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*Application for approval of any interlocking relationship which may be necessary as a result of Mr. Gardiner's being a director of Northwest Airlines, Inc., and other corporations has been filed with the Civil Aeronautics Board.

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E. I. WHYATT - - Vice President and Treasurer
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General Offices: 1885 University Avenue, St. Paul 4, Minnesota

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Annual meeting of shareholders last Monday in September.

OUR COMPANY is now at the midway point of the most momentous two-year period in its history. In the past year, it has pressed its plans for entry into the foreign air transportation field with routes to the Far East; it has seen the fulfillment of its most immediate goal, the extension of its domestic line into Detroit and New York, and it has completed successfully its two most important military assignments. Commercial aviation has now become an important instrument for peace the world over. The webs of globe-circling air routes will inevitably provide the arteries for American commerce reaching every part of the world. Your company moves forward into this first postwar year conscious of its extraordinary opportunities and responsibilities and confident of its ability to serve the country's program for the restoration of a peacetime economy in a manner that will reflect the greatest benefit and distinction.

love Humen

St. Paul, Minnesota October 27, 1945

President and General Manager

THE PAST

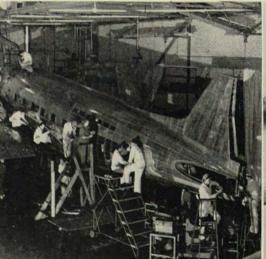
A T NO TIME before has it been possible to look back on so productive a year as the last nor to look forward to so promising a year as the one your company has recently entered. It is correct to say that this period is an epoch in the history of our industry. The entire future of commercial air transportation is now being charted. The scope of expansion of air routes exceeds anything in past history, since the events of these last difficult years have evolved opportunities which, under normal circumstances, would have been years distant.

Your company has kept pace with these swiftly-moving times. In the last year it has completed hearings on applications for routes which would broaden its domestic system and project its lines beyond our country's borders; it has inaugurated and successfully operated coast-to-coast service; it has acquired and put into service

ARMY PLANE GETS AIRLINE DRESS

PACIFIC MEETS ATLANTIC AT N. Y

NEW TICKET OFFICE AT DETROIT







additional DC-3 equipment and has purchased, for early delivery, modern, high-speed, four-engine aircraft with more than twice the capacity of its present type planes; it has resumed service into several cities and increased service into practically all others; it has modernized its facilities in many instances, notably its ticket offices; it has brought to a successful conclusion its operation of two front-rank war projects, and it has strengthened itself in many ways to meet the formidable tasks that lie immediately ahead.

Your company enters the new year with the opportunity to concentrate its energies on the sound and proper development of commercial airline activities. It is encouraged in this tremendous undertaking by the favorable recommendation of the Examiners of the Civil Aeronautics Board in regard to its application for proposed extension to Alaska and the Orient.

Hearings on the application for this route were completed befor the Civil Aeronautics Board early in March, 1945. Six months later, the Board's Examiners reported favorably on this application, underscoring Northwest's extensive operation for the Army on its Northern Region routes, and urged that Northwest be given authority to utilize its comprehensive experience by flying commercially through this area to the Far East. The Examiners recommended that New York and Chicago be made terminals in this country, with lines from these cities converging at the Twin Cities and then continuing to Edmonton in Canada, Anchorage, Alaska; Tokyo, Shanghai, Hong Kong and Manila.

The Examiners failed, however, to recommend that Seattle be named as a co-terminal for this North Pacific route which Northwest proposed to operate to the Orient via Anchorage. It is the belief of your company that this co-terminal should be an integral part of the route structure over the North Pacific to the Orient so as to provide service to principal traffic generating areas through their natural gateways and to assure its maximum development. In its brief supporting its exceptions to the Examiners' Report, Northwest Airlines asserted that the tremendous development of the Pacific Northwest in recent years and its vast hydro-electric and other resources require that it be recognized as one of the great trade areas to be served by such a route.

Hearings were conducted during the past year on one more

proposed route outside continental United States, namely, from the co-terminals of Seattle and Portland to Honolulu, Hawaii, and on a variety of domestic routes. Among the latter it was proposed to operate between Seattle and Portland in order to join our two Pacific Coast terminals so as to provide better integration, greater operating efficiency, and needed local service between those cities. It was further proposed to operate directly from Portland, Ore., to Butte, Montana, and from Billings, Mont., to the Twin Cities via Aberdeen, S. D., saving more than one hundred miles on the transcontinental route to Portland. Other supplementary services were proposed in the Mid-West which will provide service to Duluth, directly east through Milwaukee, and directly west through Fargo, and add such cities as Rockford, Ill., Beloit-Ianesville, Wis., Dubuque, Iowa, and La Crosse, Wis. to the system. Also proposed is a route from Fargo, N. D. through Grand Forks, Devils Lake, Minot and Williston, N. D., Glasgow, Havre, Great Falls, Cut Bank and Kalispell, Mont., to Spokane, Wash.; also Great Falls and Bozeman, Mont. have been proposed as additional intermediate points on the present route.

Northwest has also proposed in applications now on file, but on which no hearings have yet been held, to provide direct service into Washington, D. C., from Detroit, via Cleveland and Pittsburgh and to serve Buffalo, N. Y. on flights between Detroit

and New York.

A complete list of presently certificated and proposed routes

is printed elsewhere in this report.

While we have looked to the future, we have likewise seen the present produce many vital route developments. In December of last year your company won its long struggle to extend its lines into Detroit and New York, spanning the nation by the shortest of the four transcontinental routes.

The achievement of this success marked a new phase in the history of this company, as well as in the history of transportation. The traditional travel barrier of the Great Lakes has been overcome. Despite many difficulties due to wartime restrictions, seventeen hour coast-to-coast service has been inaugurated and has given to the entire northern portion of our nation an instrument of incalculable value. By attaining this immediate goal

your company has been placed in a sound position for the projection of its routes into the international field.

Since the start of service into Detroit and New York, your company has operated three daily round trips between New York and its Pacific Northwest terminals and one additional daily round trip between New York and the Twin Cities. One more flight between the latter points has recently been added.

