



Foreword

HE following pages report fiscal and historic developmental progress of your company during the past year. Also portrayed are some of the tasks which lie ahead.

Few American companies during this critical era have greater responsibilities than that of your company in its participation in the vital program of bringing the world into closer federation. Just as Lord Tennyson foresaw the role of aviation over a century ago in his immortal Locksley Hall¹, your company is deeply conscious that the course which it has charted and with which it is now entrusted is of great importance.

The proper discharge of such responsibilities will require maximum utilization of your company's organization and facilities. However, it is our conviction that the continued dedication of your company's efforts to the highest standards of public service should assure successful fulfillment of its destiny with consequent sound benefit and distinction.

Por Hume

Sow the heavens fill with commerce, argosies of magic sails, Pilots of the purple twilight, dropping down with cost) bales.

Heard the heavens fill with shouting, and there rain it a ghasily dev From the nations' ary navies grappling in the central blue;

Far along the world-wide whisper of the south-wind rushing warm, With the standards of the peoples plunging thro the thunder-storm;

Till the war-drum throbb d no longer, and the balle-flags were furid In the Parliament of man, the Federation of the world."

-ALFRED LORD TENNYSON-1842

When I dipt into the future,

President and General Manager

St. Paul, Minnesota September 25, 1946

NORTHWEST AIRLINES, INC.

BOARD OF DIRECTORS

President and Director, Jersey City Stock Yards Co.
Chicago, Ill.
Chairman, Board of Directors, Incorporated Investors
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President, Sunshine Mining Co., Yakima, Wash.
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President, Kalman & Co., St. Paul, Minn.
Executive Vice-President, Northwest Airlines, Inc.

*Subject to approval by the Civil Aeronautics Board.

General Offices: 1885 University Avenue, St. Paul 4, Minnesota

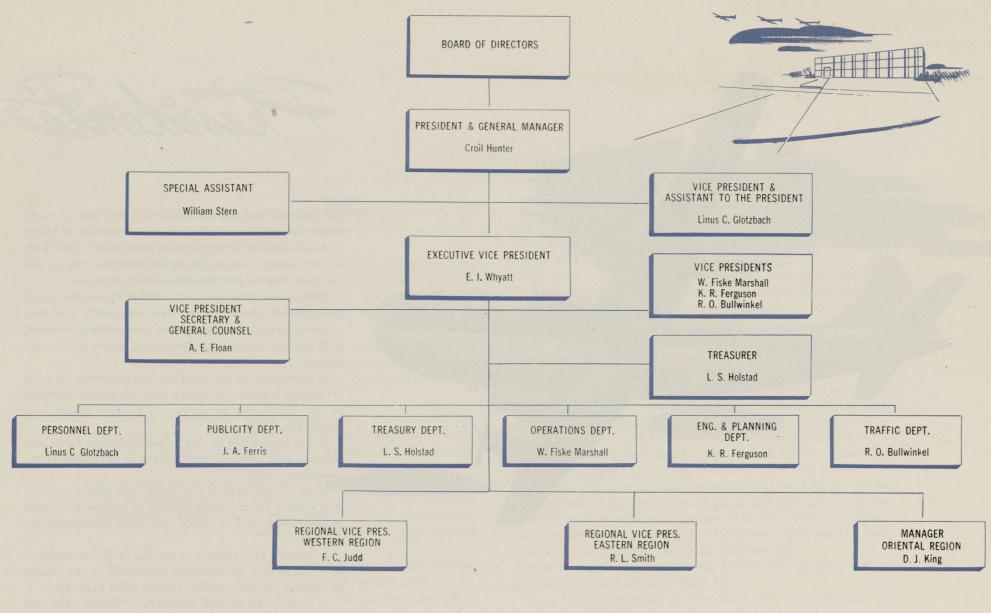
The Chase National Bank of The City of New York, New York, N. Y. Principal Registrar Bankers Trust Company, New York, N. Y.

Principal Transfer Agent

- City National Bank and Trust Company of Chicago, Chicago, Illinois Co-Registrar
- Continental Illinois National Bank and Trust Company of Chicago, Chicago, Illinois Co-Transfer Agent

Annual meeting of shareholders last Monday in September







Fresidents

orthwest Airlines has taken its place among world leaders in commercial aviation. Its acquisition of routes to Alaska and the Orient, adding more than 12,000 miles to the system, is of major significance not only to this company, but to the territories which it serves.

This development gives this airline its broadest scope and greatest identity-what first was local, and then transcontinental, has become an international network, with all this implies in opportunity, responsibility and prestige.

It will bring to the northern tier of states, to parts of western Canada, to Alaska and the remote expanses of the Pacific, an air service of modern planes and speedy schedules.

It will fly the flag of this nation to foreign lands and promote that most effective means of international cooperation-trade.

More immediately, it will enable this airline to serve as a vehicle for the rehabilitation of peoples who were impoverished, and of lands that were devastated, by war.

It writes a new chapter in the log of this companynow completing its twentieth year-and in the annals of modern aviation, which is not a great deal older.

It is an event of such importance, indeed, that this report, a little later, will seek to interpret, in detail, some of its aspects.

Ordinarily, an annual report does not go beyond the

equipment.

end of a fiscal year, which in this case is June 30, 1946. Yet in the

present calendar year two dates fall beyond this day, to provide historic sequel to the twelvemonth.

One, of course, is July 31, when President Truman approved the certificate issued by the Civil Aeronautics Board, authorizing Northwest Airlines to fly to Edmonton, Canada; Anchorage, Alaska; Tokyo; Seoul, Korea; points in Manchuria and eastern China; Shanghai; and Manila.

The other is October 1, which marks the twentieth anniversary of the first Northwest flight, a mail hop from the Twin Cities to Chicago, under contract with the Post Office Department.

Both of these dates are milestones.

Granting of Northwest Airlines' certificate to fly to Alaska and the Orient was an event of such major importance in aviation that the national news spotlight was focused on this company. Newspapers throughout this nation, in Alaska and in foreign countries printed the announcement from Washington, D. C., together with background material and maps prepared by our publicity department. Similar interest was shown in other developments during the past year, including the purchase of new aircraft

Projection of Northwest Airlines into the international field has the zest of adventure. The announcement quickly captured the imagination of prospective travelers, who besieged our ticket offices for space on the first flights.

Setting up more distant operations-those beyond the familiar Alaskan and Aleutian confines-will be pioneering.

There is far more, however, than romance in this vast undertaking.

For all its boldness, it is essentially a business venture, based upon a study of traffic potentials.

This study reveals at the outset the great need of the Far East for transportation, most of which was paralyzed during the war.

It shows, also, the need for machinery and a great variety of goods. It discloses that, through private initiative and government back-

ing in these badly mauled lands, entire industries are being revived. It points the possibility of developing hydro-electric power and

utilizing latent resources.

It discloses that both imports and exports, though still well below pre-war figures, are increasing; that crops next spring will approach seasonal averages; that the peoples-and there are hundreds of millions of them-are astir with a hope of bettering their lot.

Improvement of their living standards will further a new era in reciprocal trade. Closer ties with these lands will follow.

This new era of trade and understanding, we believe, will be accomplished by an interchange of goods and and services, of raw materials and manufactured articles, that will prove of common benefit to the East, the West and to the airline which provides them with a fast, sure, regular means of communication.

Some of the developments in the Far Eastern countries will be discussed more specifically a little later.

Their broad significance is this-that when the fulfillment of present plans is achieved, the dreams of the past, when explorers sought a way to the Orient by means of the Northwest Passage, then will become a reality.

20 years of Progress 1926 DE 1946

hile chief attention has been turned to Northwest Airlines' expansion into the international sphere, there have been a number of major developments in the domestic field during the past year. They have entailed some serious problems of engineering and planning.

The need for more adequate facilities for maintenance of aircraft has been emphasized by the addition of a fleet of bigger, faster planes and the purchase of still more and larger ships.

So plans were drawn for a main plant and maintenance base to cost approximately \$8,000,000.

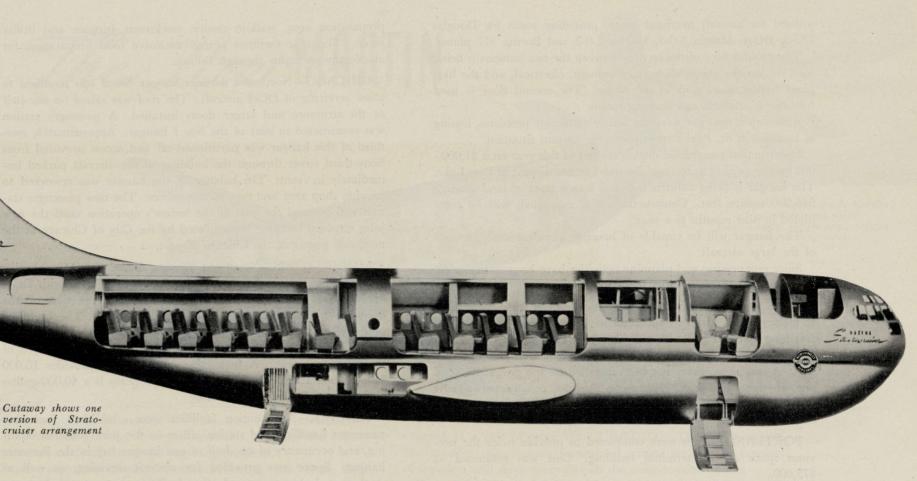
The location of this project was, and still is, something to be decided later.

