Annual Report 1952

BOEING

ON THE COVER — The YB-52, huge eight-jet bomber, goes aloft on a test flight. Revolutionary in performance, the B-52 is another forward step in Boeing aircraft progress.

ANNUAL REPORT · 1952

Report to Stockholders • Year Ended December 31, 1952

TABLE OF CONTENTS

Contents of this report comply with national security requirements concerning publication of military information

BOEING AIRPLANE COMPANY

HIGHLIGHTS

OPERATING SUMMARY

	1952	1951
Sales	$739,010,214	$337,300,566
Earnings before federal and state taxes on income	$49,784,449	$19,840,751
Federal and state taxes on income	$35,700,000	$12,700,000
Net earnings	$14,084,449	$7,140,751
Percentage of net earnings to sales	1.91%	2.12%
Number of shares outstanding	1,623,681	1,082,454
Net earnings per share	$8.67	$4.40*
Stockholders' equity per share	$41.60	$35.59*
Cash dividends paid	$4,325,560	$3,247,074
Backlog	$1,648,000,000	$1,355,000,000
Average number of employees	54,677	47,699

*Adjusted on an equivalent basis to the 1,623,681 shares outstanding as of December 31, 1952.

THE YEAR IN BRIEF

Sales and income were at an all-time high in terms of dollar value. Production program was swinging into full stride after two-year buildup.

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B-52 eight-jet bomber was successfully flight tested and is being put into production. This plane further established Boeing's leading position in the large jet airplane field.

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B-47 Stratojet bomber production reached one per working day. Production time for 300th plane was brought down to 1.4 man-hours per pound of airframe as compared with 1.7 man-hours per pound for 300th B-29 built in World War II.

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Prototype jet transport project was undertaken. The plane, to be flying in 1954, will have basic design adaptable to military tanker-cargo-transport and commercial airline transport.

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Activity was accelerated on pilotless aircraft development.

KC-97 transport-tanker production increased according to schedule. Boeing Flying Boom aerial refueling was successfully used by Air Force in regular operations, including transpacific jet fighter flights.

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New facilities expenditures of $6,552,000 were made during year by the company. Boeing money authorized for new facilities over past three years has totaled more than $22,000,000.

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"Guns and butter" problems continued to show effect in short supply of skilled and technical man-power, and slow delivery of materials and parts. Nonetheless, with minor exceptions monthly production schedules were met.

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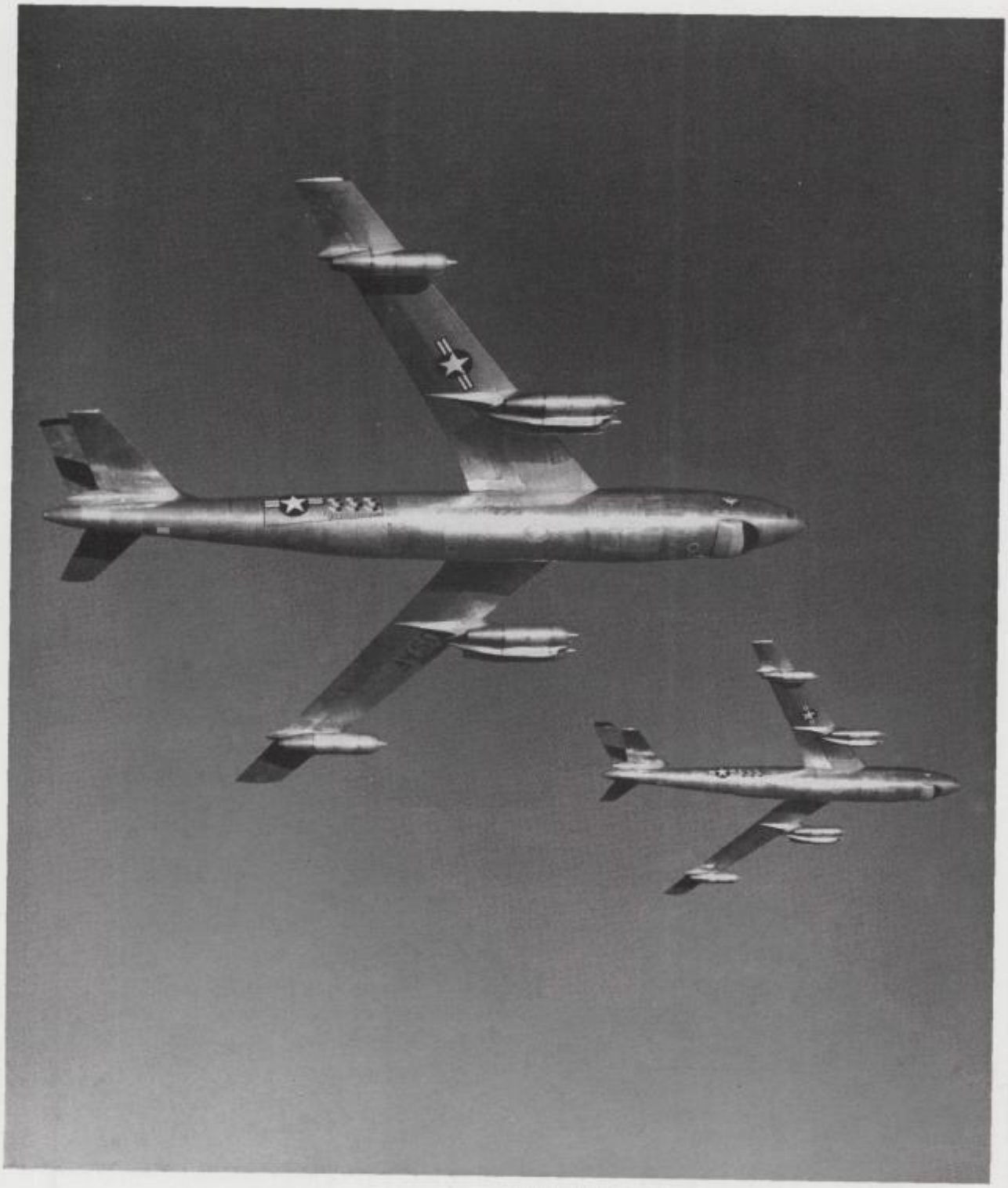
President Allen cites need for planned continuity of production if national security is to be maintained. Only in this way is it possible to hold together the complex organization of skills and technical knowledge necessary to create modern defense equipment.



Boeing B-47 Stratojets, now built by three companies, are being used to form wings of the Strategic Air Command.

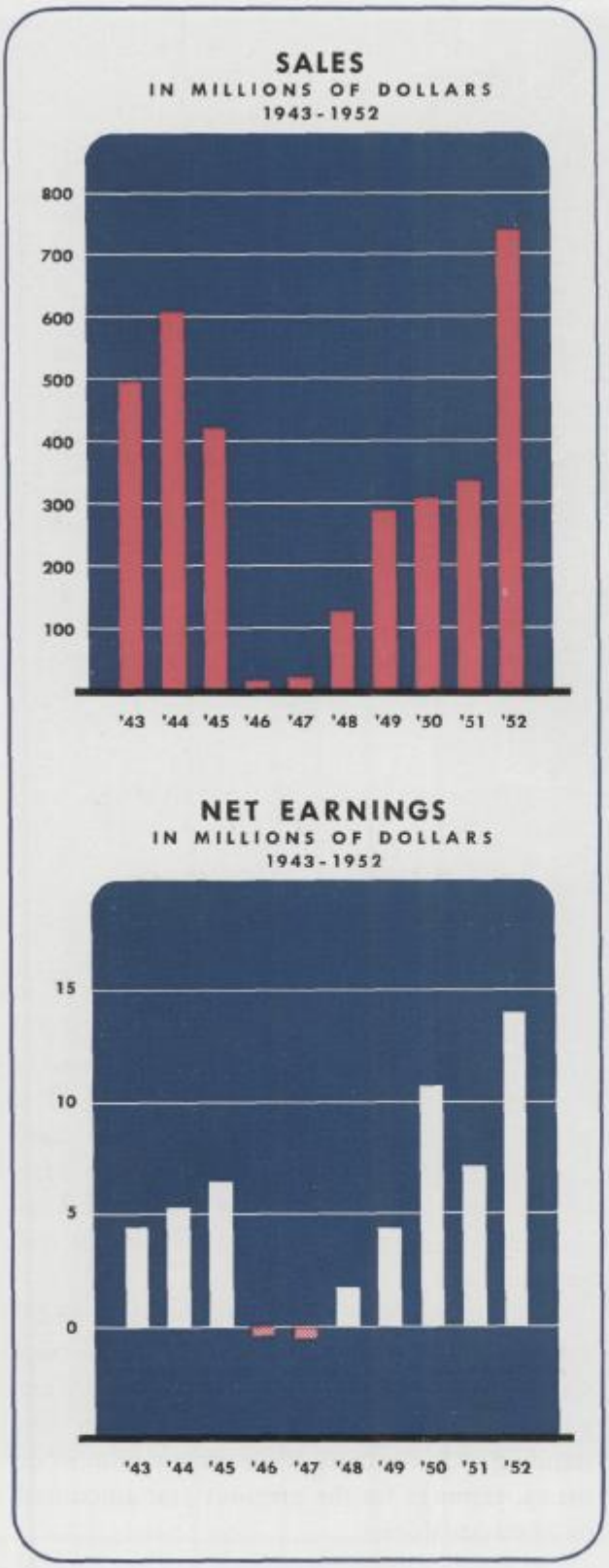
YOUR COMPANY · 1952

To the stockholder:

In dollar volume of business and earnings, the year 1952 was the largest in the Boeing Airplane Company's 36-year history. It was also an important year from the standpoint of developments which should lead to substantial production in the future. The new B-52 eight-jet Stratofortress was successfully test flown and established as the Air Force's new heavy bomber, major plant expansion was undertaken, and construction of a prototype jet transport was begun. Production of the six-jet B-47 Stratojet bomber was greatly increased and KC-97 military transport-tankers were delivered in substantial quantity.

Sales for the year ending December 31, 1952 totaled $739,010,214, an increase of $401,709,648 over sales of the previous year. Net earnings after taxes were $14,084,449, compared with $7,140,751 for the previous year. No provision has been made for a possible refund of 1952 profits through renegotiation, since it is your company's opinion that excessive profits were not realized during the year. We are unable to give assurance, however, that a refund will not be required.

The net earnings were equivalent to $8.67 per share for the 1,623,681 shares of stock outstanding. This compares with $6.60 per share the previous year for the 1,082,454 shares then outstanding. (On the basis of the present number of shares, earnings for the previous year amounted to $4.40 per share.)



Financially, your company is in sound condition. The bank indebtedness which reached a high of $32,190,000 in June, 1952, has been paid off. However, it is possible that some bank borrowings in 1953 will be required. Net worth increased $9,758,889 in the past year, now amounting to $67,552,946. Working capital was increased by only $4,785,887, however, due to the substantial amount invested in facilities and equipment. As far as is possible we are endeavoring to avoid investments in capital facilities which are not eligible for government certificates of necessity permitting accelerated amortization.

Cash and Stock Dividends

Two cash dividends totaling $4,325,560 were paid during the year. A stock dividend of one share for each two held was declared following stockholder approval of an increase in the number of authorized shares from 1,250,000 to 2,500,000. The stock dividend increased the number of shares outstanding from 1,082,454 to 1,623,681.

Backlog Remains High

The backlog of unfilled orders at the end of the year totaled approximately $1,648,000,000, an increase of 21 per cent over the figure at the end of the previous year. This backlog is made up almost entirely of military orders.

In addition to the backlog cited above, your company has letter contracts from the Air Force authorizing work on which the price has not yet been negotiated. While these letter contracts will result in substantial business, only the amounts which they authorize the company to spend at this time have been included in unfilled orders.

The principal products of current production, namely the B-47 and KC-97, are covered by

fixed-price "incentive-type" contracts; the target cost and profit are set after a portion of the contract is performed, and the profit is increased or reduced depending on whether actual costs are below or above the target cost. Early-stage production and development projects are under cost-plus-fixed-fee contracts because of the many unknowns and changes in this kind of work. The B-52 and guided missiles are in this category.

Based on present schedules, sales volume in 1953 should somewhat exceed that of the past year.

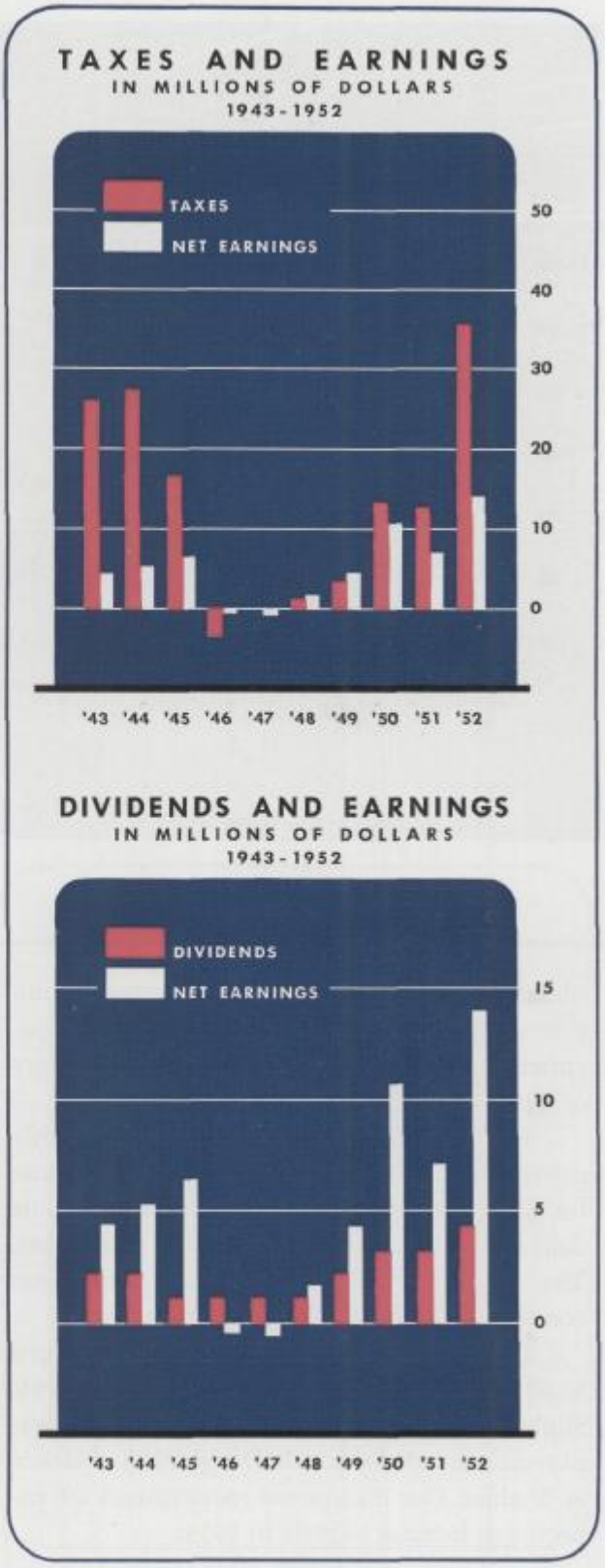
Schedule Problems Met

The tempo of production increased at both the Wichita and Seattle-Renton plants during 1952, and more planes were delivered to the Air Force this year than in any year since 1945. In terms of pounds of airframe weight delivered, the year's production was nearly four times that of the previous year.

Although the planned rate of increase in some monthly production schedules was revised downward by the government early in the year to conform to its "stretchout" program, there still were many problems to be overcome in meeting schedules.

Boeing, like other members of the defense industry, was in direct competition with civilian industry as well as other military contractors for skilled and technical employees. The man-power pinch was especially acute in engineering and in the specialized trades. Jig builders, toolmakers and machinists could be obtained only through nation-wide recruiting and by on-the-job training of semiskilled employees. Often these measures failed to produce adequate help. National advertising programs and recruiting were necessary to obtain engineers.

Long delivery dates were quoted by suppliers of materials. Delays were often encountered in



The B-47 program constituted the company's largest production effort during the year. The sweptwing Stratojet has been established as the medium bomber of the Air Force.

obtaining parts from firms that were experiencing a brisk demand for their civilian products concurrently with the acceleration of their military orders.

Despite the various obstacles, all monthly delivery schedules for B-47s were met, and those for KC-97s were met with the exception of some deliveries held over for late arrival of equipment. The latter airplanes, for the most part, were conditionally accepted by the government.

During the year total employment averaged 54,677 persons, as compared with 47,699 in 1951. Slightly more than half of the company's employees were at the Seattle Division, the balance at Wichita. Our man-power requirements are expected to increase slightly in 1953.

The company continued to operate the government-owned plants at Renton, Washington, and Wichita, Kansas, in addition to its own plant at Wichita and its two plants at Seattle, Washington.

B-47s, One-a-Day

Your company has taken the lead in the development of jet bombers and has acquired a great amount of experience in this field. We regard the strategic bomber as primary equipment for the Air Force because of its importance as a war deterrent and as a weapon necessary to negotiate the distances that would be involved in the event of global war. As a result of the com-

pany's continued efforts to advance jet bombers, its products have been established as the medium bomber and the next heavy bomber of the Strategic Air Command. These two types of planes account for a major part of the current backlog of orders.