In the last year, Northwest also has resumed service into Portland, Ore., and Wenatchee, Wash., and will, on November 1,

resume passenger flights into Duluth, Minn.

It has been possible to increase the frequency of service to virtually all stations on the Northwest system in the last year, as a result of the acquisition and conversion of ten more Army aircraft of the DC-3 type and a higher utilization of all our planes. Two additional Army planes will soon be converted for commercial operation. On October 15, 1945, our schedules included three daily round trips between New York and Seattle, two between New York and Minneapolis-St. Paul, three between Chicago and Seattle, one between Chicago and Portland, one between Chicago and Winnipeg, six local flights between Chicago and Minneapolis-St. Paul, one flight (mail and express only) between Minneapolis-St. Paul and Duluth, two between Spokane and Portland, and one between Spokane and Seattle. Your company is now operating a total of seven transcontinental flights daily between Chicago and New York in the east and Seattle-Tacoma and Portland in the west.

Consistent with its historic policy, your company recently reduced its passenger fares to a system-wide average of $4\frac{1}{2}$ c per mile.

The extent of service rendered in the fiscal year just ended is shown in the following figures: 247,589 revenue passengers, more than double the total for the previous year; 9,634,390 revenue miles, an increase of more than four million miles; 5,289,489,351 pound miles of mail, exceeding the previous year's total by more than 600 million; 1,628,994,471 pound miles of express, again an increase of more than 600 million; 162,325,068 revenue passenger miles, nearly twice last year's total. The revenue load factor for the fiscal year was 85.80, slightly more than a year ago, and the performance factor remained virtually the same at 96.20 per cent.

Several new city ticket offices were opened by the company in the last year to handle this increasing volume of business and in anticipation of further increases as our service is expanded. Offices were opened for the first time at Detroit and Yakima and new offices were obtained at Chicago, Winnipeg, Portland and Spokane. The Seattle and Minneapolis offices were remodeled to provide more space for accommodation of customers. A new office is now being equipped at Duluth, and another is planned for Milwaukee during the current fiscal year. A regional traffic office was opened at 535 Fifth Avenue, New York City, to handle all traffic activities in the New York area.

Northwest has established a policy for the re-employment of employees returning from military service by reinstatement to their former positions or to positions of like seniority status and pay. In cases where, by reason of acquired skill or experience in military service, the veteran is qualified for a better position than the one he left, every effort is being made to find a position in line with his qualifications. Furthermore, servicemen not formerly in our employ are being given preference in filling vacancies as they occur.

Elimination of some of the war activities outside the normal scope of our operations and general improvement in efficiency have brought a steady decrease in the company's personnel. From a peak of 6,693 on July 1, 1944, the number of employees had dropped to 4,767 on September 1 of this year and to 3,051 on October 15.



Forerunner of Northwest's fleet of four-engine transports is this C-54, leased from the Army for use in familiarizing pilots with the operation of these huge planes.

THE WAR

ITH THE END of the war, your company was relieved of its two principal military assignments, the operation of the Army cargo air routes to Alaska and the Aleutian Islands, and the operation of the bomber modification center at the St. Paul airport. It is continuing to contribute men and their skills to the ice research and precipitation static projects at the Wold-Chamberlain airport in the Twin Cities.

It is yet too early to evaluate accurately the importance of Northwest's aid to its country in the unequaled crisis from which it has now emerged. All that this company has gained beyond the victory of our nation is secondary, for no gain in experience or in the special knowledge which these operations made available to us could be put to our full use without the freedoms which victory assures to all categories of enterprise.

In terms of experience your company's personnel has acquired knowledge and skill with which we shall be able to build an even sturdier commercial airline structure. Our war assignments have acquainted us with new problems and their solutions; and the war, in a more general sense, has equipped us with up-to-date concepts and a wholly fresh perspective of a world determined to keep its hard-won peace through co-operation and neighborly business relations.

The tremendous responsibilities your company undertook and successfully discharged have helped to create the opportunities we now perceive and the ability to successfully utilize them.

THE NORTHERN REGION

ORTHWEST AIRLINES withdrew from the operation of the military cargo routes to the far north on September 1 of this year, after three and a half years of flying military personnel, mail and cargo from the United States to Army bases in Alaska and out on the Aleutian Islands.

Over these routes, established by Northwest through Canada and Alaska, flowed the stream of supplies to the forces who turned back the Japanese thrust toward our mainland and, in time, dislodged the enemy entirely from the far north. The story of the beginning of this project has already been told. The results have already become manifest.

Largely through the efforts of your company these vital air channels were constructed, under the most challenging circumstances. In normal times, the development of such routes would be an enormous task. In times of crisis, under the pressure of historic events, it was an accomplishment of which we have a right to point with especial pride.

At the completion of our assignment, these routes ranked with the finest in the world.

Hundreds of workers from Northwest's main base in the Twin Cities and from other stations along its commercial routes were sent to Canada and Alaska for the operation. At peak employment, 970 workers were assigned to this project.

In the three and a half years your company operated the Northern Region, Northwest pilots flew a total of 21,559,469 transport miles; 164,814,621 passenger miles, and 44,977,183 ton miles. This record surpasses that of any of the other airlines flying the north routes.

The routes correspond generally to those over which the company would fly on its projected routes to Alaska, Tokyo, Shanghai, Hong Kong and Manila. Experience gained in the operation was cited by Civil Aeronautics Board examiners, in their favor-

Brigadier General D. V. Gaffney, commanding the Alaskan Wing, Air Transport Command, presents the Air Medal to two civilian Northwest Airlines pilots in recognition of outstanding work by the company's pilots on the Northern Region routes.

able report, as one of the most cogent factors in establishing Northwest's qualifications to fly the Orient routes.