When it became known, however, that Northwest Airlines was considering a number of possible sites, various cities sent delegations to the General Office in St. Paul to offer the advantage of their communities. Many factors were discussed and much valuable data gathered for further pondering before this company reaches a final decision. Newspapers sent along reporters with some of these delegations, and press conferences were held at the General Offices.

Construction was contingent on obtaining materials, and as these were scarce and were under government control it became

> Northwest Pilots in Stratocruiser Cockpit.





apparent that before this airline could set up its own plant according to its own designs, it must lease temporary quarters.

In this emergency leasing of the wartime Boeing plant at Renton, Wash., was considered. Certain factors, however, made it inadvisable to take on this commitment at this time.

Then opportunity presented itself to lease hangars and other facilities at the St. Paul airport, where headquarters of Northwest Airlines once were located and where, during the war, this company operated a bomber modification center.

A three-year lease was signed with the Metropolitan Airport Commission of the Twin Cities.

Shop, offices and stores were moved there from Overhaul Base

Building in St. Paul, a large warehouse in Minneapolis and from the Minneapolis airport.

Facilities at the St. Paul airport-incidentally named Holman field, in honor of the late Charles Holman, former operations manager of this airline-include two hangars, each 600 feet long and 168 feet wide, and a two-story shop and office section between the two hangars.

One-half of one hangar, 50,000 square feet, is utilized for warehouse and stockroom and a second deck is being added to this area to provide an additional 25,000 square feet of warehouse area. The other half of this hangar contains the engine, machine, sheet metal, paint and propeller shops. The second hangar will be utilized for aircraft overhaul space, providing room for Douglas DC-3, DC-4, Martin 3-0-3, Martin 2-0-2 and Boeing 377 planes.

The ground floor of the section between the two hangars is being used for smaller shops, such as instrument, electrical, and the like, plant maintenance and locker rooms. The second floor is used for offices, cafeteria and training rooms.

Although it does not solve the airline's ultimate problems, leasing of facilities at St. Paul airport meets the present situation.

Construction was started during August of this year on a \$1,000,-000 hangar project at the new Seattle-Tacoma airport at Bow Lake. The hangar is being constructed on a leased tract of land totaling 346,500 square feet. Construction, it is estimated, will be completed in nine months to a year.

The hangar will be capable of housing, simultaneously, several of the large aircraft.

Since engineering and planning activities have been system-wide, others will be listed by cities for ready reference:

SPOKANE—With the entire operation moved from Felts Field to Geiger Field, various improvements were made. A hangar 200 feet long and 120 feet wide was fitted for occupancy, while shops and equipment facilities were set up in one of two adjoining buildings. A new commissary has been installed on the ground floor of one of these buildings. Northwest Airlines constructed a new passenger station to provide for the expanding operations into and out of Spokane.

PORTLAND—Plans were completed to provide twice the previous space at the terminal building. Cost was estimated at \$75,000.

YAKIMA—The terminal building was expanded to provide additional space for lobby, message center and station manager's office.

WENATCHEE—Northwest Airlines co-operated with city officials to establish a passenger station at the new Wenatchee airport.

BILLINGS—A commissary owned by the airline was established adjacent to the passenger station. It includes kitchen area, food

preparation area, walk-in cooler, stockroom, furnace and utility room. The new facilities permit exclusive food preparation for all Northwest flights through Billings.

CHICAGO—Northwest Airlines hangar No. 2 was modified to allow servicing of DC-4 aircraft. The roof was raised on one-half of the structure and larger doors installed. A passenger station was constructed in part of the No. 1 hangar. Approximately onethird of this hangar was partitioned off and access provided from Sixty-third street through the building to the aircraft parked immediately in front. The balance of the hangar was reworked to provide shop area and new station offices. The new passenger station will be used for part of the airline's operation until the new joint terminal building is completed by the City of Chicago at the northeast corner of the Chicago airport.

MINNEAPOLIS—Northwest Airlines leased the Minneapolis-Honeywell hangar to be used for service in connection with DC-4 operation at Wold-Chamberlain field. A small portion of the hangar was sub-leased to Minneapolis-Honeywell. The building, of conventional type, reinforced concrete and brick-faced, has a door opening 180 feet wide by 35 feet high and a floor area of 28,800 square feet. A mezzanine office section provides 10,000 square feet. Included with the hangar property is a 40,000-gallon underground fuel storage system.

NEWARK—New station facilities were established, including passenger handling and station offices in the joint terminal building, and occupancy of one-half of one hangar bay in the Brewster hangar. Space was provided for aircraft servicing, as well as stockroom, locker room and other facilities.

ICE RESEARCH—STATIC PRECIPITATION

Northwest Airlines has continued its scientific researches into means of combating icing of airplanes and formation of precipitation static under government contract. These were conducted at Twin Cities Airport—Wold-Chamberlain Field, and on Mt. Washington, in New Hampshire.

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The New MARTIN

 (Top) Martin design speeds handling of passengers and cargo.
 (Side) Lounge supplements regular seating arrangements.

roviding adequate aircraft to fly the new Far East routes and to maintain the growing domestic schedules has been the subject of intensive study and some far-reaching decisions.

From competitive offerings, Northwest Airlines has chosen those types which it believes best suited to its requirements, present and prospective. It has not been content merely to accept conventional designs, but groups of its engineers have worked with manufacturers' engineers to incorporate special features which this airline either originated or refined, or which its experience has proved most desirable.

It has purchased, for its overseas and limited stop routes, the "airplane of the future," the huge Boeing Stratocruiser, of which more will be said later.

To supplement these, it has acquired, or has in the process of manufacture, other planes which represent the latest word in aircraft development.

Among these are two fleets of Martins, the 3-0-3 and the 2-0-2.

These Martins, with their high speed and economy of operation, will eventually replace the presently-used twin engine DC-3's and the interim four-engine DC-4's. Forty of the exhaust jet-aided, five-mile-a-minute 3-0-3's were ordered at a cost of more than \$10,000,000. These twin-engine, 38-passenger planes, with pressurized cabins for greater comfort of travelers, will serve every city on the coast-to-coast routes.

Ten of the Martin 2-0-2's, with a cruising speed of 250 to 270 miles an hour, also were ordered.

Each type has its individual characteristics, with features developed in addition, by engineers of this company.

The 3-0-3's pressurized cabin will maintain 6,000-foot altitude conditions as high as 16,000 feet. It will have thermetically-controlled warm-wall radiant heating, with air-conditioning systems to insure constant temperatures both winter and summer. Humidity will be controlled.

The 40-passenger Martin 2-0-2 will incorporate some of the characteristics of the 3-0-3, with special features of its own.

It is expected that the 2-0-2's will start flying the airline's transcontinental routes shortly after the first of the year, with all deliveries of this type completed in six months. The first of the 3-0-3's will go into service next summer, it is estimated, with final deliveries by April 1, 1948.

Traffic has many ramifications-some of them the result of Northwest Airlines' entry into the international sphere; others due to normal expansion of the airline; still others due to the recall of wartime and post-war controls by the military and by government gencies.

Though airplane space has continued at a premium, we are entering an era when the problem will not be to find seats for passengers, but to find passengers for seats. This is true not alone of Northwest Airlines but of all airlines.

Competition will intensify.

Our traffic department has long foreseen this turnabout and has made preparations accordingly. It has moved, also, to meet other conditions of the air age.

In anticipation of the routes to Alaska and the Orient, its key personnel have prepared themselves for special assignments. Some of these men have had past experience in Alaska or the Far East, know the customs of foreign lands, speak Chinese or Japanese. and have wide acquaintance among the natives.

Going even further back in the period of preparation, the traffic department-to meet both domestic and international demands-began setting up a program of standardization. This applied to all the traffic offices, both as to the physical set-up and operation.

By this means, economies have been effected, and a high degree of mobility has been achieved, so that personel could be transferred, yet find themselves in familiar working surroundings. This standardization will guide the great expansion of traffic that lies ahead; and will serve to integrate traffic activities on the mainland, in Alaska and in the Orient.

