GRUMMAN AIRCRAFT
ENGINEERING CORPORATION

Annual Report
for
1948
Grumman Aircraft Engineering Corporation

DIRECTORS

Leroy R. Grumman  Charles A. Wight
Albert P. Loening  Wm. T. Schwendler
Leon A. Swirbul  Edmund W. Poor

E. Clinton Towl

OFFICERS

Leroy R. Grumman  Chairman of the Board
Leon A. Swirbul  President
Wm. T. Schwendler  Executive Vice-President
E. Clinton Towl  Vice-President
Joseph A. Stamm  Secretary
Edmund W. Poor  Treasurer

TRANSFER AGENT

Bankers Trust Company, 16 Wall Street, New York City

REGISTRAR

Chemical Bank & Trust Company, 165 Broadway, New York City
The F9F "Panther" above is shown with folded wings, which permit compact stowage aboard the Navy’s aircraft carriers. A fuel tank for longer range is located on each wing tip.

Production of the “Panther” began late in 1948, after an extensive flight test program at our plant. This program was accelerated by the use of three experimental aircraft, two of which are pictured in flight at the top of the following page.
<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Sales</th>
<th>Net Income (after Provision for Taxes)</th>
<th>Percentage Net Income to Gross Sales</th>
<th>Dividends Paid During the Year per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>$21,858,680</td>
<td>$1,066,682</td>
<td>4.88%</td>
<td>$1.50</td>
</tr>
<tr>
<td>1942</td>
<td>143,155,930</td>
<td>3,454,654</td>
<td>2.41</td>
<td>1.50</td>
</tr>
<tr>
<td>1943</td>
<td>278,695,000</td>
<td>6,598,287</td>
<td>2.37</td>
<td>1.50</td>
</tr>
<tr>
<td>1944</td>
<td>323,749,330</td>
<td>9,550,001</td>
<td>2.93</td>
<td>1.50</td>
</tr>
<tr>
<td>1945</td>
<td>236,846,861</td>
<td>5,713,528</td>
<td>2.41</td>
<td>1.50</td>
</tr>
<tr>
<td>1946</td>
<td>37,615,540</td>
<td>337,771</td>
<td>.90</td>
<td>2.00</td>
</tr>
<tr>
<td>1947</td>
<td>24,241,247</td>
<td>2,291,120</td>
<td>9.45</td>
<td>3.00</td>
</tr>
<tr>
<td>1948</td>
<td>41,031,662</td>
<td>2,393,311</td>
<td>5.83</td>
<td>2.00*</td>
</tr>
</tbody>
</table>

* On shares outstanding after two for one stock distribution.
To the Stockholders of

GRUMMAN AIRCRAFT ENGINEERING CORPORATION

This report covers the operation of Grumman Aircraft Engineering Corporation for the year 1948 and includes a Balance Sheet as of December 31, 1948. This date marks the completion of the nineteenth year of the Corporation’s existence.

Review of 1948 Financial Operation:

A comparison of the Company’s 1948 business with that of the preceding years is shown in the table on the opposite page. The comparison of the figures for the various years shows a lack of uniformity, which is characteristic of the aircraft manufacturing industry. Even in peace time years, variations in figures occur which would be considered excessive for other industries. The large size of the major unit of business (the military contract) often contributes to these fluctuations.

Gross Sales in 1948 amounted to $41,031,662 which is 70% in excess of the sales in 1947.

Net Earnings for the year are reported as $2,393,311 or 5.8% of Gross Sales.

Cash Dividends totaling $2.00 a share were paid to stockholders during 1948, after a distribution to stockholders of an additional share for each share previously held. The Company’s record of income earned and dividends paid each year since its inception has now been maintained for nineteen years.

Increased Capitalization:

In June 1948, the capitalization of the Company was increased from $500,000 to $5,000,000.

The requirement for more fixed assets (such as the additional plant and facilities in the amount of $3,500,000 purchased in 1947) resulting from the growth of the business during past years, made this change desirable to secure the continued future operation of the Company.
The increased capitalization was obtained by transfer of funds from Capital and Earned Surplus, after increasing the number of outstanding shares of stock of the Company from 500,000 to 1,000,000.

