The pilot involved was fined \$250.00 on each count or a total of \$500.00.

Since this last penalty, which was considered quite severe for a serviceman, there have been no violations of this type reported to the Department of Aviation.

Point Barrow

Point Barrow is the largest community in the Arctic. The Community has only one boat arrival per year, and the people depend primarily upon the airplane for travel and for all types of freight. Everything that is humanly possible to be carried in a plane, is flown to Point Barrow as a routine procedure.

There is a U.S. Navy landing field at Barrow provided with a steel mat, but due to the heavy military traffic, the civilian airlines were limited to a maximum of three flights per week at the Navy airfield. Three flights per week was far from sufficient to serve the important and growing civilian community. In addition, bush planes were not allowed to use the military landing facility, and were confined to a remote spot on

the beach during the summer season. This was not only dangerous, but also impractical because of the distance of this beach landing area from the village. Transportation overland was difficult and slow because of the boggy tundra-like terrain.

In order to serve these needs of the Barrow community, the Territorial Department of Aviation secured a surplus steel landing mat, using Territorial Aviation Gas Tax funds for the purpose.

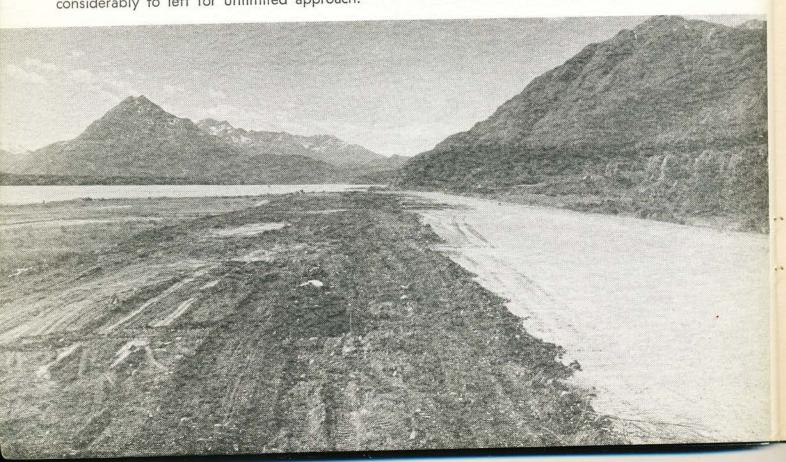
During the summer of 1953, it is planned to complete this airfield with the cooperation of the Air Force, the Navy, and the Arctic Contractors. Supervision will be provided by the engineering staff of the Territorial Department of Aviation.



Discharging cargo from amphibious plane at Haines.

Haines

Hill at right on end of old Haines runway was hazardous obstruction. New runway was aligned considerably to left for unlimited approach.





Grumman Goose has good safety margin in takeoff from new Haines runway.

Haines

Of special interest in view of the announced plans of the Aluminum Company of America to construct a major plant in the nearby Taiya valley, is the new airport at Haines. For many other reasons, too, Haines, located on Lynn canal in the northern part of the Panhandle, has become an increasingly important transportation center.

In order to be served regularly by planes of the PBY and DC-3 types, Haines required a runway 4100 by 150 feet. This project was developed under the Federal Airport Aid Program, at an estimated total cost of \$130,000.00. After the design was approved and bids advertised, the contract was awarded on a low-bid basis to the Palmer Construction Company, of Anchorage. Work proceeded through a part of the summer of 1951. Mild weather made it possible to continue construction through November 15th. of that year.

On resuming work in 1952, on June 27th, unforeseen circumstances made it necessary to extend the construction contract. There was a shipping strike in the spring, which delayed delivery of heavy equipment to the site.

A season of excessive rain slowed the work still further. Out of a period of thirty-five days, only two days without rain were experienced. Because of these circumstances, the contract was only 98% complete when it became necessary again to suspend operations for the winter, on October 9, 1952.

The field is usable meanwhile, however, and the people of Haines should begin to enjoy the benefits some time before the completion of the project in 1953.

There are two flights daily to Haines by Alaska Coastal Airlines, using amphibious Grumman Goose aircraft; and when heavier passenger or freight loads demand, a PBY is used. DC-3's too have already used this newly constructed field.

The Haines Airport should become very active if the Taiya valley Aluminum plant becomes a reality, as this is the largest airport in the vicinity. The Skagway Airport cannot be used by large craft because of limitations imposed by the surrounding terrain; hence a large proportion of any additional traffic will doubtless pass over this new airport at Haines.