Extension of Northwest Airlines to Alaska, Korea, Manchuria, Japan, China and the Philippines has focused interest in round-the-world tours. So traffic department officials are discussing working arrangements with Trans World Airline, with which it will connect in the globe-girdling routes at Shanghai. Thus complete encirclement of the earth for the benefit of air travelers will be made possible and practicable by the combined services of these two airlines, one over the Atlantic and the other over the Pacific.

To effectuate further this round-the-world service, the company has entered agreements with travel agencies in the United States and foreign countries to exchange business between Northwest Airlines and the other companies they represent.

As one of the first steps to care for Alaska and Orient traffic, a temporary ticket office was opened in the Westward hotel at Anchorage, Alaska,

Other similar offices will be opened in Far East countries, directed by the company's key personnel. which will train native help, wherever this is advisable.

New and better food service is being worked out. Because of long overseas hops to the Orient and the inability to stock up at commissaries en route, frozen foods will be served. Extensive experiments have been carried out to test the handling, cooking, serving and wholesomeness of such foods.

While these preparations have been under way to meet the international responsibilities, domestic traffic has received due attention. Much thought has been given to the coming change-over when the airline's problem will be to fill the increased number of bigger. faster planes. All traffic personnel have been indoctrinated with the idea that each must use the utmost initiative, consistent with fair business practices, to sell and accommodate traffic.

The traffic department has conducted an extensive national advertising campaign to acquaint the public with business possibilities and vacation lures along the routes of this airline. This campaign has been conducted through leading newspapers and magazines.

In all the communities where they are located, district traffic managers and their staffs have kept in close contact with community leaders and have helped promote community interests, thus associating Northwest Airlines with the progress of these communities.

New ticket offices-following the pattern set in Chicago. New York and Detroit-have been opened in various cities, including Milwaukee, Newark and Duluth.



Bear cubs spot friendly planes



(Above) Alaska in scenic splendor (Below) Anchorage has its Main Street



Operations

n entering the international field, Northwest Airlines has had thrust upon it some of the greatest operations responsibilities ever faced by the airline, while at the same time it has enjoyed certain unique advantages. The latter stemmed from wartime experiences of this company, its pilots and ground crews, in setting up and operating, on schedule and under all weather conditions, a military cargo and passenger line for the Army to Alaska and out along the Aleutian Islands.

The company's present Alaskan operation, a forerunner of the international operation, started September 1, just one month after the certificate was granted, over the "outside" route from Seattle-Tacoma to Anchorage, Alaska. One trip a day was flown, with more to follow as equipment is available. Northwest provided the first domestic air express service at rates comparable to those between mainland cities.

As preliminary steps to outside route service to Alaska, a survey flight and other preparatory flights were undertaken shortly after the Civil Aeronautics Board authorized Northwest Airlines to fly the Great Circle route. Because of its historic importance, this flight was widely publicized in newspapers here and in Alaska. On preliminary flights, study was made of airports and communications. Arrangements were completed to install additional ground-to-plane radio at Yakutat and Annette Island.

Shipping of necessary materials and supplies was begun at once. As in the wartime operation, it was planned to carry in most of the material by plane.

Key operations personnel went to Alaska on early flights, or were transferred there for more permanent duty.

Pilots who previously had flown the company's military operation in Alaska and the Aleutians, as well as other transport services, received letters from the company asking them to stand by for northern or overseas assignments.

Many of these have been re-employed, and others will be used when the Far East operations are started.

While the outside flights to Alaska were gotten under way within a month after the Civil Aeronautics Board certificated this route, the "inside" route was delayed somewhat because of diplomatic formalities and for other reasons.

Since Northwest Airlines planes would have to fly over Canadian territory and stop at Edmonton on the way to Anchorage, formal



authorization from the Canadian government was necessary.

Such diplomatic steps have been taken through the United States Department of State and the Canadian government indicated its wholehearted co-operation.

Start of the inside route, which is expected to carry heavy traffic through Minneapolis-St. Paul, headquarters of the company, from Chicago, New York, Detroit and other mid-west and eastern areas, will begin before the first of the year.

Start of the Orient operation, which involves further and perhaps more complicated diplomatic negotiations with other foreign countries, through the American state department, will begin early in 1947.

While developments beyond the mainland were most engrossing, the transcontinental system witnessed several outstanding operational achievements.

Chief among these was the inauguration of service with fourengine, 44-passenger DC-4 planes, to replace twin-engine 21passenger DC-3's on limited stop runs.

To prepare for this change-over, Northwest Airlines early acquired a C-54 plane—the military counterpart of the commercial airline DC-4—which had been used on the "Cannonball Run" of the Air Transport Command during the war. Several of our pilots who had flown this type of ship for the ATC during the war and had made numerous ocean crossings, were available to help train other regular airline pilots in flying such ships.

As a result, when DC-4 operations began, there were many pilots fully qualified to take over the controls and such operation began last spring, with flights into New York and Chicago from the Twin Cities. Later this service was extended coast-to-coast.

Use of the DC-4's with their need for longer runways than the DC-3's brought up some operational problems which were not settled until a change of airports was made. Felts Field at Spokane was found inadequate, and successful negotiations were conducted with the Army for the use of Geiger Field. Plans were made at Detroit to use Willow Run for all our operation instead of the regular airport at Detroit, which was outmoded by the larger planes and still other plans were laid for the transfer of operations from LaGuardia field, New York, to the much more spacious Idlewild.

Another significant event during the year was the extension of service into Newark, N. J., in the New York metropolitan area.

Newark was used as the eastern terminus and Seattle-Tacoma as the western terminus of the Transcon. operation conducted by the company for the transfer of military personnel from ports of debarkation, both east and west, to points near discharge centers. This operation was begun August 27, 1945, and ended February 28, 1946. During this period, more than 30,000 military personnel were carried, as a schedule of four round trips daily between Newark and Seattle-Tacoma was maintained.

Affecting both operations and traffic during the year were the easing and then the relinquishment of travel controls by the military and by the Office of Defense Transportation. The wartime priorities system came to an end. Northwest ended its Northern Region operation September 1, 1945.

orthwest Airlines' foreign flights and its coast-to-coast non-stop and limited stop flights call for an airplane that can fly high, far and speedily.

Plane of the Future

For a plane that will offer passengers the utmost in comfort during the hours they spend aboard it. For a plane that can carry heavy loads, yet maintain fast schedules economically.

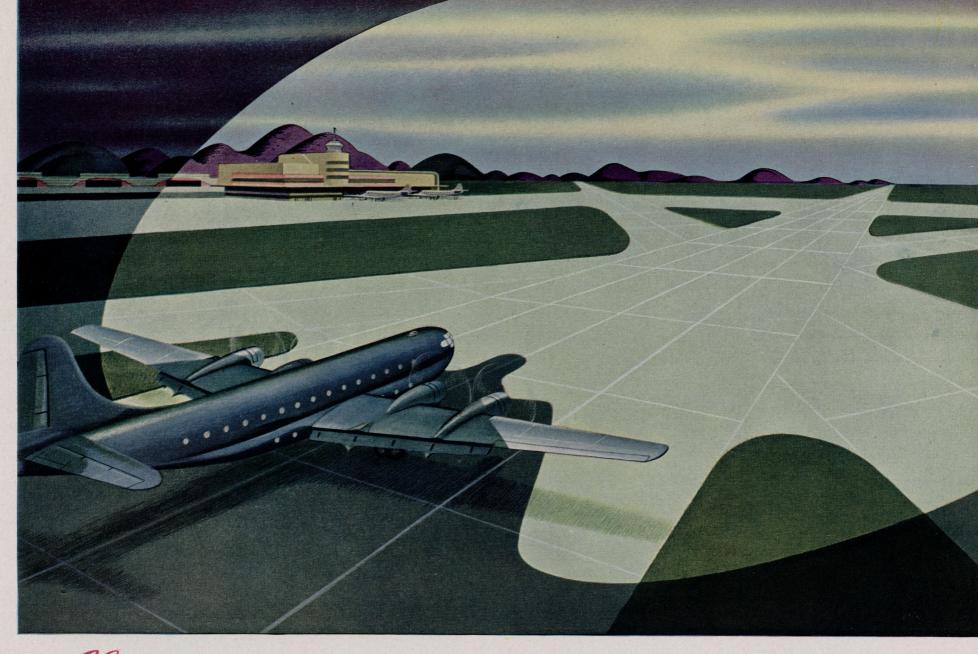
For a plane that is sturdy, while embodying those refinements that put travelers at ease.

For a plane whose airworthiness has been proven under the most trying tests.

With all these specifications in mind this company decided upon the Boeing Stratocruiser, the commercial airline version of the famous Boeing B-29 Superfortress. Convinced that this was the plane of the future it signed a \$15,000,000 contract for the purchase of a fleet of these 75-to-105-passenger, double deck luxury liners.