Shortly after we withdrew from the Northern Region operation, your company received a letter of commendation from Brigadier General D. V. Gaffney, commanding general of the Alaskan Division, Air Transport Command. General Gaffney wrote, in part:

"I know that a review of the records would indicate a performance which will be difficult to excel for a long time to come and particularly in view of being confronted with the challenge as you were in operating through an area which previously had been entirely pioneered. Much has been written about the hazards of the Hump operation. You have been confronted with all the hazards existent on any and all airlines, in many cases to a far greater extent than have been existent in other areas. Your record of performance in overcoming such obstacles and in rendering a continuous, harmonious service is one that has to be studied to be believed."

This wartime assignment has given us the chance to advance our technical knowledge by a matter of years. If Northwest is awarded its routes to Asia, via Alaska, much of its preliminary

work will already have been accomplished.

Alaska holds a strategic position on the air map of the world. Only in this war has this position been generally recognized. The thorough knowledge of this new northern empire gained in discharging our obligation as an arm of the national defense, will serve many purposes in assuring a peaceful and prosperous future.

THE MODIFICATION CENTER

BEFORE THE CLOSE of 1945, it is expected that Northwest Airlines will have withdrawn completely from the bomber modification center at St. Paul airport.

It is possible only now to make public the full story of this undertaking.

Bombers from the St. Paul center operated in every theater of war.

The development of inventions, the engineering and installation of special equipment, the incorporation of innumerable changes in the aircraft to ensure their effectiveness in all kinds of operations—this was the job of the modification centers.

Beyond any question, the most important work carried on at St. Paul in the three and a half years of the center's existence was its radar program. In the estimate of the Army itself, the radar assignment given to this center was more important than any other task assigned to any of its modification projects.

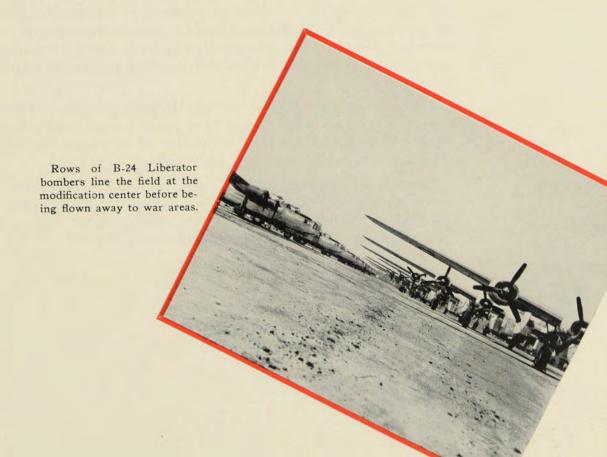
Radar increased the effectiveness of our bombers by five times. It enabled them to fly in nearly every kind of weather and to bomb with incredible accuracy despite the cloak of overcast which hid their targets from view. Radar was the decisive weapon in reducing Germany's once-powerful submarine fleet to a negligible force. On the ground, where the European enemy introduced a new kind of warfare keyed to blitz movement, radar facilitated the puncture of every line of their communications and, near the end, had slowed the Germans to a pace at which they could no longer fight the way they had fought with such sensational success in the early periods of the war. Once their speed was taken away from them, they were defeated.

It is impossible for most of us to comprehend the extent to which radar revolutionized the methods of making war.

The Northwest-Modification center at St. Paul installed radar equipment in 1,119 B-24 Liberator bombers. These planes carried the brunt of the attacks which led to our final victory.

From the beginning of your company's operation at St. Paul until the last complete modification was finished on the day after Japan's surrender, a total of 3,286 aircraft was equipped with radar or other special accourrements. Despite the demands imposed by a high-speed war, the center succeeded in achieving the quota set for it in each of the last seventeen months of its activity. A star, signifying continued production excellence, was awarded to your company during the last year for display with the Army-Navy "E", previously received.

A comprehensive report of the activities at the modification center was mailed to stockholders recently. It is a source of pride to your company that it has now ended this important operation with a record of outstanding success.



THE ICE RESEARCH CENTER

NE OF THE MAJOR problems which still stands in the way of commercial aviation's attaining the ideal of all-weather flying is rapidly being solved. Research into icing conditions and methods of circumventing this hazard is now being made at the Army center at Wold-Chamberlain field, Twin Cities, from which will come the application of satisfactory de-icing systems to commercial aircraft.

This important center has expanded its activities in the last year with establishment of a supplementary base atop Mt. Washington in New Hampshire. The prevalence of uncommonly severe weather conditions on this summit makes it possible to pursue certain phases of research without the high expense of using an airplane. This phase of the work was begun in September of 1945.

Discoveries made at the principal Twin Cities base were incorporated in the design of the B-24 and B-32 bombers and undoubtedly will be used, in one form or another, on commercial planes which are still on the drawing boards. Experimental planes now are being flown by manufacturers to the Twin Cities where members of the center's staff subject their de-icing systems to rigorous tests.

When it becomes possible for the airlines to operate without regard to ice, this industry will have made a significant advance toward the goal of complete reliability of schedules which the traveling public will eventually insist upon.

Commercial aviation as a whole will profit by these researches. So far as is known at this time, it is the intention of the Army to continue its studies of ice indefinitely, with mechanics, pilots, engineers and office staff supplied by Northwest Airlines.



T IS STILL IMPOSSIBLE to reveal in detail the research program carried on by the Navy and Army, in co-operation with Northwest Airlines, at the precipitation static center at Wold-Chamberlain field in the Twin Cities.

Since its inception, your company has contributed personnel to this project in its determination to aid in whatever way possible in the study of aircraft refinement for the eventual benefit of aviation.

Studies made at this center have as their goal the elimination of static produced by severe weather conditions. Such static interferes with communications and navigation signals.

Your company feels that by contributing mechanics, pilots, engineers and office staff to this project it has aided materially in establishing the superiority of America's wartime air power and in enhancing the reliability of the postwar commercial airplane.

It is likely that this work will be continued for many years to come and the fields of research expanded.

THE TRANS-CON TROOP AIRLINE

N AUGUST OF THIS YEAR, Northwest Airlines undertook an additional war service. In order to speed up the movement of troops within the United States, the Army designated Northwest, along with other transcontinental airlines, to operate separate military airline routes across the nation.