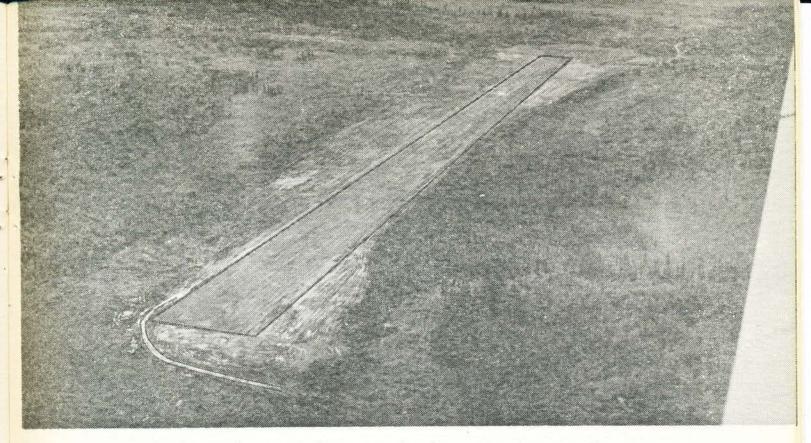


Arrow indicates survey crew's original slashing for Eagle airport site.

Eagle

Air photo of survey lines in Fortymile country, Eagle site.

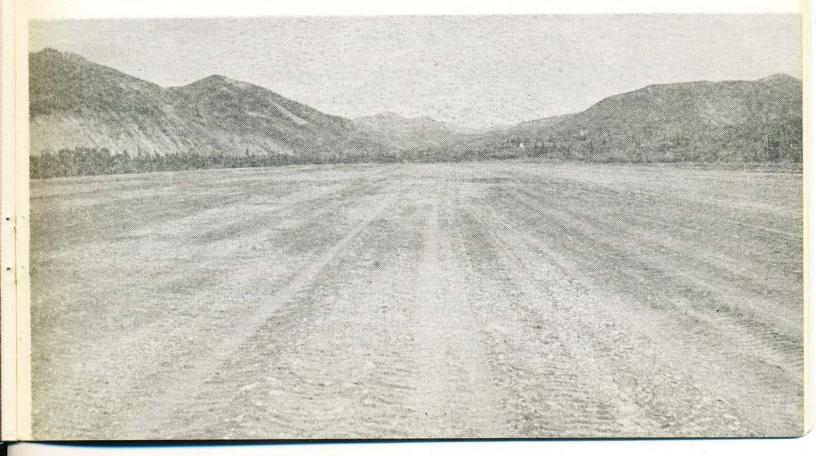




Aerial view, Eagle airport after first summer's construction.

Eagle

Completed surface, Eagle. A Federal Aid airport project.



Eagle

Located on the Yukon River, just a few miles from the Canadian border, the town of Eagle is approximately 200 miles east of Fairbanks, and in the center of the Fortymile mining district.

Few Alaska towns have a more interesting history. One of the first gold strikes in Interior Alaska was made here at Eagle in 1886. In 1899, an important U. S. Army establishment, Fort Egbert, was built at Eagle, and soon it became one of the first stations in the old U. S. Signal Corps telegraph system. Construction of the telegraph line between Eagle and Valdez was supervised largely by Lieutenant Mitchell, who later, as Brigadier General "Billy" Mitchell, was the first outspoken advocate of strategic aviation development for the Territory. Eagle was also the scene of the first U. S. District Court in the Interior, in 1900, and the hub for early Federal road and trail construction in Alaska.

Later gold discoveries at Fairbanks and Nome caused a shifting of population and of routes of travel, and the town entered a long period of decline, although there has always been considerable gold mining in its immediate vicinity. Today, because of the completion of a new municipal airport, Eagle and its encircling mining district are provided with favorable conditions for growth and development.

The old airstrip at Eagle was entirely inadequate. It was not only short and rough, but it had a severe dip or decline at one end, extending sharply down into the Yukon River. The slightest mechanical failure at takeoff proved disastrous at times in the past. For these reasons, the field was marginal even for small single-engine craft.

Through the use of Territorial Aviation Gas Tax funds, a new airport was developed at Eagle during 1951 and 1952.