To the basic engineering of the Boeing ships, this company will add special features which its own engineers have developed and in order to speed the manufacture and carry out the characteristic designs, this company has set up its own organization in the Boeing plant at Seattle to work there with Boeing engineers and crews. This arrangement is expected to be of mutual advantage to both organizations—the manufacturer and the airline.





Worthwest Airlines pilots flying the Stratocruiser will find exceptional visibility has been provided for the crew. The vision field is large thereby affording the maximum safety for operations in congested areas. Forward and side windows have large flat glass panes, set at proper angles. So inclusive is the vision that

it takes in broad areas of even the largest airports and brings out the runway pattern clearly. Whether it is front or side, the pilot is able to see every ground marking or object which is related either to landing or take-off. This clear visibility is provided even under adverse weather conditions.

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The Stratocruiser has been designed to fly above the weather, thus enabling Northwest Airlines passengers to avoid storms and other disturbances. Yet its air-conditioned cabins will provide atmospheric conditions similar to those on the ground or at a few thousand feet above ground level. Sea level cabin air, in fact, will be provided at altitudes up to 15,000 feet, and 6,000-foot cabin air up to 25,000 feet.

Luxury appointments, some of them engineered by Northwest Airlines, will provide passengers with such accommodations as a lounge seating 14 persons; men's and women's dressing rooms; fullview, non-frosting panorama windows; designed by Northwest Airlines engineers; commodious sleeping quarters; and numerous other refinements.

Greater fuselage volume in the passenger compartments allows more space to each passenger. The two-deck arrangement of the airplane permits greater freedom of movement within compartments. This, in turn, is likely to relieve the tedium of long hops and to keep Northwest passengers relaxed and interested in their journey.

High wing loading and high speed tend to "smooth out" air bumps, another factor contributing to the comfort of passengers. At most cruising altitudes, flight levels may be changed rapidly, yet with passengers scarcely conscious of this fact, since a constant cabin pressure is automatically maintained.

The maximum rate of change for cabin pressure altitudes may be limited to 200 feet per minute. On flights of 15,000 feet or less, there need be no change in pressure. Ear discomfort due to changes of altitude is thus eliminated. Noise and vibration levels are reduced to a minimum because of construction methods. This is another of the features carefully studied by Northwest engineers.



The lounge, located on the lower deck behind the wing, provides not only a place where 14 persons may gather in comfort, but it also offers a complete change of environment for Northwest Airlines passengers who visit it. It is reached from the main cabin by a circular stairway. These stairs, likewise, may be used in embarking or disembarking passengers at intermediate stops through a lower door.

In the cabin, well upholstered, roomy seats may be adjusted to various positions, from a normal upright sitting posture to a nearly full reclining. Exceptional "leg room" is provided for occupants of these seats.

Design For Gracious Travel



20 years of Progress 1926



Serving of food aboard Northwest Airlines' planes is one of the most attractive features of air travel.

The galley of the Stratocruiser is large and fully equipped for such food service.

In addition to its regular coast-to-coast system of food service, which ties in with commissaries at various points, the airline is making provision for meals to be served during long flights over land or water-typical hops of the Alaskan and Far Eastern operations. Tests have been made of the use of frozen foods, by the Maxson Food Service and it is planned to have these on the menus of long distance flights.

These meals are prepared at commissaries, frozen, and then placed aboard the planes, where they are then brought back to normal state by being placed in ovens. The transition into and out of the frozen stage is so scientifically done that the food can be served piping hot and with none of its original flavor lost.

Some air travelers desire sleeping accommodations. Others prefer to sit up—or rather to recline in their seats and take their sleep that way.

For the former, fifteen lower berths accommodate two people each, fifteen upper berths accommodate one person each .

The berths are conveniently lighted, and are curtained off from the rest of the cabin.

In addition to the berths, there are seats for those who do not care to go to bed those who expect to get off at intermediate stops, and those who prefer to sit up even on long jaunts.







he ladies' lounge consists of two separate compartments. In addition to usual dressing room facilities, the lounge has mirrors for good vision, and is tastefully appointed.

Several men at a time can be accommodated in the men's dressing room, a feature that makes it possible for passengers to shave without delaying others. Lights and electrical outlets are conveniently located.

Considerations of comfort for passengers are supplemented, in the Stratocruiser, by many other features simplifying operations such as loading, ground service, maintenance and inspection. These provide economical handling of both passengers and cargo. Passengers will normally pass through a large door on the upper level, completely separated from all cargo and servicing.

Lower deck cargo compartments, fore and aft, have ground-level, in-a-door steps, wide doorways with sills at truck bed height, upright headroom, and wide angle floor-wall intersections. These make possible single-motion loading without special equipment.

Two-lobe construction (figure eight type design of the fuselage) affords easy access to all plumbing, electrical and control assemblies. Power plants are quickly removable, or accessible without removal, for inspection, adjustment, or minor repairs. All four units have been made interchangeable in order to simplify overhaul and engine change.

The Stratocruiser will cruise at 300 to 350 miles an hour at 20,000 feet above sea level, using only 65 per cent of maximum continuous horsepower per engine. It is able to climb to 15,000 feet with only two of its four engines in use.

Physical dimensions of the airplane are 141 feet $2\frac{3}{4}$ inches in wing span; 110 feet 4 inches in length; 38 feet 3 inches high at the top of the tail fin.

Its total fuel capacity is 7,700 gallons.

Icing is reduced to a minimum by a system which provides an ample, controlled flow of heat to wing and empennage surfaces, preventing ice from forming. The source of heat is a separate unit, independent of the main power plants.

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certification of the great circle route has emphasized, rather than overshadowed the need for a well-rounded domestic network.So Northwest Airlines has applied for important new routes or pressed its case for routes it previously sought.

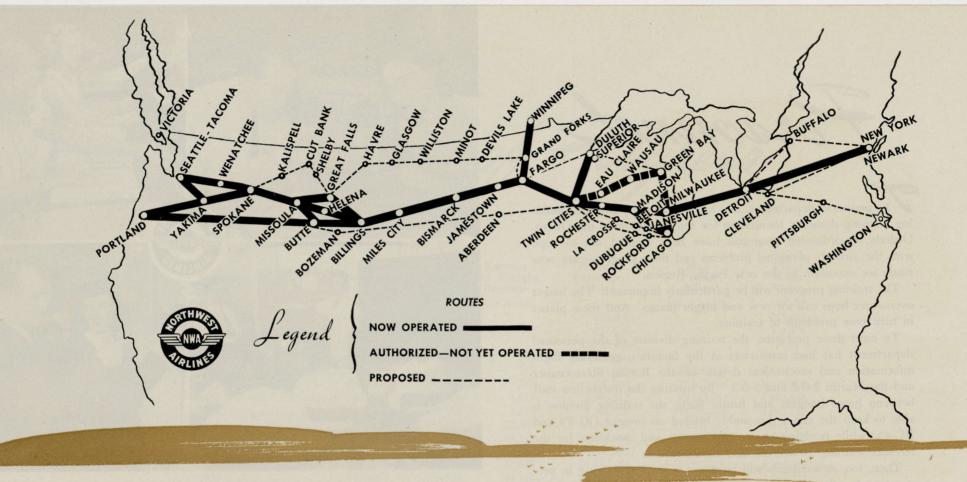
Among the applications are those for routes to Washington, D. C., and to the industrial cities of Buffalo, N. Y., Cleveland, Ohio, and Pittsburgh, Pa.

It is felt that the extension of the airline to the Far East makes it especially important, as a consideration of national defense, that the national capital be directly linked with such service. Of major importance, too, is the need for direct connections between Buffalo, Cleveland and Pittsburgh and the industrial territories they serve.

To make clear the company's position in its program of rounding out the domestic structure, attention is called to these facts:

Pending before the Civil Aeronautics Board is an application for service on alternate routes through the states of Illinois, Wisconsin, Minnesota, North Dakota, South Dakota and Montana. All of these were included in the North Central proceeding heard by the Board in March, 1945, and finally submitted to the Board in April, 1946. Decision on this is awaited.

Specifically, the company proposed routes between Chicago and Milwaukee and the Twin Cities, to serve Rockford, Ill., Beloit-Janesville, Wis., Dubuque, Iowa, and La Crosse, Wis.; and also from Chicago and Milwaukee directly to Duluth, Minn., via Green Bay, Wis., and from Duluth-Superior, directly across to Fargo, N. D., making connections there for the west coast; and from Fargo to Spokane, via Grand Forks, Minot, and Williston, N. D., and Glasgow, Havre, Great Falls, Cutbank-Shelby and Kalispell, Mont.