This company was allocated 15 Army airplanes of the DC-3 type, and approximately 120 pilots were assigned to this project. Planes follow virtually the same route as flown by the company's commercial fleet, with flights originating at Newark, N. J., instead of LaGuardia field in New York, and with stops at Buffalo, Milwaukee, Minneapolis, Fargo, Billings, Spokane and Seattle, the terminating point. Principal maintenance base is centered in one of the hangars at St. Paul airport which was previously used for bomber modification work. Four round trips are being flown daily.

When the end of the war with Japan made it no longer necessary to rush troops to the Pacific embarkation points, this airline was given the additional task of transporting troops to separation centers.

This work is expected to continue until some time next year.

The Auture

THE FAR EAST, ancient center of world civilization, has now become the new frontier for American enterprise. In the Oriental countries, almost unlimited quantities of raw materials and manpower enrich the prospects of profitable trade relationships between those nations and our own. The United States has emerged from the war with the greatest industrial capacity in the world. The Orient, on the other hand, has become the world's greatest potential market. The predictions of economists as to the enormous volume of trade and commerce to be enjoyed between the United States and the Orient clearly appear justified by the extensive studies and surveys which have been made.

The Orient is the home of more than a billion people. It contains the world's greatest deposits of tin and mica; it is rich in coal, manganese and iron ore; its rubber plantations are among the largest in the world. Yet, in spite of this enormous wealth, its standards of living are among the lowest to be found anywhere. In many years of war, it has come, tragically late, to the conviction that its future safety and progress require the development of these resources. The president of China recently declared that his country will need help from beyond its borders to accomplish this purpose and that such help will be warmly welcomed.

This invitation represents a glowing opportunity for American capital. With our productive capacities swelled as a result of wartime exigencies, we must find just such outlets as the Orient offers. And to take full advantage of these circumstances, American industry must be given the speediest, most reliable communication lines possible.

Your company has taken every possible step to provide this medium, convinced that its projected routes to Alaska and the

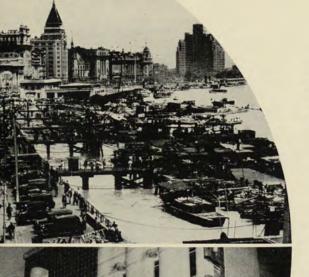
Structures of the most modern design reflect the new-world consciousness of the Far East. At right, an Oriental pagoda in Manila and, below, the new buildings which comprise the heart of Tokyo show the old and new of Asia. (USA Signal Corps and Acme Roto Service Photos.)

Orient are practical from an operations standpoint and that economically our greatest opportunities outside our own country lie in this direction. The favorable report of the examiners of the Civil Aeronautics Board gives rise to the hope that the Board will authorize your company to conduct such service.

Northwest Airlines has plotted its course at home with a view to strengthening its position in its domestic sphere. It has asked the Civil Aeronautics Board for routes into the great cities of Buffalo, Cleveland, Pittsburgh and Washington in the eastern portion of the country and it seeks routes in the mid-west which would supplement service to those now certificated.

Northwest Airlines' program for domestic expansion has been primarily designed to properly serve the states in the Northwest area. It has confined such program to those routes which will improve its service and contribute to the proper development of the territory in which it has pioneered. It does not seek routes which are not primarily and directly related to the development of this territory, the interests of which have always been so closely intertwined with those of the company. The states served by Northwest constitute an empire of great industrial, agricultural and recreational importance. With its vast resources and with the great distances separating its principal urban centers reduced by a sound air transportation system supplementing the other transportation facilities in the area, prospects for rapid development and an expanding economy would appear to excel those of any other area in the country.

In the proceeding before the Civil Aeronautics Board involving service in the North Central States area, Northwest offered an



Shanghai's busy waterfront is framed by a ring of modern buildings, with the black tower of the Cathay hotel rising in the center. Symbolic of Manila's progressiveness is the Times theater, below, undamaged by the war. (International News Photos.)

exhibit showing a tentative pattern of the minimum service to be rendered by Northwest on its present and proposed domestic system in the first postwar years. This service pattern would provide for a total of 81,000 miles to be flown daily with schedule frequencies greatly increased at all points on the system.

Such a service pattern will require a minimum fleet of 18 four-engined aircraft and 23 two-engined aircraft if airport conditions permit operation of the Green Bay, Wausau, Eau Claire route already certificated and the Civil Aeronautics Board certificates the various other supplementary and auxiliary routes requested.

Inasmuch as it will be a year or two before any of the several modern larger four-engine airplanes will be available, it is necessary that we acquire a minimum fleet of the only four-engine type plane immediately available to us and which we consider sufficiently proven to operate on our present or proposed routes. The policy of the Army is not clarified as to the release of four-engine aircraft. We have contracted with Douglas Aircraft Company for delivery in January and February, 1946, of the first of the fleet of DC-4, 44-passenger airplanes which it has been necessary for us to acquire. We have taken from the Army on lease one C-54 plane for training our flight crews and ground personnel, and it is expected that this will make possible inauguration of daily coast-to-coast schedules with four-engine equipment immediately upon delivery of the planes from the Douglas factory. Planes of this type purchased from the factory will cost approximately \$430,000 each, fully equipped.

It is contemplated four-engine equipment will gradually replace two-engine planes, except on those runs where present DC-3 or more modern equipment will be more practical. The greater speed of the DC-4 aircraft will enable us to reduce flying time by approximately five hours on coast-to-coast flights.

While we have committed ourselves to the use of the DC-4 in the immediate future, it is inevitable that this plane, the first of the larger planes to become available, will in time be replaced by still larger aircraft. Our engineers are conducting extensive studies of such planes as the Douglas DC-6, Douglas DC-7, Lockheed Constitution and the Boeing Stratocruiser, all four-engine planes seating from 50 to more than 100 passengers and having ranges of several thousand miles. The swiftness with which aircraft refinements are being produced makes it desirable that we withhold decision on these planes until the picture of our needs is more clearly defined.