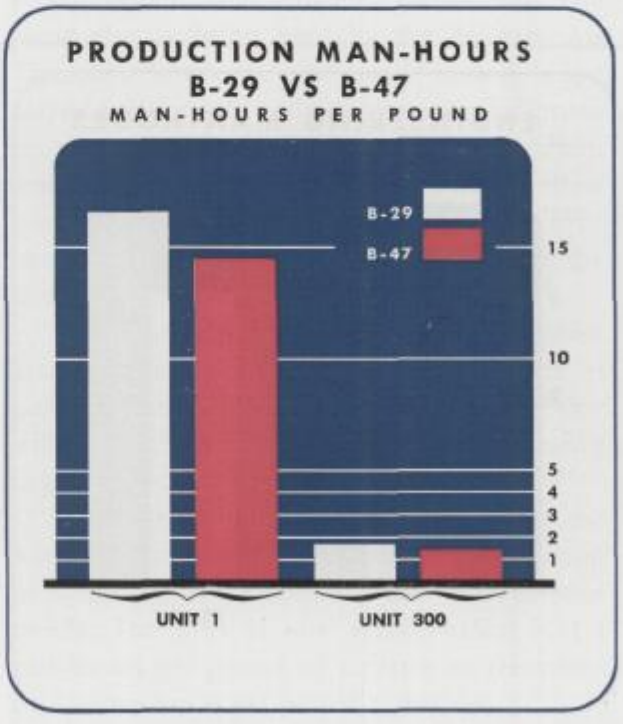
The B-47 Stratojet medium bomber constituted the company's largest production effort during 1952. Former Undersecretary of the Air Force Roswell Gilpatric said, "I consider the most notable achievement of the Boeing company the design, development and production of the B-47." The scope of the production program can be seen from an Air Force announcement last October that more than 300 of these planes already had been built, and that they were coming off the Wichita assembly line at the rate of more than one per working day. The first production model had come out of the factory less than two years before.

The first 300 B-47s were turned out with 5,500,000 less direct labor man-hours than would have been required under the normal "improvement curve," which makes allowance for gains expected as production rates increase and personnel acquire familiarity with repetitive jobs.

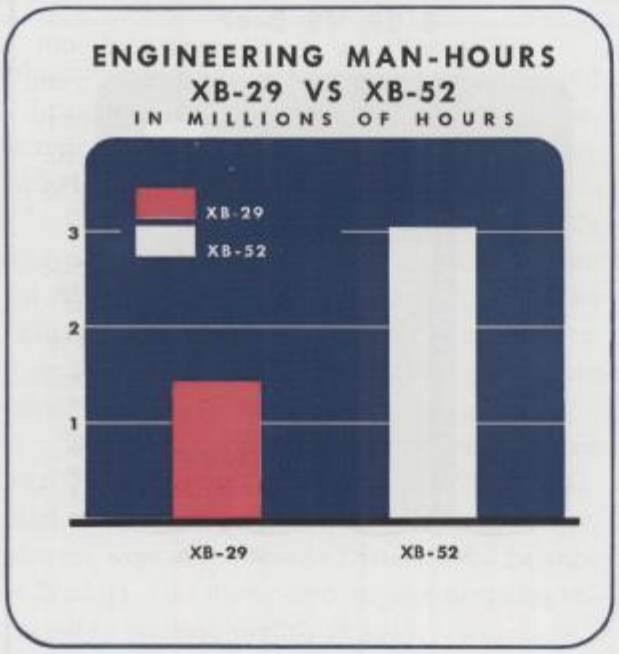
Despite the advanced design of the B-47 and the increased degree of precision required in the work, it has been possible to hold the number of production man-hours of work per pound of Boeing-built airframe to less than the number that went into the wartime B-29 at a similar production stage. The 300th B-47 required 1.4 man-hours of labor per pound, while the 300th B-29, built in the same plant, required 1.7 man-hours per pound. This result has been accomplished through efforts to simplify basic engineering design and by new manufacturing techniques, application of modern machine tools, closer coordination of engineering and manufacturing philosophies, and intensive training programs.

The Boeing B-47 also is in production at the Douglas-operated plant in Tulsa, Oklahoma, and at the Lockheed-operated plant in Marietta, Georgia. Your company supplied these two firms with design and production information, master gauges, master tooling and the necessary technical assistance and training. Major unjoined body and wing sections, parts and equipment for the first ten planes at Douglas and eight at Lockheed were supplied by Boeing Wichita to help get the new assembly lines flowing. The first planes from the two plants were successfully test flown in December.

A separate modification program was set up during the year to provide means of handling special change orders for B-47s already produced and for those so far along the assembly line that installation of new equipment would slow down production. A government-owned facility at Tucson, Arizona, was used for a major part of this



Comparison of B-52 to Boeing B-17 (foreground) and B-50 (background) shows size and advancement of new bomber. Only jet-powered bombers are now being built by Boeing.



program, with Boeing serving as the prime contractor and Grand Central Aircraft as subcontractor. Modification work was also performed by Boeing at Wichita and by the Douglas company at Tulsa.

The airplanes incorporating equipment installed in the modification program were being used to form two wings of the Strategic Air Command at the close of the year, while earlier production models were being used for combat-training operations.

A new Air Force letter contract extends B-47 Stratojet production at the Wichita Division to mid-1955. The size of this contract and previous orders cannot be revealed at this time for reasons of military security.

B-52 Production Under Way

In the big-bomber field the important and heartening event of the year was the selection of the B-52 Stratofortress by the Air Force as its production heavy bomber.

Excellent progress has been made on the B-52 project. This is especially apparent when account is taken of the size and advanced features of the Stratofortress and the many new systems incorporated in the plane. The first of two experimental models made its initial flight in April, to be joined later in the year by the second. The flight program has gone exceptionally well, and has demonstrated that the B-52 is a sound airplane with unusual performance capabilities.

The production program for the B-52 is getting well under way, with much of the tooling already completed and fabrication work begun. However, it will be some months before the first production planes make their appearance. The large jigs and tools filling the assembly bays at Plant II in Seattle are tangible evidence of the great amount of effort required to get this bomber into production. Because of the extremely high performance of this big bomber, greater precision of workmanship must be maintained both in tooling and production than for any previous airplane.

Your management believes the B-52 will be in demand for a substantial period of time, and our production planning is based upon this belief.

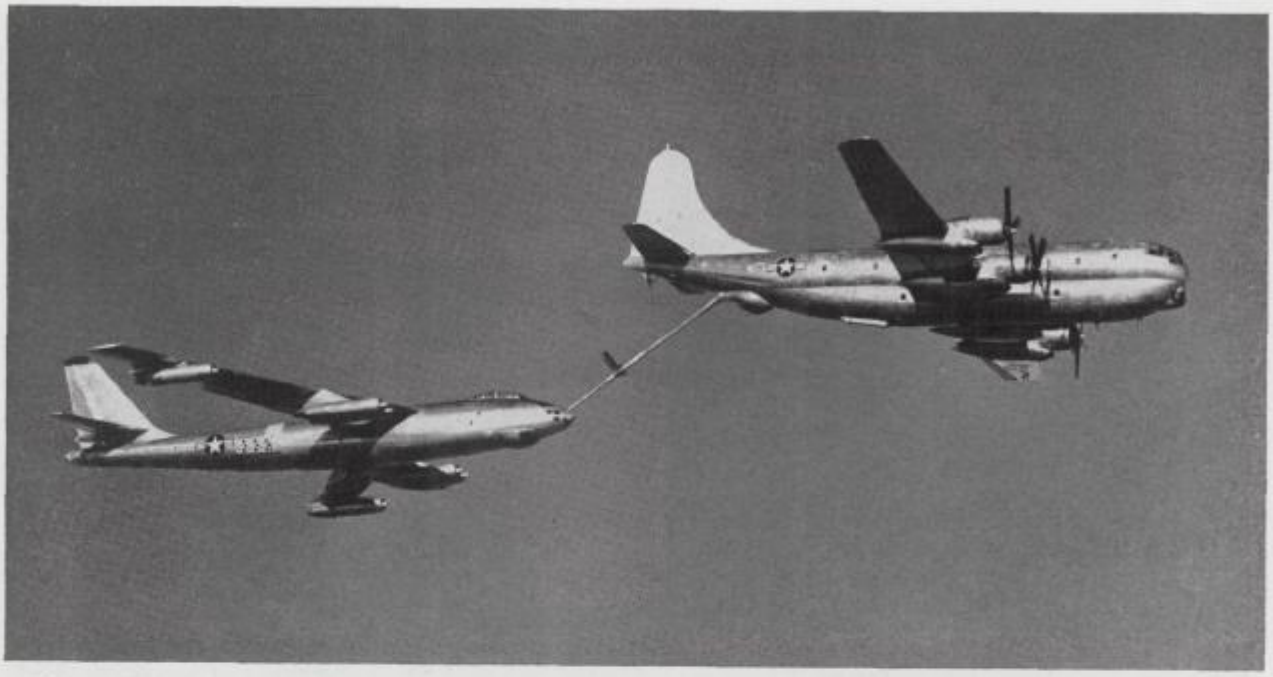
KC-97 Output Up

The main production work of the Seattle-Renton operation during the past year has been the KC-97 Stratofreighter program. This is a combination military transport and tanker for aerial refueling, convertible to either use in a few hours.