The company also has asked that Great Falls be certificated permanently as a stop on its transcontinental route, as it presently is serving it under a temporary wartime exemption.

The company likewise has asked that Bozeman, Mont., be certified as an intermediate point between Billings and Butte, Mont.

The company further seeks authorization to serve Aberdeen, S. D., on its straight line operations between the Twin Cities and Billings; and with the authority already granted to serve Portland, directly from Butte, this would effect a saving of 108 miles on a transcontinental route from New York to Portland.

The company has asked authorization to serve Cleveland, Pittsburgh and Washington from Milwaukee or Detroit, and hearing on this was set for October 21. Finally, the company has the following applications pending, on which no hearing dates have been advised:

Detroit-New York, via Buffalo.

Detroit-New York, via Cleveland.

The company has asked the Civil Aeronautics Board to remove restrictions on its certificate which require that flights east of Milwaukee originate or terminate at the Twin Cities or points west of them.

Service between Milwaukee and the Twin Cities, via Green Bay, Wausau, and Eau Claire, Wis., will be inaugurated as soon as adequate airport facilities are available; and limited service will be given to Eau Claire this Fall. Northwest Airlines also expects to serve Jamestown, N. D., upon completion of airport facilities this Fall.

20 Gears of Progress 1926 (

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he personnel department, too, has for several years been building a strong domestic foundation for the expansion to the Orient. Orderly, co-ordinated programs have been worked out to cope with the airline's personnel problems and these programs are now ready for extension to the new Pacific Region.

The training program will be particularly important. The longer over-water hops call for new and bigger planes. And these planes in turn pose problems of training.

To meet those problems, the training division of the personnel department has had instructors at the factories, gathering flight information and mechanical details on the Boeing Stratocruiser and the Martin 2-0-2 and 3-0-3. By rotating the instruction staff between home hangars and future fleets; the training division is able to keep the crews thoroughly briefed on present DC-3's and DC-4's, while readying charts and movies and mock-ups for the advance training on Martins and Stratocruisers.

Then, too, stewardesses will be given transition training in preparation for the new equipment and the new customers. Stock clerks will be drilled in accuracy against the increased complication of handling hundreds of thousands of additional parts.

Navigators and flight radio operators will have to be trained for over-water operation. Key treasury personnel will be trained in foreign exchange.

Ticket and transportation agents will be exhaustively briefed in customs handling, foreign exchange, tariffs, visas, passports, and the other requirements of international travel.

Other functions performed by the personnel department are also ready for extension to the Pacific region. The statistical division, the procedure and classification division, and the publication division will all expand their already company-wide service.

The employment division has instituted advanced methods of testing and interviewing prospective employes so as to hire the strongest possible employes for the company. It has also instituted



TRAINING PROGRAMS IMPROVE EMPLOYE'S EFFICIENCY

(Upper Left) They study own telephone voices over wire records to improve vocal appeal in public contacts. (Upper Right) Girls take reservations requests at switchboards. (Lower Left) Mechanics learn about modern aircraft parts. (Lower Right) Stewards practice duties aboard airplane.

modern records, to keep tab on the personnel after they are hired.

In the labor relations field, the company has tried to hold labor unrest to a minimum through advanced and constructive personnel practices and by paying wages commensurate with the best in the industry. For the Pacific operation, it is aiming at high morale among its employes by putting foreign employment on a volunteer basis. Already many company employes and outside applicants have been attracted by the offer of salaries higher than domestic salaries, and other inducements as to working conditions.

After the foreign bases are set up, the company expects to hire many of each base's staff from among the local population.

Record of Progress

Calendar Year	Mail Revenue	Passenger Revenue	Express and Freight Revenue	Revenue Passenger Miles	Mail Pound Miles	Total Plane Miles Flown
3 Months, 1926	\$ 11,790	-0	Not Avail.	—0—	Not Avail.	47,397
1927	76,029	\$ 8,663	"	126,000	,,	211,667
1928	195,315	24,890	"	402,400	"	314,496
1929	495,708	121,075	"	1,956,400	,,	736,664
1930	648,799	119,349	\$ 146	2,129,600	,,	1,032,340
1931	917,635	205,164	575	3,934,093	89,706,330	1,434,555
1932	884,719	200,984	343	4,127,800	77,867,566	1,639,015
1933		188,966	1,873	4,108,313	82,613,032	1,823,850
1934	251,133	199,074	4,319	4,301,145	44,034,248	1,643,127
1935	629,724	481,528	12,388	10,342,834	315,817,803	2,841,198
1936	1,050,639	759,981	27,318	16,528,401	671,011,789	3,699,818
1937	1,076,293	761,839	33,768	16,685,852	841,274,933	4,462,439
1938	1,286,549	829,554	41,625	21,153,258	1,116,975,430	5,310,015
1939	1,763,288	1,324,728	61,186	34,749,246	1,166,518,244	5,399,024
1940	1,769,735	2,151,311	79,531	51,175,254	1,370,076,043	6,079,669
1941	1,955,826	2,526,721	118,885	59,659,145	1,871,311,191	6,353,659
1942	1,850,601	2,410,512	240,800	52,061,159	2,528,042,954	4,931,815
1943	1,353,822	3,139,713	297,941	63,787,683	4,005,180,807	4,584,766
1944	1,500,874	6,073,967	246,030	120,834,296	4,900,802,947	7,523,146
1945	1,649,575	10,060,619	409,613	218,469,773	5,396,757,098	12,870,714
1st 6 mos., 1946	598,192	7,467,236	173,292	159,589,157	1,941,498,248	8,641,861

20 years of Progress 1924 1946

Financial Report

OR the fiscal year ended June 30, 1946, your company made a net profit of \$988,851 after deduction of all taxes and reserves, an increase of 36% over the previous fiscal year. This profit amounts to \$1.82 for each of the 543,870 shares of common capital stock outstanding at the end of the fiscal year. At the close of the year, the company's earned surplus was \$2,422,855. On the following pages are shown a report from Ernst & Ernst, Certified Public Accountants, covering statements of profit and loss and surplus and the balance sheet.

Total operating revenues, excluding fees from war contracts, increased 52% over the previous fiscal year primarily as a result of increased transportation of passengers.

Passenger revenue of \$13,371,074 is 68% above the preceding year and represents the major portion of the increase in operating revenue. This increase is again the result of flying more airplanes and more miles in commercial service than at any time in the history of your company. During the fiscal year, approximately 89% of all available seats were filled.

Mail revenue of \$1,455,166 is 10% under the previous year as a result of lower average mail loads carried. The air transportation industry has generally experienced lower average mail loads than during the war.

Express and miscellaneous operating revenues increased \$32,123.

Total operating revenues exclusive of contract fees produced \$1.00 per revenue mile.

Contract fees decreased \$598,025 as the result of completion or curtailment of various government contracts.

Total operating expenses increased 42% and total miles flown increased 64% over the preceding year. The cost per mile flown decreased 16% or 13 cents per mile flown.

Cash dividends of 50 cents per share were declared on August 7, 1945 and June 4, 1946 and were paid on September 1, 1945 and July 1, 1946, respectively. Our dividend, which in recent years was paid in September, was paid this year on July 1.

Cash and United States Government securities decreased from \$7,208,423 to \$2,348,044 during the fiscal year ended June 30, 1946. This decrease resulted principally from the purchase of aircraft and equipment now in service and from substantial deposits made in connection with procurement of aircraft and engines for future delivery. The ratio of current assets to current liabilities declined during this period due to the conversion of cash and securities into fixed assets, deposits on purchase commitments, dividends of \$541,470 paid in cash, and increased current liabilities resulting from additional costs of aircraft conversion, buildings and equipment in progress and increased federal and state taxes on income. Unreimbursed costs from war contracts decreased to \$193,659 at June 30, 1946.

20 years of Progress 1926 1941

Balance

\$14,753,773

Cash		500,367
Trade accounts receivable, including United States Government accounts of \$374,032		
** * * * *		1,573,634
Unreimbursed costs and accrued fees under war contracts with		
the United States GovernmentNote A	,708,966	
Less advances	655,307	
\$1.	,053,659	
	860,000	193,659
Inventories — at lower of cost or market:		
Materials and supplies Deposits on purchase commitments to be refunded		333,975
		679,714

ASSETS

OTHER ASSETS

Income taxes recoverable upon utilization of reserve for war contract adjustments	213,000	
Sundry accounts, claims, deposits, etc., less reserve of \$10,000	141,749	
Indebtedness of employees, less reserve of \$500	5,123	359,872

PROPERTY, PLANT, AND EQUIPMENT — on the basis of cost.....