Low bidder on the project was the construction firm of Strandberg and Ramstad, in the amount of \$101,327.05. Engineering and supervision were provided by the Thomas B. Bourne Associates.

A new airport, 3600 by 150 feet, complete with access road and the necessary bridges, was constructed during the seasons of 1951 and 1952. Work was concluded on July 26, 1952.

Eagle's new airport also has an aircraft parking apron and an auto parking area. It meets all requirements for scheduled DC-3 type plane service. In fact, such scheduled DC-3 service has been inaugurated by Wien Airlines, with regular flights from Fairbanks by way of Fort Yukon.

Heavy mining equipment, motor fuel, and other necessities can now be provided to the Eagle vicinity all the year around. This is especially important in view of the fact that there no longer is any river boat service to this portion of the Yukon, except by special arrangement and at great expense.

Both mining and trapping activities in the Eagle area should be greatly aided and their growth stimulated by the completion of this new municipal airport.

Rampart

Rampart is still remembered throughout the English-speaking world as the scene of Rex Beach's novel, "The Barrier". The little town still preserves the cabin in which the author lived during the Klondike gold rush days.

Rampart was a center for placer mining on the Alaska side of the Yukon in the days prior to the Dawson gold rush. Although the population has dwindled from 1,500 in 1898 to a little more than 100 today, Rampart is still a mining town. It is a source of supply, transportation, and other services for the surrounding mining district.

The town had an airfield for many years, but it was inadequate and larger modern aircraft were unable to land since it was only 1,500 feet in length, and covered in many spots with heavy underbrush. Numerous pot-holes created another hazard at landing and takeoff.

A project was developed by the Territorial

Department of Aviation for the improvement of the Rampart Airport, using aviation fuel tax funds. This involved grading of the main strip, clearing and grading an additional 400 feet, ditching, and clearing the south approach. Local labor was used exclusively, with engineering and supervision provided by the Department of Aviation.

An interesting incident may point to a new source of income for Rampart, supplementing mining and trapping activities; recently a commercial shipment of fresh-water fish, caught near Rampart, was made by air to Fairbanks, where a ready retail market was reported.

A tractor is now available at Rampart, so maintenance and snow removal should be far more satisfactory than in the past. A further extension of improvement work is contemplated for 1953.



Ruts in old Circle Hot Springs Airfield created serious hazard: primary reason for construction of new airport.

Circle Hot Springs

Circle Hot Springs is one of the oldest and busiest airports in the rural section of Alaska, having as many as twenty flights per day during the summer season. A health resort built around the natural medicinal hot springs waters has drawn patrons and sightseers not only from all parts of the Territory, but is popular with outside tourists as well. The spot has been called Alaska's second most popular point of interest.

The original airport, said to be the first constructed outside the principal cities of the Territory, was inadequate and far from satisfactory from a safety point of view. This was especially true in view of the fact that the traffic was increasing. The terrain was boggy, and the old field was wet and dangerous during seasonal rains. In addition, the runway headed into the foothills, and the prevailing winds created crosswind hazards and drifting snow in winter.

An improvement at Circle Hot Springs was included in the National Airport Plan, and a

project for participation in Federal Aid was approved late in 1951. It called for a new municipal airport three miles from the base of the foothills, with dimensions of 4000 feet by 150 feet.

Additional land was secured by the Territorial Department of Aviation from the public domain, and through the cooperation of local land-owners a privately-owned tract of 2.75 acres was obtained by donation.

Bids were advertised, and the low bidder was Sidney Kent of Fairbanks, for \$97,500. Extensive drainage work was involved, including an 8-foot bottom drainage ditch and the installation of 24-inch culvert pipe. At the end of the first summer construction season (1952) the new airport was 80% complete. Work will be resumed in 1953 just as soon as weather permits.

Scheduled DC-3 flights by Wien Airlines will be started as soon as the airport is completed. A high volume of traffic is expected at this health and recreation center.