The acquisition of larger planes undoubtedly will necessitate changes or additions to our hangar facilities. Your company is now studying plans for construction of a new-type hangar at Idlewild Airport in New York which will be susceptible to expansion with minimum cost and inconvenience. Hangar space at Seattle, Chicago, and the Twin Cities, and perhaps at several other points, will have to be increased, through rent or purchase of additional facilities.

The magnitude of the Idlewild project probably will prevent the completion of the first stage of development before 1948, although the airlines will begin operations there next year. There is hope for an early decision on a site for a new, modern airport at Detroit. A new airline terminal building, embodying the latest theories of design, is being constructed at Chicago, the cost of which is being defrayed by the eight airlines serving Chicago. This will serve as a temporary terminal until a new commercial airport is built. Modernization of the Duluth airport has been completed, and a new airport, serving both Janesville and Beloit, Wis., on one of Northwest's proposed routes, has recently been constructed. Improvements have been made at several other airports on the company's system.

The growth of many cities on its routes, the presence of new industries now seeking new markets, the general consciousness of the advantages of air transportation by all classes of the population and our invaluable experience gained in the war years

are factors which portend a promising future for our company. The events of these last years have ushered in a period of opportunity for the airline industry which may properly be viewed

with optimism.

While we must take into account the many favorable factors, we must also guard against illusions and recognize that the industry is now at a critical stage and every effort must be taken to avoid the pitfalls which have beset other forms of transportation. The surge of popular enthusiasm for aviation has brought about a zeal for aviation legislation by many state and local legislative bodies, the inevitable result of which will be to subject aviation to multiple and conflicting laws which will seriously fetter and impede its progress. That aviation is national in scope and character and, like radio broadcasting and navigable waters, transcends imaginary boundary lines on land or water, was partially recognized by Congress when it adopted the Civil Aeronautics Act in 1938. Even the Supreme Court of the United States has called for Federal action by the Congress to prevent multiple and burdensome taxation of the promising new air transportation industry. (Minnesota vs. Northwest Airlines, 322U.S.292). The States themselves have co-operated with the Civil Aeronautics Board in making a report which is the basis of a bill now in Congress to alleviate the multiple tax aspect. Although many members of Congress are cognizant of the vital importance of uniform and national regulation of the air transportation industry, for reasons of national defense alone if for no other, there is an everpresent reluctance to take the necessary complete pre-emptive action which, under our dual system of government, might appear to impinge too greatly on local prerogatives or state rights.

A strong national policy with respect to our national and international air transportation system must be preserved at all costs. It has been established by the Congress and ably effectuated by the Civil Aeronautics Board. They must be supported and encouraged to constantly maintain and strengthen such policy and to continue the prevention and elimination of needless, artificial barriers. If properly fortified by public opinion and popular support, such a policy will cause air transportation to be a major force in the advancement of our nation's welfare, and your company is constantly improving itself to prepare for its participation

in the bright future of air transportation.

One of several four-engine airplanes being studied by Northwest Airlines engineers for possible use on international and limited stop domestic flights is the Boeing Stratocruiser. Pictures at the right, taken in a mockup of the plane, show various features of the huge airliner.

Line-of-sight instruments, a new range of unobstructed vision and a central control stand for engine, trim tab and miscellaneous controls are features of the spacious 573-cubic-foot control cabin.

Passengers enjoy a chat in the plane's lounge on the lower deck, connected with the main passenger sections by a circular stairway.

The commodious main cabin, with double rows of seats, provides comfortable accommodations for passengers. Round portholes offer a panoramic view for the traveler.

Overnight transcontinental service will include sleeping accommodations as shown in the lower picture. A total of 28 berths, upper and lower, can be made up on the main deck of the plane.

An artist's drawing gives a preview of one plane in the future fleet of Northwest Airlines four-engine DC-4's. The first of these 44-passenger planes have been purchased for delivery early in 1946.











PRESENT AND PROPOSED ROUTES

THE COMPANY HOLDS certificates of public convenience and necessity from the CAB, which authorize it to engage in air transportation with respect to persons, property and mail as follows:

with respect to persons, property and mail as follows:

1. Between the terminal point Chicago, Ill., the intermediate point Milwaukee, Wis., and (a) beyond Milwaukee, Wis., the intermediate points Madison, Wis., Rochester, Minn., Minneapolis, Minn., St. Paul, Minn., Fargo, N. D., and (b) beyond Milwaukee, Wis., the intermediate points Green Bay, Wis., Wausau, Wis., Eau Claire, Wis., Minneapolis, Minn., St. Paul, Minn., Fargo, N. D., and (c) beyond Fargo, N. D., the intermediate point Grand Forks, N. D., and the terminal point Winnipeg, Canada, and (d) beyond Fargo, N. D., the intermediate points Jamestown, N. D., Bismarck-Mandan, N. D., Miles City, Mont., Billings, Mont., Great Falls, Mont. (as a temporary intermediate points Jamestown, N. D., Bismarck-Mandan, N. D., Miles City, Mont., Billings, Mont., Great Falls, Mont. (as a temporary intermediate point Jamestown, N. D., Wissoula, except for local non-priority passengers between Great Falls and Billings, Helena or Butte), Butte, Mont., Helena, Mont., Missoula, Mont., Spokane, Wash., and (1) beyond Spokane, Wash., the intermediate points Wenatchee, Wash., Yakima, Wash., and the terminal point Seattle, Wash., and (2) beyond Spokane, Wash., the intermediate point Yakima, Wash., and (2) beyond Spokane, Wash., the intermediate point Yakima, Wash., and the terminal point Portland, Ore.: provided that, (a) the service to and from Green Bay, Wausau, and Eau Claire, Wis., is not to be inaugurated until the Board notifies the Company that the national defense no longer requires that the same be delayed.