With the exception of a few converted B-29s, the KC-97-type airplane constitutes the Strategic Air Command's tanker force, using the Boeing Flying Boom aerial refueling mechanism. The plane also is being used by the Military Air Transport Service on world-wide routes. It has played a major role in flying the wounded home from across the Pacific, and in carrying cargo and personnel in the Pacific Airlift. It has likewise been heavily used in carrying high-priority supplies and personnel across the Atlantic for the European defense buildup.

The production rate of KC-97s was increased gradually during the year and will continue to build up until September of 1953, when the rate will level off. Additional orders are now being negotiated.

Increase in operating efficiency, plus the normal improvement with continued production of a model, is reflected in KC-97 man-hour trends. The work is now accomplished in 1.4 man-hours per pound of airframe as compared to 2.7 man-hours per pound a year ago.



A Boeing KC-97 refuels B-47 bomber by means of the Flying Boom. The KC-97-type planes today constitute the main tanker force of SAC, giving added range to jet aircraft.

Inboard wing sections of the KC-97 Stratofreighters move along the assembly lines at Boeing plant at Renton, Washington. Production was gradually increased during the year.

Refueling Gains Importance

We regard as significant the increased use and acceptance of aerial refueling as a basic part of modern air strategy. It becomes increasingly important with the switch of military equipment to jet power, involving high speed and high fuel consumption.

Boeing has taken a leading part in the development of aerial refueling, having designed and produced the Flying Boom system for transferring fuel and the KC-97 tanker for transporting it. The company has also carried on research work with the British-developed hose and drogue system, and will continue to work with this as well as the boom system.

Aerial refueling has become a definite and routine part of military operations. This was demonstrated in 1952 by the Strategic Air Command with two mass flights of Republic F-84 jet fighters across the Pacific Ocean, refueled by Boeing tankers equipped with Flying Booms.

While the KC-97 is proving satisfactory today, the company sees a growing need for an all-jet tanker-transport to keep pace with jet fighters and bombers, both in speed and in altitude. This need was one of the major factors pointing the way to a Boeing jet transport project, a program which will be discussed further on Page 15.

Superforts Completed

Production of reciprocating-engine bombers came to an end at Boeing with the delivery of the last TB-50 Superfortress just after the close of the year. The bombers your company is now building are all powered by jet engines. The TB-50 is a trainer version of the B-50 bomber,

KC-97s in background soon will roll out onto apron and undergo flight tests and inspection before delivery. Body sections in foreground will then move to final assembly lines.

which is the outgrowth of the B-29 used in World War II and now being used in Korea.

The first of the B-29s took to the air ten years ago. This airplane has set an enviable record in its decade of service, having played a vital role in two wars. It was the first pressurized high-altitude bomber, and the first capable of flying the long distances necessary to strike at the enemy in the Pacific. It carried the aerial attack against Japan in World War II and finished the task by dropping the first atom bombs.

The production order for the TB-50s was small; thus its completion did not greatly affect the workload. The floor area at the Renton plant occupied by this model has been used to expand the KC-97 production line.

Spares Business Grows

Production of spare parts has become a sizable operation both at Seattle and Wichita. As more Boeing planes are put into service, this phase of the business grows accordingly. During 1952, spare parts totaling $115,874,000 in value were shipped to the Air Force, and shipments of $1,466,000 were made to commercial airlines using the Boeing Stratocruisers.

Assistance to Subcontractors

Boeing, in keeping with government policy, has engaged in a substantial subcontracting program. This program also is intended to reduce the peak manufacturing loads of your company and minimize the investment of capital in expanded facilities that may not be required on a continuing basis. However, subcontracting is only feasible if the subcontractors perform on schedule and maintain required standards of quality. At present, because of shortages of skilled man-power and competition of commercial programs, subcontracting is giving rise to numerous problems.

We have been required to assist many of the subcontracting companies by sending them substantial numbers of people to help establish proper manufacturing techniques or to make up for deficiencies in their own man-power. Our manufacturing personnel alone spent approximately 25,600 man-days in direct help given subcontractors during 1952. We expect that we will be called upon to give even greater assistance in 1953.

Pilotless Aircraft Development

While the projects previously discussed have been established, or are being established, on a production basis, your company is at work on several research and development programs which should gain importance in the future. Foremost of these is a new, advanced pilotless aircraft (guided missile) program which utilizes valuable information gained from Boeing's previous GAPA (ground-to-air-pilotless-aircraft) project.

Although still in the developmental stage, Boeing's pilotless aircraft work represents, as of today, a very substantial effort. It is the third largest project in the engineering division and has required large numbers of highly-skilled engineers, especially in the electronics field.

Added emphasis was placed by Boeing on this program early in 1953 with the establishment of the new office of director—pilotless aircraft. In addition to directing the engineering phase of this work, the office will be responsible for the coordination of all activities relating to the company's pilotless aircraft projects.

From what we now know, we believe there will be increased activity on the missile program. Over the years it has a potential of substantial and continuing business.

A word of caution should be given, however, on missile-type weapons. Continued talk of

A GAPA missile developed in company's early pilotless aircraft program races skyward. Information gained from this project is being used in today's new and expanded program.

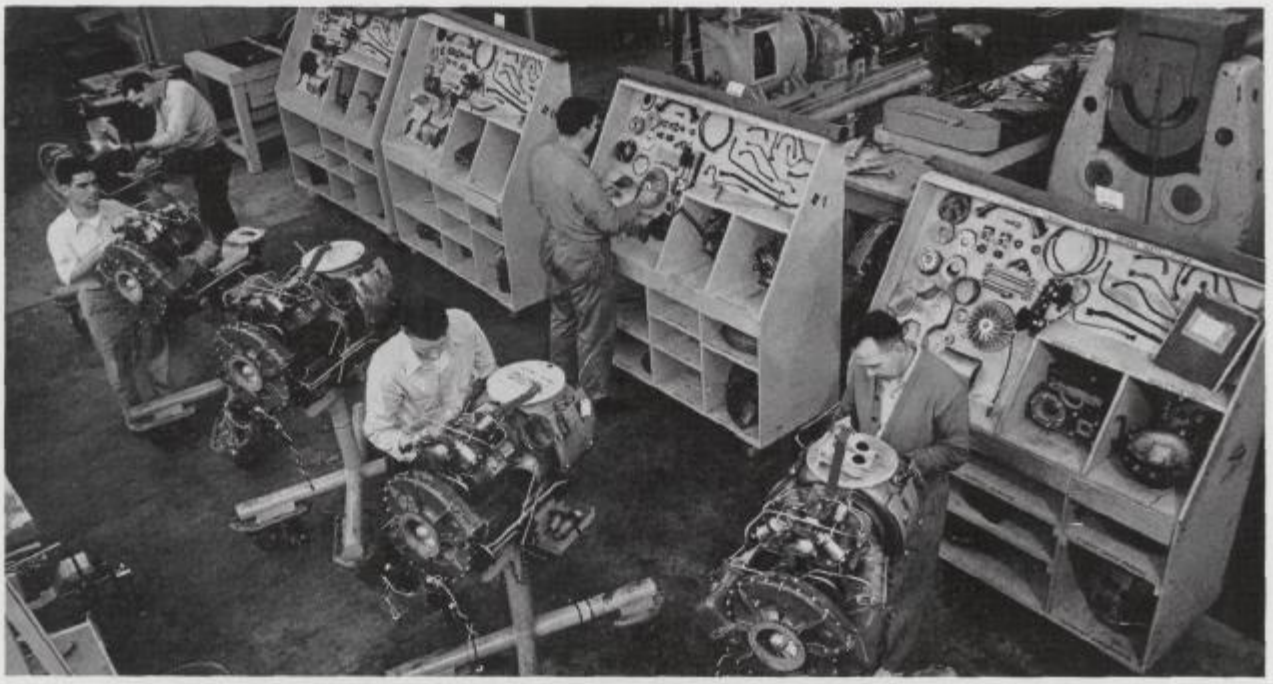
"push-button warfare" has developed missiles in the public's mind far faster than engineers have been able to develop them in the laboratories. Progress in this highly scientific field is necessarily time-consuming.