Stock Outstanding:

As mentioned above the number of shares of Grumman Aircraft Engineering Corporation Stock outstanding was increased to 1,000,000 shares, by a distribution made on June 29, 1948 of an additional share for each share then outstanding. As of the end of 1948, the stock of the Company was held by more than 3,000 stockholders.

Products Manufactured During 1948—Military Aircraft:

As in previous years, the design and construction of aircraft for military purposes constituted the major portion of our business during 1948.

The "Bearcat", the last of our line of propeller driven fighter planes, continued in production throughout 1948. This contract is scheduled for completion about the middle of 1949. No further orders for this type of airplane are expected.

The "Panther", a jet fighter for Navy carrier service, started in production in 1948, the first of the production planes being delivered late in the year. Rate of production is scheduled to increase during 1949, as the "Panther" gradually replaces the "Bearcat" as the major production project of the Company.

The "Albatross", a twin-engine utility amphibian, was also in the process of being put into production in 1948. A number of these airplanes are on order for the Air Force, and for the Navy.

The "Guardian", a special purpose propeller driven airplane, is also on order in limited quantities for the Navy. Production deliveries are not scheduled until late in 1949.

Commercial Airplanes:

Sales of the "Mallard" a twin-engine executive type amphibian plane, were continued in 1948. Conditions remained unfavorable for sale of commercial planes, there still being a considerable amount of competition in
this field from surplus aircraft, which are obtainable at a fraction of their original cost.

The last of the "Widgeons", a four-place sportsman amphibian, were sold in 1948, and further production of this model has been discontinued.

**Non-Aeronautical Products:**

Sales of canoes and dinghys, of aluminum alloy construction, were continued thru 1948. Many customers have written and expressed their unqualified satisfaction with the lightness and strength, and easy maintenance qualities of this new product. Since inception of this project several years ago, over 15,000 canoes and dinghys have been delivered.

Production of aluminum alloy truck bodies was continued and during 1949, the volume of this business exceeded $1,500,000.

Because of the increased need for space for aircraft, and the inefficiency involved in truck body manufacturing in facilities and with an organization intended for aircraft design and construction, a small wholly owned subsidiary corporation, **Aerobilt Bodies, Inc.**, was created to carry on this work. **Aerobilt Bodies, Inc.** will continue the manufacture of aluminum alloy truck bodies at a small plant acquired by the Company in Athens, New York.

Compared with our aircraft business, these non-aeronautical projects are relatively small—the total volume of this business being about 4% of the Company's total during 1948.

**Outlook for 1949:**

The aircraft manufacturing industry has been dependent upon government orders throughout its history. This is true, today, to a greater extent than usual, owing to the apparent impossibility under today's high development and manufacturing costs, of reaching a "break-even" point on sales of commercial and private airplanes.

Our Company has on hand a sufficient volume of military orders to insure operation at normal capacity during 1949. These production contracts were obtained as a result of maintaining our leadership in design and prototype construction during the past years. Following the recommendations of the President's Air Policy Committee, and the Congressional Aviation Policy Board, Congress last year expanded the appropriation for the Air
Force and the Navy’s Air Arm, for national security purposes. As a result, military contracts have been correspondingly increased.

As of December 31, 1948, uncompleted contract work on hand amounted to approximately $107,000,000 (a high percentage of which consisted of work for the Government). This does not include additional work amounting to approximately $75,000,000, authorized by Letters of Intent, for which contracts will be received later, in the normal course of events.

**Profit Limitation Statutes:**

Included in the Supplemental Appropriations Act of 1948 passed last May, was a section called “The Renegotiation Act of 1948”. All important contracts for military aircraft made after May 21, 1948 or obligating funds made available by that appropriations act are subject to renegotiation. The Vinson-Trammell Act, a law limiting the profits on contracts for airplanes and ships, suspended during the war, is also again applicable.

The Income Statement for 1948 includes a provision for refund under the Vinson-Trammell Act on uncompleted contracts. The amount has been estimated at $520,000.