2. Between the terminal point Minneapolis-St. Paul, Minn., and the

2. Between the terminal point Minneapolis-St. Paul, Minn., and the terminal point Duluth, Minn.-Superior, Wis.

3. Between the terminal points Minneapolis-St. Paul, Minn., the intermediate points Milwaukee, Wis., and Detroit, Mich., and the terminal point New York, N. Y., provided that service east of Milwaukee, Wis., shall be rendered only on flights originating at Minneapolis-St. Paul, Minn., or a point west thereof and terminating at New York, N. Y., or originating at New York, N. Y., and terminating at Minneapolis-St. Paul, Minn., or a point west thereof.

THE COMPANY HAS applied to the Civil Aeronautics Board for a consolidation of routes 3 and 69 and to have the restrictions removed.

Service to and from Green Bay, Wausau, and Eau Claire, Wis., has not yet been inaugurated.

- has not yet been inaugurated.

 The Company has filed with the CAB the following applications for certificates of public convenience and necessity for the transportation by air of persons, property and mail:

 (1) From Chicago, Ill. to Minneapolis-St. Paul, Minn., via Rockford, Ill., Beloit, Wis., Dubuque, Iowa, and La Crosse, Wis.

 (2) Between Minneapolis-St. Paul, Minn., and Billings, Mont., the additional intermediate stop Aberdeen, S. D.

 (3) From Seattle, Wash., to Honolulu, Hawaii, and return; from Seattle, Wash., to Honolulu, Hawaii, in Portland, Ore., and return, and/or from Portland, Ore., to Honolulu, Hawaii, and return, and/or from Portland, Ore., to Honolulu, Hawaii, via Seattle, Wash., and return.
- (4) Between the intermediate points Fargo, N. D., and the intermediate point Spokane, Wash., the following points: Grand Forks, Devils Lake, Minot and Williston, N. D.; Glasgow, Havre, Great Falls, Cut Bank-Shelby, Kalispell and Bozeman, Mont.
- Cut Bank-Shelby, Kalispell and Bozeman, Mont.

 (5) Between the terminal points Seattle, Wash., and Victoria, B. C., via the intermediate point Port Angeles, Wash., and/or between the terminal points Seattle, Wash., and Port Angeles, Wash.

 (6) Beyond Spokane, Wash., the intermediate points Wenatchee, Wash., Yakima, Wash., Seattle, Wash., Olympia, Wash., and the terminal point Portland, Ore., and (2) beyond Spokane, Wash., the intermediate points Wenatchee, Wash., Yakima, Wash., Portland, Ore., Olympia, Wash., and the terminal point Seattle, Wash.

 (7) Between the terminal point Detroit, Mich., via the intermediate points Cleveland, Ohio, and Pittsburgh, Pa., and the terminal point Washington, D. C.

 (8) Between the terminal points New York, N. Y., and Anchorage,

(8) Between the terminal points New York, N. Y., and Anchorage, Alaska, via Detroit, Mich., Minneapolis-St. Paul, Minn., and such

additional or other intermediate points as the Board may find required

(9) Between the terminal points New York, N. Y., and Anchorage, Alaska, via Detroit, Mich., Minneapolis-St. Paul, Minn., Seattle, Wash., and such additional or other intermediate points as the Board may find required to be served.

(10) Between the terminal points Washington, D. C., and Anchorage, Alaska, via the intermediate points Chicago, Ill., Minneapolis-St. Paul, Minn., and such additional or other intermediate points as the Board may find required to be served.

(11) Between the terminal points Washington, D. C., and Anchorage, Alaska, via the intermediate points Chicago, Ill., Minneapolis-St. Paul, Minn., and Seattle. Wash., and such additional or other intermediate points as the Board may find required to be served.

(12) Between the terminal points Seattle, Wash., and Anchorage, Alaska, and such additional intermediate points as the Board may find required to be served.

(13) A route or routes to and from the United States of America and return via the following points:

The sets of terminal or coterminal points:

- (1) New York, N. Y., Detroit, Mich., and Minneapolis-St. Paul, Minn.
- New York, N. Y., Detroit, Mich., Minneapolis-St. Paul, Minn. and Seattle, Wash.
- (3) Washington, D. C., Chicago, Ill., and Minneapolis-St. Paul,
- (4) Washington, D. C., Chicago, Ill., Minneapolis-St. Paul, Minn., and Seattle, Wash.

(5) Seattle, Wash,

- (b) Intermediate points in Alaska such as Anchorage, Kodiak, Dutch Harbor, the Aleutian Islands, or Nome, or any of them or any others as well as points in Canada which the Board may find required.
- (c) Intermediate points in Japan and China such as Paramushiro, Kurile Islands; Tokyo, Japan, and beyond Tokyo to Dairen, Manchuria (and/or a point or points in the vicinity of Mukden, Tientsin, or Peiping, China), and beyond Tokyo, to Shanghai, and Canton, China (and/or a point or points in the vicinity of Canton, including Hong Kong and Macao, China).
- (d) And beyond Canton, China (or Hong Kong or Macao), to the terminal point of Manila, Philippine Islands, with the privilege of operating non-stop to Manila, Philippine Islands, from Tokyo, Japan or Shanghai, China.
- (e) And beyond the terminal point of Manila, Philippine Islands, to the terminal point of Singapore, Malay States.
- (f) And beyond Canton, China (or Hong Kong or Macao), to the terminal point Calcutta, India, via Hanoi, French Indo China, and Mandalay, Burma.
- (g) And beyond Canton, China (or Hong Kong or Macao), to the terminal point Singapore, Malay States, via Hanoi and Saigon, French Indo China.

Also authorization to operate service omitting any of the above-mentioned points and including one or more other intermediate points when technical conditions permit, and also to include a route across Siberia from Alaska, when conditions permit with the following ports of call or any of them in Siberia: Markovo, Okhotsk, Yakutsk, Khabaravsk, Petropavlovsk and Vladivostok, and others that the Board may find required.

- (14) Between the terminal points Butte, Mont., and Portland, Ore., via either Pendleton, Ore., or La Grande, Ore., as intermediate points.
- (15) Between the terminal points Milwaukee, Wis., and S. Wash., via the intermediate points, Green Bay, Wis., Duluth, Fargo, N. D., Minot, N. D., and Great Falls, Mont. and Spokane, Juluth, Minn.,
- (16) Between the terminal points Detroit, Mich., and New York, Y., via the intermediate point Cleveland, Ohio.
- (17) Between the terminal points, Detroit, Mich., and New York, N. Y., via the intermediate point Buffalo, N. Y.