Jet Transport-Tanker Begun

The decision to design and build a prototype jet transport was, we feel, one of the most important Boeing decisions in 1952. Based upon the recommendations of management, your Board of Directors authorized the project in the spring of 1952.

For several years Boeing has advocated the development of a combination military jet transport and tanker for aerial refueling of today's high-speed jet bombers and fighters. We have likewise recognized that long-range air travel would eventually be carried on by jet airliners. However, taking into account the substantial costs involved and the state of jet-power development, it was not until the early part of 1952 that the management felt the company should undertake such a project.

We are of the opinion that the company can build a prototype transport which will enable it to demonstrate to the military the principal characteristics of a combination tanker and jet transport, and at the same time demonstrate to the commercial airlines the principal characteristics of a production jet airliner. From the standpoint of military security, we feel that the development of a jet tanker and transport is essential. Furthermore, it long has been our view



Gas turbine engines were produced on a limited assembly-line basis during the year. Substantial progress was made in cutting production cost and increasing engine efficiency.

that American manufacturers should develop commercial jet transports as soon as it was economically feasible to do so. By reason of its successful B-47 and B-52 programs, the Boeing company has the advantage of a greater volume of experience with large jet aircraft than any other company. For example, more than 5000 hours of multi-jet flight test experience have been gained in the combined B-47 and B-52 programs. Flight research with the B-47 has been continued through the past five years.

The design, development and manufacture of the prototype will require expenditures estimated to exceed $15,000,000. These expenditures are being charged to profit and loss as incurred, and are also currently deductible for income tax purposes.

The prototype airplane is scheduled to be flying in 1954.

Secret Projects

A considerable amount of design and development work was carried on during the year on military products classified as confidential or secret, including the continuation of a research study on the application of nuclear power to aircraft. Because of its well-equipped engineering facilities and experienced engineering staff, your company is in an excellent position to carry on such programs.

Gas Turbine Improved

The industrial products division has moved ahead with the Boeing gas turbine engine. Principal developments during the past year have been directed toward increasing the engine's dependability, decreasing its fuel consumption and

decreasing the cost of production. Encouraging progress has been made in each of these three categories.

The latest model engine, the 502-10, has 30 per cent more normal rated power than the earlier Model 502-2, and its specific fuel consumption is reduced by 20 per cent. Direct cost of engine production has been reduced 37 per cent during the year. Engine reliability has been increased fivefold on the test stand.

The point has not been reached where the turbine is in a competitive position with conventional engines, except in a limited field where its special characteristics are particularly advantageous. For the present, these applications are primarily military. Turbine business in 1952 amounted to approximately $7,375,000.

In other non-aircraft fields Boeing sold approximately $198,000 worth of electronic computers and $107,000 worth of high-voltage powerline clamps during the year.

New Facilities Required

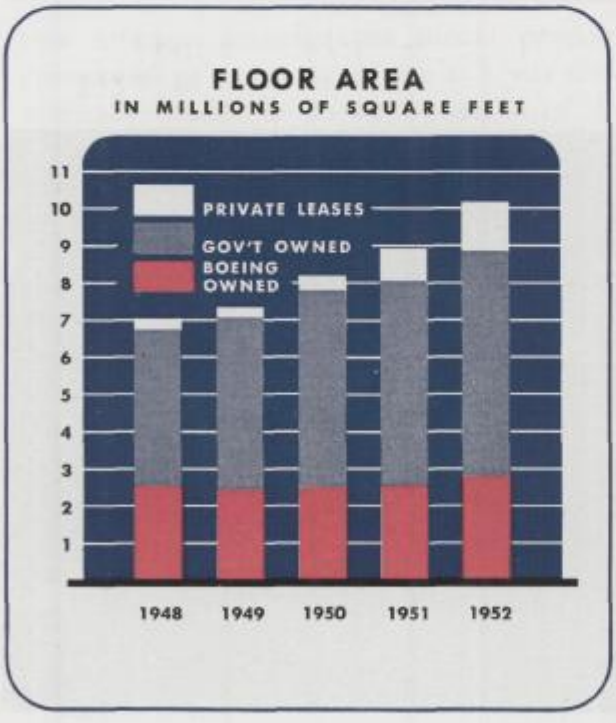
To produce today's jet aircraft requires far greater and more costly facilities than were needed for the World War II bombers. In order to be in a position to manufacture efficiently the B-52 and the B-47 airplanes, the company, with help from the government, has engaged in a substantial facilities program.

During the years 1950, 1951 and 1952, your company authorized expenditures for capital assets in an amount exceeding $22,000,000. Of this, $6,552,000 was expended during 1952. A major portion of the investment in new facilities is covered by certificates of necessity which permit the cost of new facilities, to the extent certified, to be amortized on an accelerated basis.

Principal items being financed by the company in the Seattle program are: a five-story addition to the engineering and office building completed in January, 1953; a flight test hangar

This new hangar at Wichita was a principal unit in government portion of the facilities-expansion program, which was undertaken to expedite production of today's aircraft.

The five-story engineering and office building (right), which the company built at Seattle, was completed in January. Several other buildings are now under construction.



adjoining Boeing Field which should be completed in October of this year; modification of the Boeing wind tunnel, ready for use in March, 1953; and a jig-construction building, completed in the summer of 1952.

In meeting the facilities requirements we have constantly had in mind the need for as much flexibility as possible in the event of future reduction in workload.

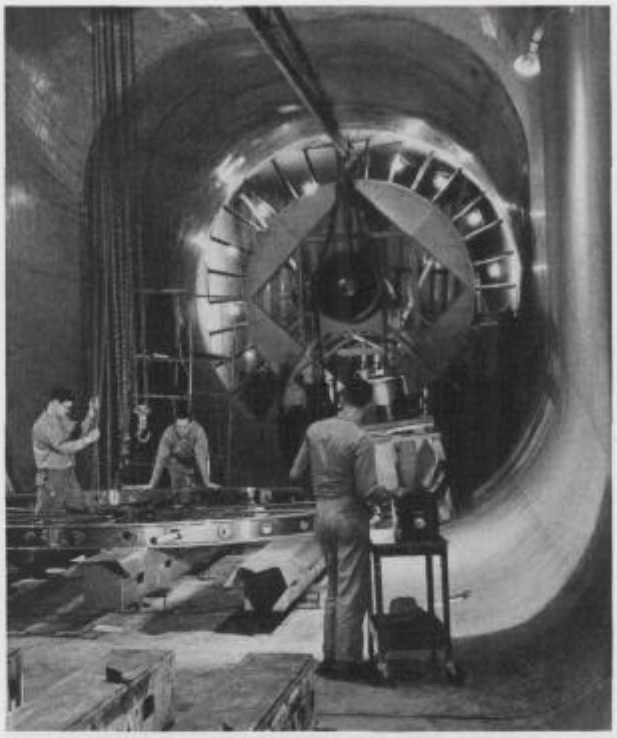
During the past three years the government has approved facilities expenditures by the Air Force at Seattle and Wichita for an even greater amount than that expended by the company. A large part of the government money has been used to purchase machine tools.

At Wichita, new government-financed facilities included a hangar, an electronics building,

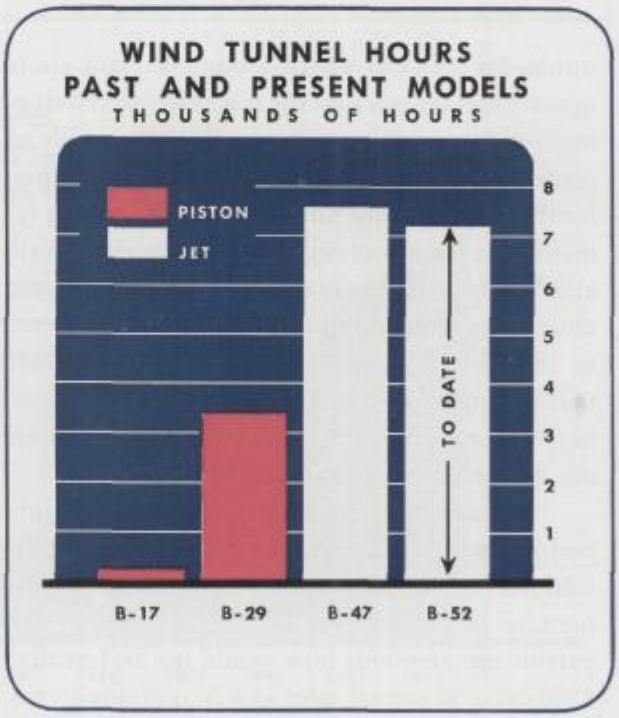
a warehouse, a transportation building, an electrical substation, and flight-ramp expansion.