Alaska Has Almost 400 Airfields

Adak Akiak Alakanuk Aleknigik Alatna Alder Creek Amchitka (2) Anchor Point Anchorage (5) Andreafsky Aniak Annette Island Atka Attu (2) Baldwin Barter Island Bear Creek (3) Beaver Creek Beaver Bethel (2) Bettles Bettles River Big Delta Big Lake (2) Birchwood Black Rapids Bluff Boundary Bremner Buck Creek Budd Creek Burk Creek Cache Creek Candle (2) Candle Creek Cantwell Canyon Cape Krusenstern Cape Lisburne Cape Newenham Caribou Caribou Creek Central Chandalar Chena Hot Springs Chicken Chisana Chistochina Circle Circle Hot Springs Chitina Cliff Mine Coffee Creek Cold Bay Colorado Creek (2) Colorado Station Copper Center (2) Cordova (2) Council (3) Crevice Creek Cripple Landing Cripple Creek (2) Crooked Creek (2) Curry Dahl Dahl Creek Deering Dick Creek Dillingham (2) Disappointment Creek Dutch Harbor

Eagle (2) Eight Mile Creek Eldon Elim Eureka Eva Creek Fairbanks (4) Farewell Farewell Lake Fishook Flat Folger Fort Yukon Franklin Gakona Galena (2) Gambell Ganes Creek Girdwood Glacier Creek Gold Bench Gold Creek Golovin Goodnews Goose Bay Granite Creek Grant Creek Gulkana (2) Gustavus Hamilton Hannum Creek Haycock Healy (2) Holy Cross Homer Hooper's Bay Hog River Hope Hughes Huslia Igiugig Iliamna Inglutalik Jack Wade Jake's Bar Joseph Juneau Kako Kaltag Kantishna Kasilof Kenai Keenans Katalla Kiana King Salmon Kiska Kivalina Kiwalik Kobuk Kodiak NAS (2) Kokrings Kotzebue (2) Kougarok (Lower) Koyuk (3) Koyukuk Lassen Lawing Lignite

Livengood

Long

Lopplagoon Lost River (2) Lucky Shot Macklin Creek McCarthy McGrath McKinley Park Madison Creek Manley Hot Springs Marshall Marvel Creek May Creek My Creek Medfra Middleton Island Miller Miller Creek Hot Springs Miller House Minchumina Mineral Point Moore Creek Moose Creek Minto Mountain Village Moses Point Nabesna Napimiute Naptowne Nation Nancy Lake Nenana Neva Creek Newhalen Ninilchik Noatak Nome (2) Noorvik North Forks Northeast Cape Northway Noxapaga Nulato Nyac Omega Creek Ophir Palmer Palmer Creek Paxson Peter's Creek Pilgrim Hot Springs Platinum Point Hope Point Barrow Point Spencer Poorman Portage Pyne Creek Port Heiden Quartz Creek (2) Quartz Creek Kougarok Rainy Creek Rampart Riley Wreck Ruby Ruby Creek Ryan Creek St. Paul Salmon Lake Sand Point Savoonga Sarachef

Seldovia Shaktoolik Sheep Mountain Shemya (2) Shesualek Shaefer Field Shismaref Shungnak Skagway Skwentna Slate Creek Sleitmute Snow Gulch Snag Point Solomon (3) Sparrevohn Spruce Creek Squirrel River Stampede Steel Creek Steven's Village Stony River Stuyohok Summit Suntrana Susitna Station Takotna Talkeetna (2) Tana River Tanacross Tanana Tanega Tanalian Point Tanunak Tatalina Tatitna Taylor Creek Taylor Tazlina Teller (3) Tetlin Thompson Pass Timber Creek Tofty Tin City Tonsina Totatlanika Umiat (2) Tyonek Umnak (3) Unalakleet Tok Ungalik Utica Creek Utopia Creek Valdez (2) Valdez Creek Wainwright Wales Wasilla Wattamuse White Mt. Wiener Willow Willow Creek Willow Station Windy Creek (2) Wiseman Woodchopper Yakataga Yakatat Yankee Creek Myrtle Creek

Selawik

... and 70 Seaplane Facilities

Akutan King Salmon Anchorage (Spenard & Klawock Hood Lakes) Kodiak Angoon Naknek Anvik Pelican Baranof Perryville Burnett Inlet Petersburg Chatham Pillar Bay Chernofski Harbor Port Alexander Chichagof Port Althorp Cordova (Eyak Lake) Rainy Pass Cordova (Tide Water) Sanak Sand Point Fairbanks (Chena Slough) Seldovia (2) Fairbanks Sitka (3) Funter Bay Skagway Haines Snowshoe Lake

Hawk Inlet Squaw Harbor
Holikachuk St. Michael
Homer Tamgass Harbor
Hood Bay Tanalian Point
Hoonah Tazlina (Smoky Lake)