The accuracy of future earning statements will be impaired because the full extent of liability under these Profit Limitation Statutes is likely to be unknown at the time.

**Design Research and Development:**

The need for a strong Engineering force in an Aircraft Company has been repeatedly stressed. The increasing complexity of modern aircraft and the high degree of precision workmanship required make the development of new aircraft designs extremely costly and require a large design and development department. Although not contributing directly to earnings, the design, research and development work on advanced models is extremely important to the Company. Unless this work is carried on in such a way as to lead to successful new designs, production orders in the future will not be forthcoming.

Our Engineering force has continued this work throughout 1948. A successor to the “Panther” with improved performance and characteristics has been designed and is being made ready for prototype construction. Design and construction work has also been continued on guided missiles.
When future production orders are competed for, we believe the designs of our Engineering force will continue to hold a leading place in the competition.

Conclusion:

The Board of Directors wish to take this opportunity to express their appreciation to every one in our organization for their loyalty and cooperation throughout the year.

For the Board of Directors,

L. R. GRUMMAN,
Chairman of the Board.

March 4, 1949.
NET EARNINGS & DIVIDENDS

DOLLARS
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000

SALES

DOLLARS
350,000,000
300,000,000
250,000,000
200,000,000
150,000,000
100,000,000
50,000,000
$16,758,906
TO OUR EMPLOYEES

$13,494,864
FOR MATERIAL

$5,495,589
FACTORY RUNNING EXPENSE

$2,888,992
FOR TAXES

$2,000,000
TO STOCKHOLDERS

$393,311
TO SURPLUS
## ASSETS

### CURRENT ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 7,153,466</td>
</tr>
<tr>
<td>Employees’ Federal Income Taxes Withheld (Per Contra)</td>
<td>$ 354,864</td>
</tr>
<tr>
<td>Cash and Unregistered United States Savings Bonds Held for Employees’ Subscriptions (Per Contra)</td>
<td>$ 14,403</td>
</tr>
<tr>
<td>United States Treasury Bonds—At Cost (Par Value $10,000,000)</td>
<td>$ 10,035,468</td>
</tr>
<tr>
<td>Accounts Receivable (United States Government $1,699,667)</td>
<td>$ 2,083,608</td>
</tr>
<tr>
<td>Inventories (Note 1)</td>
<td></td>
</tr>
<tr>
<td>Finished Goods at Cost and Accumulated Costs on Work in Process</td>
<td>$ 12,774,312</td>
</tr>
<tr>
<td>Raw Materials—At Cost</td>
<td>$ 6,169,302</td>
</tr>
<tr>
<td></td>
<td>$ 18,943,614</td>
</tr>
<tr>
<td>Deduct Billings and Progress Payments</td>
<td>$ 10,589,421</td>
</tr>
<tr>
<td>Supplies—At Cost</td>
<td>$ 8,354,193</td>
</tr>
<tr>
<td></td>
<td>170,892</td>
</tr>
<tr>
<td></td>
<td>8,525,085</td>
</tr>
<tr>
<td>Miscellaneous Deposits</td>
<td>$ 27,789</td>
</tr>
<tr>
<td><strong>TOTAL CURRENT ASSETS</strong></td>
<td><strong>$28,194,683</strong></td>
</tr>
</tbody>
</table>

### FIXED ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings, Machinery and Equipment, Aprons, and Runways</td>
<td>$ 6,784,090</td>
</tr>
<tr>
<td>Less Accumulated Provision for Depreciation (Note 2)</td>
<td>$ 1,819,541</td>
</tr>
<tr>
<td></td>
<td><strong>$ 4,964,549</strong></td>
</tr>
<tr>
<td>Land</td>
<td>$ 379,456</td>
</tr>
<tr>
<td></td>
<td>5,344,005</td>
</tr>
<tr>
<td><strong>DEFERRED CHARGES AND OTHER ASSETS (Including Patents at $1.00)</strong></td>
<td><strong>427,877</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$33,966,565</strong></td>
</tr>
</tbody>
</table>
# LIABILITIES, CAPITAL STOCK AND SURPLUS