At Seattle, several Air Force facilities are under construction. A material-preparation and a transportation building being constructed immediately north of Plant II are expected to be ready for occupancy next December. A gunnery revetment was being completed on Boeing Field early in 1953. During the year two additional facilities are scheduled to be built by the government on Boeing Field: an electronics building and a fuel-tank slosh-test laboratory.

The company-owned wind tunnel at Seattle has been particularly valuable in the past few years of rapid technological advancement. Available for the exclusive use of Boeing engineers, the tunnel has made it possible for the company to gain more wind-tunnel time in the jet aircraft field than any other manufacturer possesses—a total of 14,800 hours to date. The recent modifications of the tunnel have been for the purpose of increasing its speed into the supersonic range. This will permit further research work in the field of high-speed flight.



The company wind tunnel has been modified to increase its speed into the supersonic range, permitting further research and development in the field of high-speed flight.



Continuity Needed

Along with facilities, it is well to consider the type of organization required today to maintain our business. To successfully design, develop and manufacture today's advanced-type aircraft, a large and complex organization is required, consisting of people of many different types of talent and know-how. As further advancements are made in the field of aviation, it may be assumed that the trend in this direction will continue.

An illustration of this can be seen in a study the company conducted in 1947, entitled "Cost Involved and Organization Required to Operate a Heavy Bomber Plant." It was the purpose of the study to show the Finletter Commission the

High-performance jet aircraft require manufacturing techniques previously unknown to aircraft industry. This huge pincher-type bending roll is used to contour B-47 wing skin.

minimum levels at which a bomber plant could operate and (a) carry on the research and development necessary to provide the Air Force with replacement bombers of superior design and performance; (b) avoid unreasonably high cost; (c) maintain a stabilized organizational nucleus available for reasonable expansion in time of national emergency. Based on work then being conducted at the Seattle plant, your company estimated that an annual output of $80,000,000 total business and a work force of 13,000 employees were the minimum requirements.

Because of the complexity of today's high-performance products, calling for a larger, more intricate organization and expanded facilities, and because of the lower value of the dollar, comparable requirements now would not be less than $200,000,000 annual sales and 20,000 employees.

To maintain such an organization requires a continuity of production. A cutback of the magnitude of that following World War II would have a far more crippling effect now than then.

Primarily, what we have to offer is our knowledge and experience, and our abilities growing out of them. It is important that we be able to maintain a sufficient volume of business to retain these abilities, together with the facilities necessary to put them to use. This point is brought out here because of its importance not only to the company but also to our country in its planning. It must be taken into consideration if our country is to have national security when needed and if excessive costs are to be avoided.

The products we build are such that they can only be developed and produced by a large organization possessing many different types of skills and supported by an equally capable group of supplier companies, providing the many essential items of equipment. Therefore, long-range planning and continuity of production, at whatever level is required to accomplish this end, become highly important to our national defense.

Building Company Strength

The situation which has just been described calls for your company to build its strength during periods of substantial production and to put something away for the slack periods. The situation also calls for the Boeing organization to build up its skill, know-how and efficiency so that it will be best able to compete for future business. During the past year the company has made further strides in that direction.

A year ago a plan was put into effect to unify further the operations of the Seattle and Wichita divisions. This program has brought beneficial results. Policy direction has been unified. Wage and salary structures are being brought into a single pattern. Both Seattle and

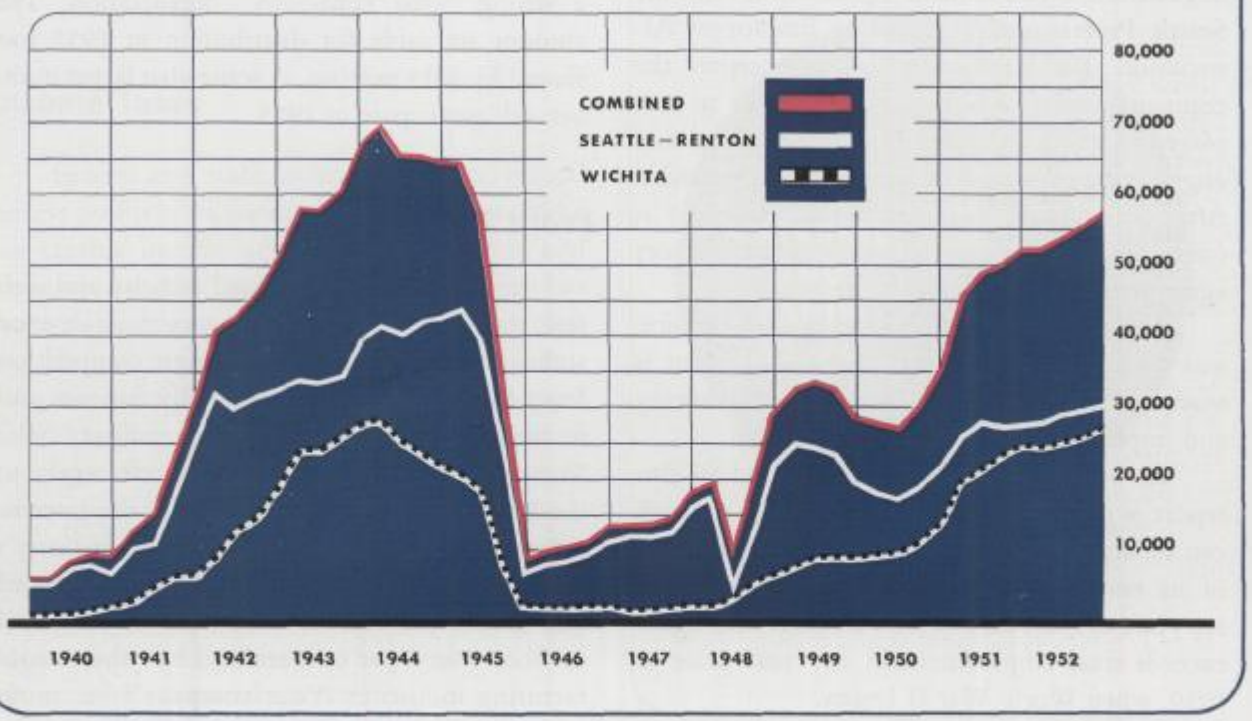
Wichita have benefited by sending people in key positions, as well as subordinate personnel, to the other plant to assist in areas needing additional help or direction.

The office of vice-president—administration was created during the year to handle organization planning and control, coordination of policies and procedures, and related functions.

In building the strength of its organization, your company realizes that good managers are its most precious commodity. It is essential that we have an orderly and systematic method of bringing on people to replace others and of developing those who can become capable managers. To assure this, Boeing has continued its management development program for supervisors and is entering into an executive development program.

Realizing the value of good managers, your company is continuing its development program for all grades of supervisors and is launching a new executive-development program.

EMPLOYMENT 1940 THROUGH 1952



Labor Relations Favorable

Labor relations throughout the company have been generally satisfactory. The only labor negotiation which remains a problem is with the Seattle Professional Engineering Employees Association. The association has not accepted the company's offer, which was comparable to that placed in effect for other Boeing personnel and engineering personnel of competitive companies. After ten months' negotiation, the company is continuing its efforts to reach a satisfactory agreement.

A comprehensive poll of employee opinion was made during the year. The management is studying the suggestions made in this survey and implementing those that have merit.

As we have previously recognized in this report, a good share of your company's strength can be attributed to the experience and abilities of its employees. Today 5800 employees have ten years or more service with Boeing. This figure exceeds total employment in any year prior to 1939, when World War II began.

Suggestions Save Dollars

The Employee Suggestion System has contributed substantially to Boeing's efforts to reduce costs. The past year has been the best postwar year for this plan, with a total of 1438 suggestions accepted. Award payments to employees totaled $111,084, and it is estimated that suggestions will result in reductions of cost of approximately $1,277,000.

Incentive Plan

The Board of Directors has set aside $2,500,000 for the year 1952 for distribution in 1953 under the incentive compensation plan. Although the amount set aside is measured by profits, the major portion is accepted as a contract cost. The entire amount of the awards is deductible for income tax purposes.

The awards, which are made to all grades of supervision and other eligible employees, have had considerable influence in the effort to build a strong "cost conscious" organization. The amount set aside for distribution in 1952 was shared by 3013 persons. A somewhat larger number will participate in 1953.