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101 - +		
LIABILITIES		
CURRENT LIABILITIES	-	
Accounts payable	2.541.268	
Salaries, wages and vacation compensation.	609,092	
Air travel contract deposits - gross	326,825	
Payroll taxes	200,286	
Employees' income taxes withheld	118,826	
Employees' war bond deductions	42,448	\$ 3,838,745
Dividend payable July 1, 1946\$		
Less deposit with paying agent	271,935	bas usosk
	AT CONTR	
Accrued taxes and rent		101,516
Federal and state taxes on income estimated:		
For the year ended June 30, 1946\$	725,000	
For prior years	35,500	760,500
TOTAL CURRENT LIABILITIES		
DEFERRED INCOME — Unused transportation — estimated		278,694
		THE REAL PROPERTY OF THE PARTY

CAPITAL STOCK AND SURPLUS

Common stock, no par value:

Authorized 1,000,000 shares; unissued 456,130 shares, of which 10,000 shares are	
reserved for options at \$14.00 per share, and 5,200 shares are reserved for issu-	
ance in connection with future options which may be granted to officers and	
employees; oustanding 543,870 shares at aggregate stated capital amount\$7,351,463	
Earned surplus	9,774,318

CONTINGENT LIABILITIES - Note B

See accompanying notes to financial statements.

\$14,753,773 _____

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20 years of Progress 1926

Comparative Statement of Profit and Loss NORTHWEST AIRLINES, INC.

Years Ended June 30, 1946 and 1945

Operating revenues:				
Transportation:		1946		1945
Passengers	\$	313.371.074	\$	7,972,423
Mail		1,455,166		1,616,886
Express, freight, etc.		467,035		458,963
Repair and service income, rents, etc net		28,635		4,584
Fees from war contracts		146,992		745,017
		110,004		/15,017
TOTAL OPERATING REVENUES	\$	315,468,902	\$	10,797,873
Openeting empered	-	10 700 000	-	0.050.101
Operating expenses	\$	513,703,283	\$	9,672,181
Provision for war contract cost adjustments		269,619	-	198,682
	\$	13,972,902	\$	9,870,863
OPERATING PROFIT	\$	1 496 000	¢	927,010
Other income and credits	φ	95,531	φ	119,169
		55,551		119,109
	\$	1,591,531	¢	1 046 170
Other deductions	φ	29,576	φ	
		25,570		17,170
PROFIT BEFORE TAXES	¢	1 561 955	\$	1 020 000
Taxes on income — estimated:	φ	1,001,000	φ	1,029,009
Provision for the year:				
Federal normal income taxes and surtax	¢	650,000	¢	979 000
State income taxes			φ	
Adjustment of recoverable taxes				22,000
Augustificity for prior years	(101,000)		56,000
Over-provision for prior years	(896)	(4,705)
	\$	623,104	\$	351,295
	φ	025,104	φ	551,455
	\$	938,851	\$	677,714
Reduction in reserve for war and post-war contingencies - Note C.	Ψ	50,000	φ	50,000
Toto of minimum		00,000	_	50,000
NET PROFIT	\$	988,851	\$	727,714
Provision for depreciation and amortization included in operating expenses	\$	1.178.022	\$	
				,

See accompanying notes to financial statements.

Notes to Financial Statement

NORTHWEST AIRLINES, INC.

June 30, 1946

NOTE A—Substantially all of the Company's war contracts have been terminated, such contracts having constituted, from February, 1942, to February, 1946, an important phase of the Company's operations. Charges to the Government under these contracts included substantial amounts for overhead expenses allocated to such contracts. While the Company believes that such allocations have been fairly determined in accordance with contract provisions, they are subject to audit (now in progress) and approval by the Army Contracting Officer and the General Accounting Office. A reserve has been provided against disallowances of overhead allocations and direct costs. During the period of these contracts total charges to the reserve amounted to \$421,812, leaving a balance in the reserve of \$860,000.

Renegotiation proceedings pursuant to the Renegotiation Act have been concluded for the fiscal year ended June 30, 1944, and prior fiscal years, no refunds of profits on war contracts having been required. The Company believes that such proceedings for the fiscal years ended June 30, 1945 and 1946, will likewise result in no refund being required.

NOTE B—The Company has been named defendant in a law suit involving a claim of approximately \$1,900,200 for the payment of overtime compensation to employees who worked in excess of 40 hours per week on war contract operations at the Saint Paul Modification Center. In addition thereto, the Company is a defendant in a number of other law suits involving claims based on the same contention, the amounts of which are not specified but might aggregate several million dollars. The Company conducted this operation as a prime contractor for the War Department of the United States Government. In accordance with the decision of the Comptroller General of the United States, all amounts paid in satisfaction of final judgment against the Company in any such action, and the reasonable and necessary costs and expenses of litigation as approved by the Army Contracting Officer, constitute allowable items of cost under war contracts; and in view of those circumstances, the Company has made no provision in the accompanying financial statements for any portion of the amount involved in this litigation. The actions were defended by the United States Department of Justice in the Federal District Court for Minnesota, but no decision has been reached at this time.

As a result of an action involving a United States Government-owned airplane which was being operated by the Company under contract with the United States, several actions for death of, or injury to, military personnel who were then being transported have been instituted against the Company. The aggregate amount for which judgments are sought is \$1,125,000. Under terms of the United States Government contract, the Company is entitled to be reimbursed by the Government for any losses or expenses to which the Company may be subjected; and the Company has made no provision in the accompanying financial statements for any portion of the amount involved in this litigation. The United States Department of Justice has undertaken the defense of these actions.

- NOTE C—A reserve for war and post-war adjustments was provided in the fiscal year ended June 30, 1944, for expenses anticipated in conversion to peacetime operations. The amounts returned to income from this reserve during the fiscal years ended June 30, 1945 and 1946, were less than the costs, losses and expenses charged to profit and loss and for which the reserve was provided, after deducting applicable income taxes.
- Note D—As of August 28, 1946, the Company was committed to purchase ten Boeing Stratocruiser aircraft which, with spare parts, flight and ground equipment and engines will cost approximately \$20,500,000, and had commenced construction of a hangar at the Seattle-Tacoma Airport at a cost of approximately \$1,000,000. At that date, the Company contemplated entering into a contract to acquire forty Martin aircraft which, with spare parts and flight and ground equipment and engines (already on order) will cost approximately \$13,000,000, together with an option to acquire twenty additional Martin aircraft. As of August 28, 1946, the Company contemplated development of its operations to Alaska and the Orient, at an estimated cost of approximately \$2,000,000 for necessary ground facilities and development expense.

Statement of Surplus NORTHWEST AIRLINES, INC. Year Ended June 30, 1946

Balance at July 1, 1945 Add net profit for the year		.\$2,024,210 988,851
		\$3,013,061
Deduct:		
Dividends paid in cash on common stock—\$1.00 per share (including 50c per share paid July 1, 1946, representing dividend which, if paid in accordance with recent prac- tice, would have been paid in September, 1946)\$54 Cost of intangible asset (United States Government air mail route acquired in 1934)	1,470	
charged off	48,736	590,206
neuronaet an en enterna anterna anterna de la contra a de la contra de la contra de la contra de la contra de l		
Balance at June 30, 1946		.\$2,422,855
See accompanying notes to financial statements.	-	

ACCOUNTANTS' REPORT

Board of Directors Northwest Airlines, Inc. Saint Paul, Minnesota

We have examined the balance sheet of NORTHWEST AIRLINES, INC., as of June 30, 1946, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Company and, without making a detailed audit of the transactions, have examined or tested records of the Company and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary. It was impracticable to confirm by direct communication the amounts receivable from the United States Government for unreimbursed costs under war contracts as of June 30, 1946, as to which we satisfied ourselves by other auditing procedures.

There remain unsettled matters resulting from wartime conditions which may affect the accompanying financial statements. Certain costs under war contracts have not been finally audited and accepted by the War Department and the General Accounting Office and may include unallowable items; the war contract fees accrued in the fiscal years ended June 30, 1945 and 1946, may be subject to renegotiation; and the related income tax questions are still unsettled; all of which will not finally be determined for some time. These questions have been considered and dealt with in the statements on a basis believed to be reasonable in light of present information and conditions.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present as fairly as can now be stated, the position of NORTHWEST AIRLINES, INC. at June 30, 1946, and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

Certified Public Accountants

Saint Paul, Minnesota August 28, 1946

Opportunities

n extending its services to Alaska and the Far East, Northwest Airlines will be entering rich and vast fields that have lain comparatively undeveloped for centuries, yet have been powerfully affected by world events of recent years.

Alaska can stake its future on at least two circumstances, its natural resources and its vital importance in national defense.

Alaskans themselves believe it soon will become part of the Union as the forty-ninth state; and they envision a population of millions, instead of the present tens of thousands. They point out that Norway, Sweden and Finland, with a comparable climate and a smaller area, supported 13,000,000 people before the war.