## CURRENT LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable and Accrued Wages</td>
<td>$ 1,751,323</td>
</tr>
<tr>
<td>Employees' Federal Income Taxes Withheld (Per Contra)</td>
<td>$ 354,864</td>
</tr>
<tr>
<td>Employees' Deposits for Purchase of United States Savings Bonds (Per Contra)</td>
<td>$ 14,403</td>
</tr>
<tr>
<td>Estimated Liability to United States Government for Refund of Profits Under Vinson-Trammell Act on Uncompleted Contracts</td>
<td>$ 520,000</td>
</tr>
<tr>
<td>Liability to United States Government for Other Refunds (Note 3)</td>
<td>$ 2,682,000</td>
</tr>
<tr>
<td>Federal Taxes on Income (Note 4)</td>
<td>$ 1,932,203</td>
</tr>
<tr>
<td>Other Taxes</td>
<td>$ 290,094</td>
</tr>
<tr>
<td>Deposits on Contracts</td>
<td>$ 294,554</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>$ 259,869</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>$ 8,099,310</strong></td>
</tr>
</tbody>
</table>

## CAPITAL STOCK AND SURPLUS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Stock—$1.00 Par Value</td>
<td></td>
</tr>
<tr>
<td>Authorized</td>
<td>3,000,000 Shs.</td>
</tr>
<tr>
<td>Unissued</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Outstanding</td>
<td>1,000,000 &quot;</td>
</tr>
<tr>
<td>Stated Value</td>
<td>$ 5,000,000</td>
</tr>
<tr>
<td>Earned Surplus</td>
<td>20,867,255</td>
</tr>
<tr>
<td></td>
<td>25,867,255</td>
</tr>
</tbody>
</table>

**Total** $33,966,565
GRUMMAN AIRCRAFT ENGINEERING CORPORATION
AND SUBSIDIARY

STATEMENTS OF INCOME, EARNED SURPLUS, AND CAPITAL SURPLUS

Year Ended December 31, 1948
(See Notes Relating to Financial Statements)

INCOME

Sales, Including Costs and Fees Under Cost-Plus-a-Fixed-Fee Contracts... $41,031,662

Other Income
Interest .......................................................................................... $119,728
Other Credits .................................................................................. 55,734

Total Other Income .......................................................................... 175,462

Deduct
Wages, Salaries, Materials, and Other Costs........................................ $36,513,813
Provision for Federal Income Taxes (Note 4) ...................................... 1,780,000
Provision for Estimated Refund of Profits to United States Government Under Vinson-Trammell Act on Uncompleted Contracts .................................................. 520,000

Net Income, Transferred to Earned Surplus ....................................... $ 2,393,311

EARNED SURPLUS AND CAPITAL SURPLUS

<table>
<thead>
<tr>
<th></th>
<th>Earned</th>
<th>Capital</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, December 31, 1947</td>
<td>$24,031,604</td>
<td>$ 942,340</td>
<td>$24,973,944</td>
</tr>
<tr>
<td>Net Income, Year Ended December 31, 1948</td>
<td>2,393,311</td>
<td></td>
<td>2,393,311</td>
</tr>
</tbody>
</table>

|            | $26,424,915 | $ 942,340 | $27,367,255 |

Deduct

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Transferred to Capital Stock......</td>
<td>3,057,660</td>
<td>$ 942,340</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Distribution of 500,000 Shares ($1.00 Par Value) Capital Stock.........</td>
<td>500,000</td>
<td></td>
<td>500,000</td>
</tr>
<tr>
<td>Dividends Paid ($2.00 Per Share on 1,000,000 Shares) .....................</td>
<td>2,000,000</td>
<td></td>
<td>2,000,000</td>
</tr>
</tbody>
</table>

|            | $5,557,660 | $ 942,340 | 6,500,000 |

Balance, December 31, 1948 $20,867,255 $20,867,255
GRUMMAN AIRCRAFT ENGINEERING CORPORATION
AND SUBSIDIARY

NOTES RELATING TO FINANCIAL STATEMENTS

1—Billings deducted from inventories in the amount of $10,589,421 include progress payments of $8,148,649 applicable to Government contracts. With respect to the latter contracts, the United States Government has liens on work in process and on materials allocated to the contracts.