Profit Margin

In the interest of national security and welfare, the American aircraft industry must develop sufficient strength to meet foreign competition from friendly as well as unfriendly nations, and in the commercial as well as the military field. Therefore, we feel it is proper to refer again to the low profit margins permitted under government aircraft contracts. The aircraft industry's net income for the past several years has averaged less than 2 per cent of total sales as compared to from 5 to 6 per cent realized by other manufacturing industries. Your company's net profit

for the year 1952 amounted to 1.9 per cent of total sales.

Renegotiation

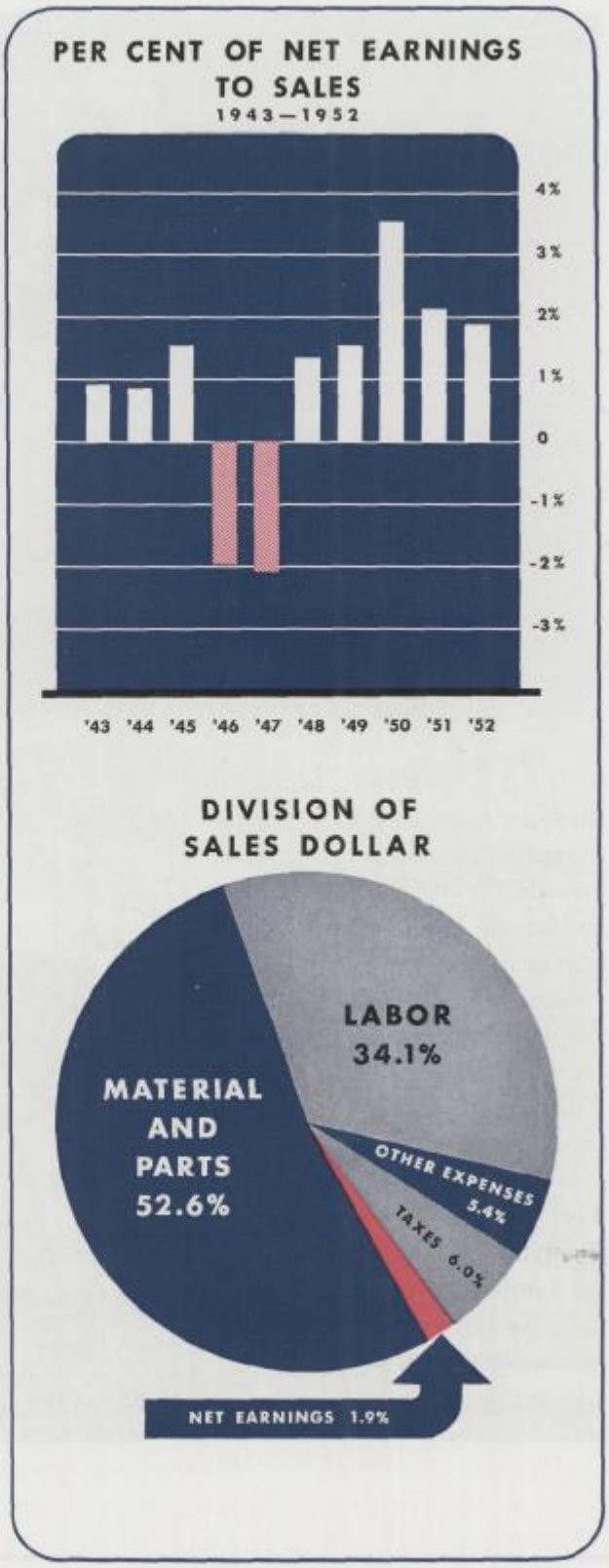
As stated previously, no provision has been made in the accompanying financial statements for a possible refund of 1952 profits through renegotiation, since it is your company's opinion that excessive profits were not realized during the year. While such a refund is not expected, it is nonetheless possible that one will be required.

The company has received a clearance notice from the Renegotiation Board for the year 1948 and has also received a clearance notice for 1949 from the Regional Renegotiation Board. The Regional Board's determination of clearance for the year 1949 is now under review by the Renegotiation Board at Washington. The required renegotiation reports for 1950 and 1951 have been filed; however, negotiations have not reached the point where any conclusions can be drawn at this time.

Income Taxes

Federal and state income taxes and federal excess profits taxes for the year 1952 were accrued on taxable income at the maximum rates and amounted to $35,700,000. Although progress has been made during the past year toward completing the settlement of prior years' income taxes, all years subsequent to 1940 still remain open. It is the company's opinion that the cumulative provision for estimated income taxes to date is adequate to cover any prior-year adjustments.

Claims for relief from federal excess profits taxes under Section 721 of the Internal Revenue Code for the years 1942 and 1943 are pending. However, no recognition has been given to these claims in the financial statements.



Fin of the B-52 towers 48 feet off the ground. This type plane, which incorporates many new systems and advanced features, has been selected as the AF's new heavy bomber.

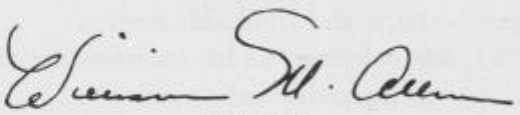
A Look Ahead

The year 1953 marks the 50th anniversary of the first powered flight by the Wright brothers. Your company has been engaged in the design and manufacture of aircraft during 36 of those 50 years. Throughout its history Boeing has emphasized the importance of research, of a forward-looking approach, and of sound design. It has likewise demonstrated a complete unwillingness to compromise safety and quality. Your company will continue to adhere to these principles. They are basic with us.

At the same time, a strenuous effort is going on throughout the organization to bring about reductions in cost. The ever-increasing demands for greater performance, requiring the incorporation of much complicated equipment and the employment of engineering and manufacturing techniques unknown a decade ago, have resulted in a continued increase in the cost of the company's products. Adding materially to this have been the inflationary forces of the past 20 years. As pointed out earlier in this report, our present performance in terms of man-hours per pound compares very favorably with our performance during World War II. We are convinced, however, that further reductions in cost are possible and one of the principal efforts of the organization will be the accomplishment of that objective.

The management feels that the abilities of the Boeing organization are employed in the design, development and manufacture of products of sound design and outstanding performance, for which there is a substantial need. We expect that 1953 will be another year of achievement and progress for the Boeing company.

For the Board of Directors



PRESIDENT

March 9, 1953

BALANCE SHEET

BOEING AIRPLANE COMPANY — DECEMBER 31, 1952

ASSETS

CURRENT ASSETS:		
Cash		$ 21,361,763
United States Treasury Bills		3,994,310
Accounts receivable—		
United States	$ 17,398,390	
Subcontractors and others	2,892,293	20,290,683
Estimated amounts receivable from the United States—		
For expenditures under cost-plus-a-fixed-fee and facilities contracts and applicable fees	$ 48,888,392	
For deliveries under contracts for which unit prices have not been established or revised	25,379,683	74,268,075
Accumulated charges on other than cost-plus-a-fixed-fee contracts with the United States less estimated cost (average total contract basis) of deliveries	$245,120,856	
Less progress payments	208,070,254	37,050,602
Inventories of materials and parts at the lower of average cost or market, less allowance for obsolescence of $400,000		6,435,859
Prepaid expenses		697,410
TOTAL CURRENT ASSETS		$164,098,702
OTHER ASSETS:		
Deposits with mutual insurance companies and other items		388,069
PROPERTY, PLANT, AND EQUIPMENT, at cost (Note A):		
Land ($525,298) and buildings	$ 18,543,053	
Machinery, tools and equipment	16,027,218	
	$ 34,570,271	
Less allowance for accumulated depreciation and amortization	18,069,783	16,500,488
		$180,987,259

LIABILITIES AND STOCKHOLDERS' INVESTMENT

CURRENT LIABILITIES:		
Accounts payable		$ 35,488,436
Salaries and wages		22,569,406
Taxes other than taxes on income		2,090,579
Estimated amounts payable to the United States arising from contract price revisions		12,386,725
Incentive compensation for officers and employees		2,500,000
Allowance for contract adjustments, including renegotiation for the year 1950, net of taxes		1,200,000
Federal and state taxes on income (Note B)		37,199,167
TOTAL CURRENT LIABILITIES		$113,434,313
STOCKHOLDERS' INVESTMENT (Note C):		
Capital stock, par value $5 a share—		
Authorized—2,500,000 shares		
Issued and outstanding—1,623,681 shares at stated value	$35,203,414	
Earnings retained for use in the business	32,349,532	67,552,946
		$180,987,259

See notes to financial statements.