FINANCIAL R E P O R T

OR THE FISCAL YEAR ended June 30, 1945, your company made a net profit of \$727,714 after deduction of all taxes and reserves. This profit is an increase of 41% over that of the previous fiscal year and amounts to \$1.35 for each of the 539,070 shares of the increased common capital stock outstanding at the end of the year. At the close of the year the company's surplus was \$2,024,210.

On the following pages are shown a report from Ernst & Ernst, Certified Public Accountants, covering statements of profit and loss, surplus and balance sheet. The comparative statement of profit and loss shows that our operating revenues increased 57% over the previous fiscal year as a result of increased transportation of passengers, mail and express.

Passenger revenue of \$7,972,423 is 88% above last year and is the largest increase in operating revenues. It results from flying more airplanes and more miles in commercial service than at any time in our history and with 86% of available seats filled.

Mail revenue of \$1,616,886 was 14% above the previous year although the average mail load carried was lower.

Express and miscellaneous operating revenues increased \$119,-472.

All operating revenues exclusive of contract fees amounted to \$1.04 per revenue mile.

Contract fees decreased \$120,631.

Total operating expenses were up 77%, also as a result of flying 75% more miles than in the previous year, and the cost per mile remained practically unchanged from the previous year. As a result of economies and of increased mileage, the cost per mile of our operations in July and August, 1945, has dropped about 20% under the cost for the fiscal year just closed, and it is expected that substantial savings will be continued in the succeeding months.

As noted elsewhere herein, the Company's war contracts have been substantially terminated since June 30, 1945. While this will, of course, eliminate earnings on such contracts, it is believed that this will be more than offset by increases from commercial operations.

A cash dividend of 50 cents per share payable September 1, 1944, was declared during the past fiscal year, and on August 7, 1945, a similar dividend was declared, payable September 1, 1945.

During the year the company issued rights to its stockholders as of March 21, 1945, covering 178,190 common shares at \$23 per share. All of these rights were exercised or sold by stockholders except rights representing about 3,500 shares, and these shares were sold to underwriters. Also during the year the president purchased 4,500 shares under option agreement rights, so that a total increase of 182,690 shares resulted. These sales, after deducting expenses, increased our cash by about \$4,000,000, and the net proceeds were invested in U. S. Government securities pending their investment in airplanes and other airline equipment.

As a result of the company's operation during the year and the cash realized from this financing, the net current assets of the company increased to an amount of \$6,546,229 as of the close

of the fiscal year.

At a meeting held October 2, 1945, your Board of Directors voted to recommend to shareholders that the authorized common stock of the company (its only class of stock) be increased from the present total of 600,000 shares to a new total of 1,000,000 shares. This recommendation will be presented to the shareholders at the adjourned annual meeting scheduled for November 26, 1945. This recommendation is made because very little of the 600,000 shares now authorized has not already been issued or reserved for options, and your management believes that additional authorized stock should be available for issue if conditions so require.

Balance Sheet

Northwest Airlines, Inc.

JUNE 30, 1945

ASSETS

A	(33513			
CURRENT ASSETS Cash (including special deposit of \$25 States Government contracts) United States Government securities—	at cost plus o	accrued intere	 st	\$ 2,204,939 5,003,484
Trade accounts receivable, including accounts of \$500,748	under United	States Govern	 n-	964,095
Less advances				
Less reserve			\$ 2,222,280 600,000	1,622,280
Inventories—at lower of cost or market— Materials and supplies				196,541
	TOTAL CUI	RRENT ASSET	S	\$ 9,991,339
Income taxes recoverable upon utilization cost adjustments. Sundry accounts, deposits, etc., less researched allocated to contracts, less reserve of the property, PLANT, AND EQUIPMENT On the basis of cost to the Company of its predecessors—Note B:	serve of \$6,00 including of f \$1;000	10dvances to k	\$ 112,000 116,818 be 11,925	240,743
Operating: Land	2,553,013 271,757 365,803 1,424,455	\$1,654,775 26,203 96,463 552,285 120,709	\$ 14,374 898,238 245,554 269,340 872,170 196,591	
Non-operating:	\$4,946,702	\$2,450,435	\$ 2,496,267	
Buildings on land not owned	174,176	152,933	21,243	
	\$5,120,878	\$2,603,368	\$ 2,517,510	2,517,510
INTANGIBLE Cost of United States Government air i	mail route			48,737
DEFERRED CHARGES Unexpired insurance				148,163
			7	\$12,946,492

LIABILITIES

CURRENT LIABILITIES		
Accounts payable\$	888,463	
Salaries, wages, and vacation compensation	1,115,941	
Pay roll deductions for employees' income tax	295,216	
Pay roll deductions for employees' war bonds	242,961	
Pay roll taxes	276,331	
Air travel contract deposits.	180,818	\$2,999,730
Accrued taxes		109,880
Federal and state taxes on income—estimated:		
For the year ended June 30, 1945\$	300,000	
For prior years	35,500	335,500
TOTAL CURRENT LIABILITIES	\$3,445,110	
DEFERRED INCOME—Unused transportation		164,509
RESERVE—For war and postwar adjustments		50,000
CAPITAL STOCK AND SURPLUS		
Common stock—no par value:		
Authorized 600,000 shares; unissued 60,930 shares of which 20,000 shares are reserved for options (10,000 shares at \$14 per share, 4,800 shares at \$18.50 per share, and 5,200 shares, the price and allocation of which are to be fixed by Board of Directors), outstanding 539,070 shares at aggregate stated		
capital amount\$	7,262,663	
Earned surplus.	2,024,210	\$9,286,873
		\$12,946,492

COMPARATIVE STATEMENT OF PROFIT AND LOSS

Northwest Airlines, Inc.