Hydaburg Tenakee
Hyder Todd
Juneau (3) Tyee
Kake Ugashik
Ketchikan (3) Unga
Kimshan Valdez (2)
King Cove Wrangell

PROPERTY OF THE UNIVERSITY OF ALASKA 33779

Territorial Projects By Divisions 1951

FIRST DIVISION

Metlakatla Seaplane Float Hoonah Seaplane Float Skagway Airport Haines Airport Petersburg Seaplane Float

Hydaburg Seaplane Float Pelican Seaplane Facility Wrangell Seaplane Float Angoon Seaplane Float Tenakee Seaplane Float

\$6,639.64

SECOND DIVISION

Shaktoolik Airfield Coffee Airfield Atlas Creek Airfield North Fork Airfield Wales Airfield Nunivak Airfield Point Spencer Airfield Teller Airfield Kotzebue Airport Kivalina Airfield Haycock Airfield Nome Airport Utica Airfield

\$5,193.72

THIRD DIVISION

Girdwood Airfield Sheep Mountain Airfield Cordova Airport Seldovia Airport Seward Airport Dillingham Airport Palmer Airport Chitna Airfield
Talkeetna Airfield
Anchor Point Airfield
Chistochina Airfield
Merrill Field Hangar
Tyonek Airfield
Civil Air Patrol

\$10,007.58

FOURTH DIVISION

Miller Field (Tofty)
Flat Airfield
Myrtle Creek Airfield
Boundary Airfield
Bethel Airport
Central Airfield
Rampart Airfield
Crooked Creek Airfield
Circle Hot Springs Airport
Fort Yukon Airport
Ruby Airfield

Wiseman Airfield Chicken Airfield Fairbanks Airfield Livengood Airfield Chena Airfield Circle Airfield Utopia Airfield Platinum Airfield Civil Air Patrol Search and Rescue

\$6,928.83

Territorial Projects By Divisions 1952

FIRST DIVISION

Port Althorp Seaplane Float Kake Seaplane Float Petersburg Seaplane Float Haines Seaplane Float Taku Lodge Seaplane Float Wrangell Seaplane Float Sitka Seaplane Float Klawock Seaplane Float Tyee Seaplane Float Chatham Seaplane Float Skagway Airport Edna Bay Seaplane Float Craig Seaplane Float Kasaan Seaplane Float Steamboat Bay Seaplane Float Myers Chuck Seaplane Float

SECOND DIVISION

Kotzebue Airport Haycock Airfield Nome Airport Wales Airfield Teller Airfield Noxapaga Airfield Golovin Airfield Elim Airfield Koyuk Airfield Selawick Airfield Nome City Field White Mountain Airfield Shaktoolik Airfield Solomon Airfield

\$83,777.08

\$23,064.46

THIRD DIVISION

Tyonek Airfield
Glacier Creek Airfield
Cordova Airport
Seward Airport
Dillingham Airport
Valdez Airport
Wasilla Airfield
Sheep Mountain Airfield
Tazlina Airfield
Copper Center Airfield
Cordova Mile 13

Seldovia Airport
Big Lake Airfield
Huslia Airfield
Talkeetna Access Road
Lawing Airfield
Kasilof Airport
Ninilchik Airport
Palmer Airport
Tonsina Airfield
Birchwood Airfield
Civil Air Patrol

\$57,540.25

FOURTH DIVISION

American Creek Airfield
Rampart Airfield
Fort Yukon Airport
Chicken Airfield
Ophir Airfield
Livengood Airfield
Flat Airfield
Marshall Airfield
Minto Airfield
Hughes Airfield

Miller Field (Tofty)
Ruby Airfield
Beaver Airfield
Josephs Village Airfield
Big Delta Airfield
Ungalik Airfield
Sleitmute Airfield
Platinum Airfield
Tok Airfield
Stevens Village Airfield

\$64,581.39

Total Expenditures By Divisions

1951-1952

FIRST DIVISION		
Territorial Funds\$	3 29,704.10	
Federal Aid (Inc. Terr. Share)		
		\$ 235,664.73
SECOND DIVISION		
Territorial Funds	\$88,970.80	
Federal Aid (Inc. Terr. Share)		
redefai izza (azze a		\$ 222,431.51
THIRD DIVISION		
Territorial Funds	\$ 67,547.83	
Federal Aid (Inc. Terr. Share)	354,703.94	
		\$ 422,251.77
FOURTH DIVISION		
Territorial Funds	\$ 71,510.17	
Federal Aid (Inc. Terr. Share)	225,488.87	
		\$ 296,999.04
TOTAL		\$1,177,347.05
TOTAL		24 67 55%