STATEMENT OF NET EARNINGS

BOEING AIRPLANE COMPANY • Year Ended December 31, 1952

Sales		$739,010,214
Other income		747,224
		$739,757,438
Cost of sales (excluding applicable portion of certain items set forth below in the amounts incurred during the year)	$674,393,642	
General and administrative expenses	6,346,525	
Research and developmental expenses	3,538,631	
Incentive compensation for officers and employees	2,500,000	
Depreciation and amortization of plant and equipment (Note A)	1,642,244	
Interest expense	922,192	
Advertising and other expenses	629,755	
Federal and state taxes on income (including $9,135,000 for excess profits taxes)	35,700,000	725,672,989
NET EARNINGS		$ 14,084,449

EARNINGS RETAINED FOR USE IN THE BUSINESS

BOEING AIRPLANE COMPANY • Year Ended December 31, 1952

Balance at January 1, 1952		$ 44,239,723
Net earnings for the year		14,084,449
		$ 58,324,172
Transfer to capital stock (Note C)	$ 21,649,080	
Cash dividends, equivalent to $2.66⅔ a share on stock outstanding after giving effect to the stock dividend	4,325,560	25,974,640
Balance at December 31, 1952		$ 32,349,532

ADDITIONAL PAID-IN CAPITAL

BOEING AIRPLANE COMPANY • Year Ended December 31, 1952

Balance at January 1, 1952	$ 8,142,064
Transfer to capital stock (Note C)	8,142,064
Balance at December 31, 1952	$ —

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

NOTE A—Emergency Facilities:

Included in the property, plant, and equipment accounts are facilities acquired during the present emergency period having a cost of $10,050,000 with respect to which Certificates of Necessity have been obtained. The certified portion of the cost of these facilities in the amount of $7,664,000 is being amortized in the accounts as facilities are completed over sixty-month periods as permitted for federal income tax purposes. Amortization in excess of normal depreciation amounted to $281,192 for 1952.

NOTE B—Federal Taxes on Income:

Returns of the company have been examined by representatives of the Bureau of Internal Revenue for all years through 1947, but final settlements have not been reached for the years subsequent to 1940. It is believed that the liability as stated is adequate to cover any possible deficiencies.

The company has pending claims under Section 721 of the Internal Revenue Code for the years 1942 and 1943.

NOTE C—Stockholders' Investment:

Capital stock is stated at the amount assigned thereto by the Board of Directors on April 22, 1952, after issuance of a stock dividend of 541,227 shares and including transfers of $8,142,064 from additional paid-in capital and $21,649,080 from earnings retained for use in the business. The amount transferred by order of the Board of Directors from earnings retained for use in the business was equal to $40 per additional share issued as a stock dividend.

NOTE D—Renegotiation:

Substantially all of the company's business for the year 1952 was subject to the Renegotiation Act of 1951. No provision has been made for a refund for the year 1952, as it is the company's opinion that profits realized were not excessive; however, it is possible that a refund will be required.

ACCOUNTANTS' REPORT

TOUCHE, NIVEN, BAILEY & SMART

CERTIFIED PUBLIC ACCOUNTANTS

1411 FOURTH AVENUE
SEATTLE 1, WASH.

March 9, 1953

Board of Directors,
Boeing Airplane Company,
Seattle, Washington.

We have examined the balance sheet of Boeing Airplane Company as of December 31, 1952, and the related statements of net earnings, earnings retained for use in the business, and additional paid-in capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to obtain satisfactory confirmations of receivables from the United States by direct communication, but we satisfied ourselves as to such accounts by other auditing procedures.

In our opinion, subject to the effect of any adjustment that may be required for renegotiation which we are unable to evaluate, the accompanying balance sheet and statements of net earnings, earnings retained for use in the business, and additional paid-in capital present fairly the financial position of Boeing Airplane Company at December 31, 1952, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Also, in our opinion, the action of the Board of Directors on February 27, 1953, in setting aside a sum of $2,500,000 for the year 1952 under the Incentive Compensation Plan for Officers and Employees, is in conformity with the provisions contained in the first paragraph of Section 2 of such plan.

Touche, Niven, Bailey & Smart

Certified Public Accountants

FIVE-YEAR CONDENSED COMPARATIVE STATEMENTS OF FINANCIAL POSITION

As of December 31,	1952	1951	1950	1949	1948
CURRENT ASSETS:					
Cash and United States Treasury securities	$ 25,356,073	$ 21,900,894	$ 25,962,122	$ 25,957,106	$ 17,114,859
Accounts receivable, and estimated amounts receivable from the United States	94,558,758	93,649,160	74,107,613	50,287,969	23,000,178
Accumulated charges on contracts, and inventories	43,486,461	33,416,629	15,625,026	29,980,789	79,201,845
Prepaid expenses	697,410	746,595	409,364	453,076	346,356
Total current assets	$164,098,702	$149,713,278	$116,104,125	$106,678,940	$119,663,238
CURRENT LIABILITIES:					
Notes payable to banks	$	$ 31,190,000	$	$	$ 35,000,000
Accounts payable and accrued expenses	62,648,421	49,371,852	30,164,192	21,450,211	18,572,624
Amounts payable arising from contract price revisions	12,386,725	8,372,017	23,565,005	14,161,856	.....
Allowance for contract adjustments, net of taxes	1,200,000	1,200,000	1,200,000	.....	1,371,057
Federal and state taxes on income	37,199,167	13,700,907	15,201,014	4,081,291	1,704,681
Advances on contracts	.....	.....	.....	26,779,515	24,797,619
Total current liabilities	$113,434,313	$103,834,776	$ 70,130,211	$ 66,472,873	$ 81,445,981
Working capital	$ 50,664,389	$ 45,878,502	$ 45,973,914	$ 40,206,067	$ 38,217,257
Other assets	388,069	389,839	285,317	505,199	862,314
Property, plant and equipment, net	16,500,488	11,525,716	7,641,149	5,609,632	4,994,793
Net assets	$ 67,552,946	$ 57,794,057	$ 53,900,380	$ 46,320,898	$ 44,074,364
Represented by stockholders' investment in:					
Capital stock	$ 35,203,414	$ 5,412,270	$ 5,412,270	$ 5,412,270	$ 5,412,270
Additional paid in capital	.....	8,142,064	8,142,064	8,142,064	8,142,064
Earnings retained for use in business	32,349,532	44,239,723	40,346,046	32,766,564	30,520,030
	$ 67,552,946	$ 57,794,057	$ 53,900,380	$ 46,320,898	$ 44,074,364
Stockholders equity per share (adjusted on an equivalent basis to the 1,623,681 shares outstanding as of December 31, 1952)	$41.60	$35.59	$33.20	$28.53	$27.14
Ratio of current assets to current liabilities	1.45 to 1	1.44 to 1	1.66 to 1	1.60 to 1	1.47 to 1

BOARD OF DIRECTORS

WILLIAM M. ALLEN
President

WELLWOOD E. BEALL
Senior Vice-President

DARRAH CORBET
President, Smith Cannery Machines Company, Seattle

C. L. EGTVEDT
Chairman

D. A. FORWARD
Senior Vice-President, The National City Bank of New York

ARTEMUS L. GATES
Consultant
New York City

FRED P. LAUDAN
Vice-President—Manufacturing

WILLIAM G. REED
Chairman, Simpson Logging Co., Seattle

J. E. SCHAEFER
Vice-President—General Manager, Wichita Division

DIETRICH SCHMITZ
President, Washington Mutual Savings Bank, Seattle

EDWARD C. WELLS
Vice-President—Engineering

J. P. WEYERHAEUSER, JR.
President, Weyerhaeuser Timber Company, Tacoma

J. O. YEASTING
Vice-President—Controller

OFFICERS

William M. Allen	President
C. L. Egtvedt	Chairman
Wellwood E. Beall	Senior Vice-President
Edward C. Wells	Vice-President—Engineering
Fred P. Laudan	Vice-President—Manufacturing
J. E. Schaefer	Vice-President—General Manager, Wichita Division
J. O. Yeasting	Vice-President—Controller
A. F. Logan	Vice-President—Industrial Relations
C. B. Gracey	Vice-President—Manufacturing, Wichita Division
Clif Barron	Vice-President—Divisional Controller, Wichita Division
James E. Prince	Vice-President—Administration
J. P. Murray	Vice-President—Eastern Representative
Harold E. Bowman	Secretary and Treasurer

General Counsel

Holman, Mickelwait, Marion, Black & Perkins

General Auditors

Touche, Niven, Bailey & Smart

Transfer Agent

City Bank Farmers Trust Company, New York City

Registrar

The National City Bank of New York, New York City

BOEING AIRPLANE COMPANY

Seattle, Washington
Main Office: 7755 E. Marginal Way

Wichita, Kansas
Wichita Division