YEARS ENDED JUNE 30, 1945 AND 1944

Operating Personnes		1945		1944
Operating Revenues: Transportation: Passengers Mail Express, freight, etc. Repair and service income, rents, etc. Fees from cost-plus-fixed-fee contracts.	\$	7,972,423 1,616,886 458,963 4,584 745,017		\$4,234,565 1,413,203 296,708 47,367 865,648
TOTAL OPERATING REVENUES	\$	10,797,873		\$6,857,491
Operating expenses	\$	9,672,181 198,682		\$5,476,858 213,512
	\$	9,870,863		\$5,690,370
Other income and credits	\$	927,010 119,169		\$1,167,121 16,640
Other deductions		1,046,179 17,170		\$1,183,761 68,987
PROFIT BEFORE TAXES THEREON	\$	1,029,009		\$1,114,774
Taxes on income—estimated: Provision for the year: Federal normal income taxes and surtax. State income taxes. Adjustment of recoverable taxes. Overprovision for prior years.		278,000 22,000 56,000 4,705)		\$ 527,000 33,000 58,000) 5,115)
	\$	351,295		\$ 496,885
Provision for war and postwar adjustments	\$	677,714		\$ 617,889 100,000
Reduction in reserve for war and postwar adjustments	-	30,000)		
NET PROFIT	\$=	727,714	=	\$ 517,889
Provision for depreciation and amortization included in operating expenses	\$	556,393		\$ 301,533

NOTES TO FINANCIAL STATEMENTS

Northwest Airlines, Inc.

JUNE 30, 1945

Note A—Since February, 1942, the Company has been engaged in substantial operations under cost-plus-fixed-fee contracts for the United States Army. Total costs incurred in these operations to June 30, 1945, have amounted to approximately \$63,350,000, of which amount approximately \$10,810,000 represents overhead expenses allocated by the Company to cost-plus-fixed-fee contracts. While the Company believes that its allocations of such costs have been fairly determined, they are subject to audit (which is now in progress) and approval by the Army Contracting officer and the Controller General's office. In recognition of the probability of differences of opinion as to interpretation of the contracts and as to the allocation of expenses between the Government contracts and the Company's commercial operations, it has been deemed advisable to provide a reserve for possible unallowable costs. Since the inception of the contracts, such provisions have been made in the aggregate amount of \$1,012,193, and the charges thereto in respect of specific items charged off have amounted to \$412,193, leaving a balance of \$600,000 in the reserve at June 30, 1945.

While it has been deemed advisable to make these provisions, it is believed that, upon review of the Company's performance under the contracts and a study of the effect of the cost allocations upon the commercial operations of the Company, it is not unreasonable to expect that in final settlement of the contracts a substantial portion of the cost charged off or reserved for may be recovered.

Attention is directed to the comments in the accompanying letter of the President of the Company relative to the termination since June 30, 1945, of substantially all of the Company's war contracts which since 1942 have constituted an important phase of the Company's operations.

Note B—As of June 30, 1945, the Company transferred all direct aircraft parts and materials from the classification of inventory to property, plant and equipment in accordance with the accounting regulations prescribed by the Civil Aeronautics Board.

In pursuance thereof, an amount of \$346,193 has been transferred to aircraft and reserve equipment; and an amount of \$115,000, representing the reserve for inventory obsolescence provided on these items by charges to profit and loss in previous years, has been transferred to the related reserve for depreciation. An amount of \$31,163 has been charged to profit and loss during the current year to reduce the depreciated balance of the items transferred to the basis of similar items previously charged to property, plant, and equipment.

Note C—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. Inasmuch as the Company conducts this operation as a prime contractor for the War Department of the United States Government, it has proceeded according to written instructions from the War Department, in part, as follows:

"... it is determined to be in the best interests of the Government for your Company, and you are hereby authorized to resist civil actions against your Company under the Fair Labor Standards Act. . . In accordance with the decision of the Comptroller General, all amounts paid in satisfaction of final judgment against you 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 your war contracts. . . ."

In view of the above circumstances, the Company has made no provision in the accompanying financial statements for any portion of the amount involved in this litigation.

Note D—Profits of the Company include those from transactions which may be subject to the provisions of the Renegotiation Act of 1942, as amended, providing for the refund of any profits found, as a result of renegotiation, to be excessive. The Company has received clearance, without refund, for the fiscal years 1942, 1943, and 1944, and believes that the profits on such transactions for the current year will not be found excessive, and no provision for refunds has been reflected in the accompanying statements.

STATEMENT OF SURPLUS

Northwest Airlines, Inc.

YEAR ENDED JUNE 30, 1945

BALANCE AT JUNE 30, 1945			
Dividends paid (in cash) 50c per share	217,414		
Deduct:	\$2,241,624		
Balance at July 1, 1944	\$1,513,910 727,714		

ACCOUNTANTS' REPORT

BOARD OF DIRECTORS

Northwest Airline, Inc. St. Paul, Minnesota

We have examined the balance sheet of NORTHWEST AIRLINES, INC., as of June 30, 1945, 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 accounting 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 correspondence the amounts receivable from the United States Government for unreimbursed costs under cost-plus-fixed-fee contracts as of June 30, 1945, as to which we satisfied ourselves by other auditing procedures.

There are still a number of unsettled matters resulting from wartime conditions which may affect the accompanying financial statements. A substantial amount of the costs under cost-plus-fixed-fee contracts have not been finally audited and accepted by the Army and the General Accounting office and may include unallowable items; the fees accrued in 1945 may be subject to renegotiation; and the related income tax questions are still unsettled, all of which may not finally be determined until after the contracts are completed. These questions have been considered and dealt with in the statements on a basis believed to be reasonable in the light of present information and conditions.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus, together with the notes thereto, present, as fairly as can now be stated, the position of NORTHWEST AIRLINES, INC., at June 30, 1945, 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

October 17, 1945 St. Paul, Minnesota

A 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	762,208	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
1st 6 mos., 1945	792,602	4,144,926	216,921	85,897,240	2,589,923,566	5,278,861