Alaska's deposits of coal are so vast that no close estimate has been possible—but there is enough to supply the rest of the United States for years. Other deposits include gold, tin, copper, iron, lead, platinum, tungsten, molybdenum, and marble.

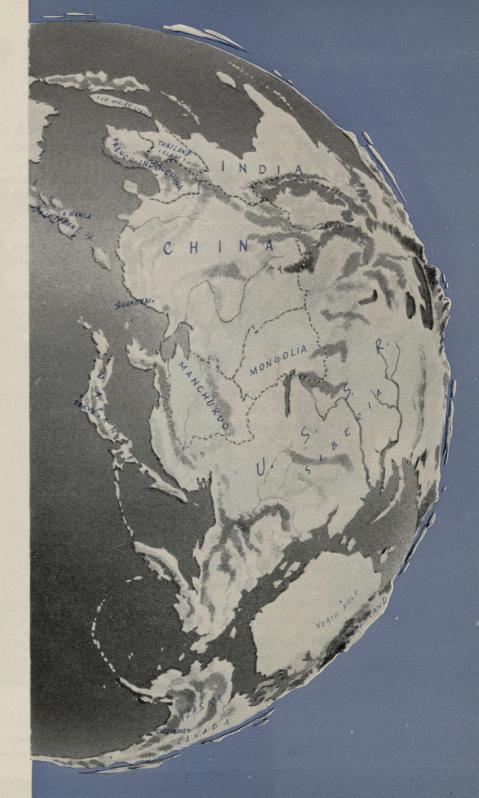
Fishing is today's biggest industry there; tomorrow's may be farming and mining.

Alaska will attract thousands of tourists annually; and the travel and business ties with the mainland will become closer and closer as air transportation develops.

Even now, Alaskans are the most air-minded persons in the world.

Governmental agencies are already moving to develop the territory. Members of the House military affairs committee, which toured Alaska, declared that the northern area should be quickly and adequately armed to repel any possible invader. The Interior department decided to release 18,640,000 acres of public land in Alaska for private development under federal mining and leasing laws. Alaska is appearing more and more in news stories, reflecting increased interest by the rest of the nation.

In the Far East, World War II had its beginning, and there it raged longer than anywhere else. There its effects were most appalling. There one of the biggest tasks of rehabilitation is under way.



The Philippines, China, Japan, Korea, Manchuria—each seeks deliverance, not now from war but from conditions brought on by war.

Hardest hit in all these countries is transportation. It is for this reason that the coming of the new trans-Pacific commercial airplane service will be an event of great importance. It will speed officials, engineers and various technicians back and forth between there and the United States to make preliminary surveys, set up organizations, arrange for the flow of equipment and goods that are so badly needed.

Requirements of the Far East are almost limitless. Many of the most urgently needed articles are made by manufacturing plants along the Northwest Airlines system—the output of factories in Milwaukee, Detroit and other cities.

New markets, in turn, will be opened in this country for Oriental exports.

Trade from Chinese coastal cities is being revived, and already some sizable exports have gotten under way from Shanghai, most of these bound for the United States.

China's chief industries, like silk and cotton textiles, which were demoralized by war, are reviving.

Prospects of rice from the lower Yangtze valley are good, with estimates that the overall crop in China this year would exceed that of last year.

Inflation, which had brought living costs up several hundred per cent, is taking a down turn.

Extensive highway repairs are under way.

All these are hopeful signs.

The United States has made extensive surveys of means to further the industrialization of China.

In the Philippines, looked upon as a great potential market for American goods, and with which the United States has mutually advantageous tariff arrangements, rehabilitation is definitely under way.

Government and private interests have joined in exporting limited amounts of staple products—things like copra, abaca (Manila hemp) rubber, bristles.

A committee organized for aid of the Philippine tobacco industry—consisting of planters, manufacturers and exporters of tobacco products—has been actively at work.

Resumption of the tobacco trade has proceeded to a point where it is believed that a full tobacco crop, after this late summer planting, will be harvested next spring.

The National Rice and Corn Corporation, a pre-war government organization in the Philippines, has been revitalized. An Agricultural Machinery and Equipment Corporation has been created by the Philippine Congress to further the producing of plows, tractors and other implements for sale to farmers on easy terms. Many of these are being obtained in the United States, from plants in Northwest Airlines' trade areas. With this supply of tools, it appears that crops of rice and corn to be harvested late this year and early next will surpass the 1945-1946 crop.

Gathering of weather data in the Philippines will not present the airline with any difficult problem, for already the United States weather bureau, in co-operation with the Philippine government, has already begun to re-establish and improve the meterological service in the islands. The United States Congress has appropriated \$1,308,000 for use by the Philippine government in setting up the weather service.

This is being done in order to provide necessary weather information for the operation of trans-Pacific airlines and shipping, as well as to foster commerce and industry.

An international forecast office will be established at Manila to make forecasts for trans-Pacific air routes. A sub-forecast center will be established on Mindanao island.

20 years of Progress 1926 1946

In addition, the United States government will provide funds for university training, in meteorology, of Filipinos in this country. During the first year, 50 Filipinos will receive this training, and 25 each subsequent year, until the Philippine Republic has sufficient trained personnel to take over the entire meteorological service in the islands.

The picture of Japan—with which the United States was at war until little more than a year ago—is more uncertain because of political considerations. Its industrial position, no doubt, will be determined largely by how far the Allies sanction recovery there.

Its trade possibilities, of course, are great, if it is permitted to reach its limits.

Its people are air conscious, and its industrial leaders are well aware of the importance of commercial aviation.

Needs of the Far East are indeed almost limitless. The problem has been, and is, its ability to pay for what it seeks. Any improvement in its industrial, financial or farming position means improvement in its ability to pay.

Such improvement, of course, bears a close relation to the opportunities of Northwest Airlines, and will no doubt be greatly advanced by the time this airline has completed its preliminary arrangements and begins operations there.

As the tempo of improvement steps up and Northwest Airlines accelerates its service, this company, and the people along the system will come more fully to realize the trade and travel possibilities opened up by the new routes. Business firms will turn to the Orient to establish new contacts or to increase those already established. Tourists will fly to these distant lands to meet peoples with strange customs.

The West will come to know the East better; and the East will get acquainted with the West. The very realization of trade opportunities will thus improve international relations.

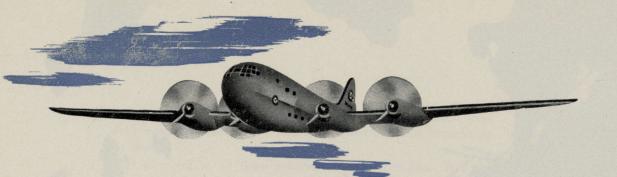


ROUTES
NOW OPERATED
AUTHORIZED-NOT YET OPERATED
PROPOSED



NORTH

POLE



Developments of the past year open new vistas for the future.

Northwest Airlines, with its 18,793 route miles, is now the fourth largest American air flag carrier.

Its domestic system continues its sound development. During the fiscal year ending June 30, 1946, its planes carried 460,342 revenue passengers, 292,161,690 revenue passenger miles; 5,261,302 pounds of mail, 4,748,331,780 pound miles; and 2,770,732 pounds of express, 1,776,888,132 pound miles.

Its international routes hold the promise of great passenger, mail and cargo business.

Northwest Airlines will continue, in greatly broadened fields, the steady growth which has characterized it during the twenty years it has expanded from a local mail contract carrier to one of the world's great airlines.









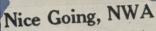
AVIATION Round-the-World Express

The last big chunk of the wor unchartered airways - the trans-Pac routes to the Orient-was finally p tioned out last week by the Civil Ae nautics Board. Promptly approved President Truman, the board's decisi will permit air travelers for the first tin to go around the world on one ticket.

Northwest will fly the great circle rou from New York, Chicago and Seattle v Alaska to Tokyo, Shanghai, Manila an points in eastern China, and in Mar

Northwest Passage will cut the flyir distance from New York to the Orient b 1,000 miles. Northwest also will do mos of its flying overland, where reassurin emergency bases can be built.

TIME AUG.12-



NORTHWEST AIRLINES is going back to Alaska-back to Mount McKinley and the salmon streams, to the gold fields and the

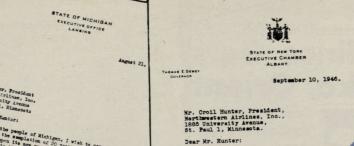
Northwest men earned a claim to the new assignment when they flew the northern ai lanes under contract to the army during th war. They pioneered much of the big plan transportation to America's largest territor They flew supplies and personnel for th Alaska highway, for the landing strips over which lease-lend ships went to Russia, for thousand defense projects all over the Arct They carried mail to the outposts. Throug some of the worst weather the universe pr duces, NWA operated regular schedules h tween Minneapolis and Attu.