REVENUE FROM AVIATION GASOLINE TAX BY DIVISIONS 1951 & 1952

FIRST DIVISION	\$119,145.51
SECOND DIVISION	19,318.13
THIRD DIVISION	318,691.25
FOURTH DIVISION	178,254.68

Statement Of Income And Expenditures

FOR THE YEARS 1951 & 1952

Fund Balance January 1, 1951		\$42,406.45
Total Territorial Income:		
CAA		
Terr. Aviation Gas Tax 631,108.42		
Miscellaneous Reimbursements 8,133.81	\$1,262,248.84	
Federal Aid Airport Program: 1951-1952		
Federal Reimbursements \$623,006.61		
Territorial Expenditures 296,607.54	\$ 919,614.15	
	\$ 342,634.69	
Territorial Expense: 1951-1952:		
Terr. Construction & Maintenance		
Navigational Aids 55,995.93		
Equipment and Buildings 14,312.60		
Salaries		
Administrative Expense 27,259.98		
Payroll Taxes		
Civil Air Patrol		
Pilot Registration		
Legal Services (not allotted		
to projects) 3,192.28 Search and Rescue 633.43		
Search and Rescue		
	\$ 344,055.20	
Net Decrease Funds on Hand		\$ 1,420.51
Funds on Hand January 1, 1953		. \$40,985.94
Street East Control of the Control of the		
	4040 408 10	
Due from CAA:	\$218,127.43	
Outstanding Obligations	\$128,476.13	
☆ ☆ ☆	7	

ADMINISTRATIVE EXPENSE OF THE DEPARTMENT OF AVIATION HAS BEEN ECONOMICAL . . . $5\frac{1}{2}\%$

Summary

The future program of the Alaska Department of Aviation is one that is progressive and requires much thought and planning, both from a financing and construction standpoint; we have already submitted a plan to CAA for federal aid airport construction to 1960.

The supervision, contracting, approving and payment of the general maintenance and snow removal of the 370 airports and seaplane facilities, with which this department is charged is an unknown figure, difficult to budget due to the unpredictable weather conditions of Alaska. This year, perhaps with the unusual warm weather to date, we have had few snow blocked airports, however, the winter is young and Alaska in general may be assured of its usual share of "lots of weather that is all bad."

Airport locations that seem to have definite need this year may be less important next year because of the great fluctuation of enterprises in this fast growing country; new aluminum production plants, a gold strike here, a tin development there, uranium showings in a remote location; each call for immediate aid in their respective airport needs.

As the airplane is so well suited to this country of mountains, rivers, lakes, ice and tundra, it is ideal transportation for Alaska, as the airways are boundless. The railroad serves the railbelt area, the steamships the coastal towns, and the highway freight lines are limited to the fast growing network of roads. But no form of transportation serves all communities from the smallest arctic villages to the largest metropolitan cities of the territory as the Alaska air transport system, flying passengers, mail and freight over a definite pattern on a dependable safe basis.

The commercial airplane means much more than fast transportation to Alaska, it has meant a whole new way of life and the word "airborne" is a commonplace part of every Alaskan's vocabulary. The following is a partial list of the contemplated airports for construction or stage construction by the Aviation Department during the summer of 1953 under the Federal Aid Airport Program, financed 75 per cent by the Federal Government. These projects are considered major developments and do not include the wholly financed and supervised airport and seaplane program to be undertaken by the Aeronautics Board:

Gambell Airport
Juneau Airport
Skagway Airport Re-surfacing
Beaver Airport
Sand Point Airport
New Andreafsky Airport
Shungnak Airport
Bethel Airport

Whether it be logistics, supervision or airport construction on permafrost in the Arctic, silt of the famed Yukon River, the fog shrouded Aleutians, the tundra and muskeg areas of the frozen coastal plains or the mooring of a seaplane base in the strong tides and corrosive salt water of Southeast Alaska, the motto of the Department of Aviation is

"CAN DO"



Seward Airport showing relation to City of Seward at right and entire Resurrection Bay.



New Seward Airport runway constructed in 1952 that allows transport type airplane service.