Northwest pilots and engineers learned h to start their planes in the dead of an Alask winter, when the thermometer stood at below and hangars hadn't yet been built. Th discovered new ways to de-ice their win They set up weather stations and navigat aids. Now, with the award of two routes Alaska and the long one to the Orient, t will draw dividends on that experience.

Romance always has been found in tra portation-river and ocean, road and rai!. latest generation finds that old allure newed in the air. Far places and stra scenes beckon. Soon Northwest will be fl there, taking off from Wold-Chamberlain and going to Manila, with stops at Edmor Anchorage, Tokyo and Shanghai.

The Twin Cities will be on the trade ro of the world more truly than if they were uated on one of the seven seas. Thanks, N west Airlines, and good luck!

Augs 1986 The Minnenpolis Star and gourna



TED: HD

Parry Frely

Jane Sullin

is with genuine pleasure that I exte ny my heartiest congratulation Anniversary. The gratific iversary. The gratification ork upon this occasion is enha-ing of the historic "Northwest

New York has a treachious stabs in internat trade both as a trader and as a producer of good this State are handned non-third of all exports. imports and a hand such service as your Compan-tow certified to attach between New York State Orient will constitute an important part of the portation service for this State.

In these difficult times characterized national misunderstandings and short-sighted is is heartening to witness the inauguration series which will bring New York and other the area which you serve so close to China. Kores and the Philippines as well as to our Northwest outpost in Alaska. These closer foundations; mutual understanding and compo

arly pioneering fort and your great contributio uuring the War. The people of the State of New whare your gratification with these new opportunit for public service and wish you Godspeed in meetin

Bincerely yours, lice mar Siva

G

New Air Route to Orient Columbus, the Cabots, La Salle, Magellan! In the period of world exploration, these great adventurers and many another were intent on reaching the fabled lands of the Orient about which Marco Polo had brought back to Europe such about which Marco Folo had brought back to Europe such amazing tales in the 12th century. Though not phased in chamber of commerce terms, and though the expeditions often had the complexion of freebooters, their purpose was to bring together those rich countries in trade alliance with

And this goal was ever kept in sight in later years as European nations — Spain, Portugal, The Netherlands, Great Britain, Germany—entered the period of colonization with methods, it must be confessed, not greatly different than those of their predecessors. In fact Japan's Pearl Harbor attack was but another manifestation of this same am-

The centuries have come and gone and the trade po-

tential of the Far East is as great a magnet now as it was in the days of Magellan, but we know now that it must be a two way traffic, that only lasting benefits to us can come when the standards of living of these peoples who have suffered so much from flood, from war, from pestilence and famine are raised to the point where they can buy from us

Despite its ancient history the future of the Orient lies

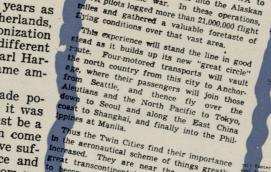
in the years ahead and it is for this reason that the authorization to Northwest Airlines by the Civil Aeronautics board Ization to Northwest Airlines by the Civil Aeronautics poard pane of new air routes to the Orient are important. The place air which air service will play in the development of foreign The trade is still largely unplumbed, but the CAB permit means e that the huge new Seattle-Tacoma airport at Bow Lake will be one terminus and that Puget Sound will be in a strategic position to participate in postwar expansion.

With competition keen it is obvious that Croil Hunter,

COMMITTEE ON

Laboure, North Dakat August 24, 1946

president and general manager of Northwest Airlines, and his aides must have done a tremendous job of selling to his aldes must have done a tremendous job of sening to achieve this victory. Credit, too, should go to the Seattle and Tacoma Chambers of Commerce which have carried on a long fight for the location of at least one Pacific air route THE TACOMA NEWS TRIBUNE



the aeronautical scheme of things greatly iental route, and they are ome part-and-parcel of a great in

and now to the Orient

Joudspeaker at Wold-Chamberlain field

It may not be so awfully long now before

barks out: "Flight now ready for immediate

Aeronautics board's approval of an

departure, leaving for Anchorage, Tokyo, Beoul, Shanghai and Manila." For with the

Alaskan and North Pacific route for North-

west Airlines, Minneapolis officially becor

cional port of call.

terry planes and personnel into the Alaskan

A during the war. In these operations

WA pilots logged more than 21,000,000 flight

Back of this good news is the dramatic

A how the army chartered NWA to

present and future deral government conow afoot, they can be ccommodate the great boom traffic now in prospect.

The tempo of the Twin Citles as an aviation center is much MINNEAPOLIS DAILY TIMES

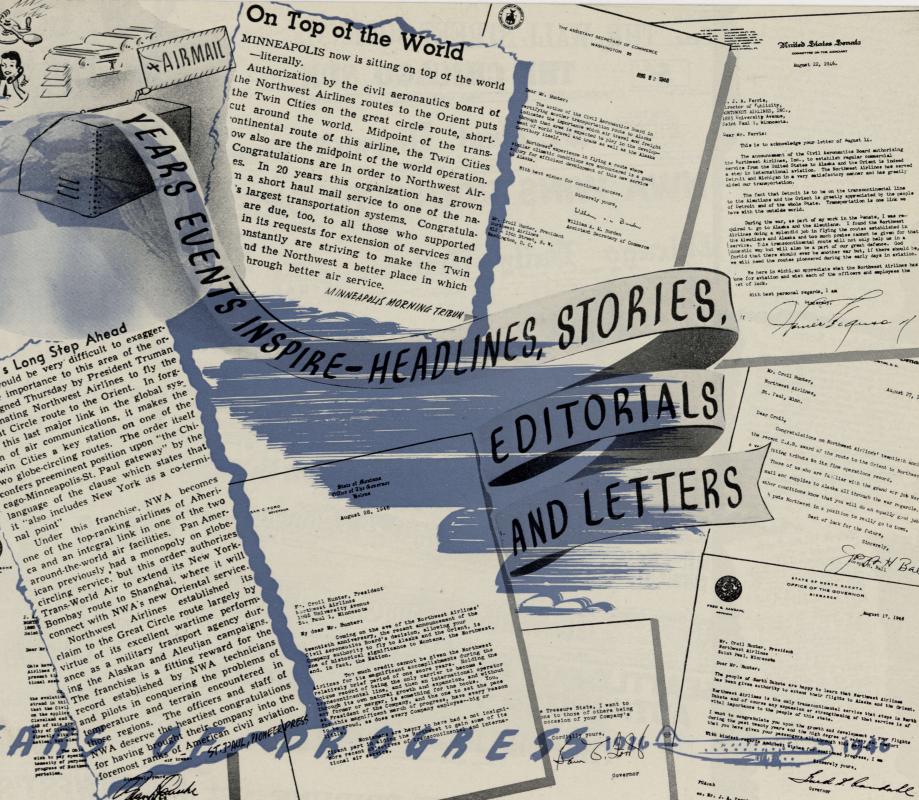
2823 Vet.ors Ave. Berett, Vasbington



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August 30, 1948

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The CAB decision puts Northwest Air-Significancelines into the big league, making it a commercial overseas carrier for the first

The CAB was told that if American rime airlines don't soon start flying the circuit into the Orient, British or Canadian lines will. One immediate goal is to exploit the rapidly growing traffic with Alaska. The long-term goal is the one Marco Polo, Columbus, and other early explorers had in mind-a commercial link between what always have been two worlds, the West and the East.

Northwest Passage: Croil Hunter of St. Northwest rassage: Gron Hunter of Sc. Paul, Minn., 53-year-old president of Northwest Airlines, Inc., got the prize fe had set his heart on-the right to fly the Great Circle route by way of Alaska and the Aleutian Islands to Tokyo and Shanghai. To complete this global circle, Trans World Airlines received permission to extend its North Atlantic route (News-WEEK, July 16, 1945) from its terminus at Bombay, India, to Shanghai. Northwest will have two routes to Anchorage, Alaska -from New York, Chicago and Minneapolis-St. Paul by way of Edmonton, and an over-the-water flight from Seattle. NEWS WEEK AUG. 12.1948

Neighbors Soon

Authorization for Northwest Airlines to fly route between the United States and nd Alaska is a boost to the Northwest as to the company. It was feared hile that the only flights permitted over ould be from California, thus divertlocally-originated air traffic

via Canadian flag lines. Vizen as co-terminals in the new York, Chicago, St. of the air are New inneapolis and finally Seattle.

er the Aleutian and Kurile islands Yokyo, Harbin, Mukden, Dairen, Peip-Nanking, Shanghal and Manila. est has on order a number of Boeing's

pliners and plans to put them in the on the Oriental run very soon. Yakima will be a neighbor of the inscrutable people over the ocean, and we can all but chat over the The Yaking Daily Republic back fence.

kane can