2—The Corporation has included provision for depreciation in its statement of income calculated on the original cost of the assets depreciated. The amount of depreciation for the year 1948 was $406,812.

3 Two contracts from which a substantial portion of the Corporation’s income for the year was derived provide for redetermination of prices. One of the contracts was completed and the other substantially completed at the close of the year. Price redeterminations in respect of both contracts were made by the Corporation at December 31, 1948 and, although the redetermined prices have not yet been ratified by contract amendments, it is the opinion of the management that the provision of $2,682,000, shown on the balance sheet, is the amount of refund the Corporation will be required to make under these contracts.

4—Federal Income and Excess Profits Tax Returns have been examined by the Treasury Department through the year 1945 and all additional assessments proposed, as a result of such examination, have been paid. The Corporation has filed claims for relief under Section 722 of the Internal Revenue Code for the years 1940, 1941 and 1942. No effect has been given in the accounts or in the accompanying statements to these claims.
Board of Directors,
Grumman Aircraft Engineering Corporation,
Bethpage, New York.

We have examined the balance sheet of Grumman Aircraft Engineering Corporation and subsidiary as of December 31, 1948 and the statements of income, earned surplus and capital surplus 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 other supporting evidence and such other procedures as we considered necessary in the circumstances.

The major portion of accounts receivable represents amounts due from the United States Government. It was impracticable to confirm these amounts by direct correspondence, but we satisfied ourselves as to their substantial correctness by other auditing procedures.

In our opinion, the accompanying balance sheet and statements of income, earned surplus and capital surplus, together with the notes relating thereto, present fairly the position of Grumman Aircraft Engineering Corporation and subsidiary at December 31, 1948, 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.

HURDMAN AND CRANSTOUN,
Certified Public Accountants.

February 17, 1949.
The Bearcat

Night Fighter

Standard "Bearcat" Fighter

Improvements to the FSF "Bearcat" include the installation of a more powerful engine and an increase in altitude performance. It is now the Navy's fastest propeller driven aircraft at medium as well as low altitudes.

A night fighter and a special photographic modification of the "Bearcat" were developed in 1948.
A new anti-submarine aircraft was developed from the TB3F "Guardian".

Two aircraft were fabricated during 1948, to conform with advanced Naval operational tactics and the latest Navy specifications.

A production contract was awarded for this type aircraft.

In the photographs above the two models of the "Guardian" are flying in tactical formation.
The "Albatross" is the largest aircraft manufactured by the Grumman company. Production orders have been received from the U. S. Air Force and the U. S. Navy.

Designed for rough water operation, the "Albatross" will be used by the Air Force in air-sea rescue operations and by the Navy as a general utility amphibian.
The Mallard

A Partial Roster of

Algoma Steel Corporation, Ltd.
Asiatic Petroleum Corporation
Mr. Vincent Astor
Mr. W. E. Boeing
Bower Roller Bearing Company
Burlington Mills Corporation
Canadian Breweries, Ltd.
Chatham Manufacturing Company
Mr. Powell Crosley, Jr.
Ford Motor Company
Forstmann Woolen Company
Mr. Frank W. Fuller, Jr.
General Motors Corporation
Major Andrew Holt
Mr. Herbert Holt
Howe's Brothers Company
Hudson Bay Mining and Smelting Co., Limited
Hydro-Electric Power Commission of Ontario
The Mallard

Mallard Owners

Mr. C. F. Kettering
Mississippi River Valley Commission
New Syndicate, Incorporated
Republic Oil Refining Company
Mr. S. W. Richardson
Mr. J. J. Ryan
Captain Boris Sergievsky
Standard Oil Company of Kansas
Superior Oil Company
Tix-O-Kan Flour Mills

The Fuller Brush Company
The Globe and Mail (Toronto)
The Texas Company
Thomas S. Lee Enterprises, Incorporated
Twentieth Century-Fox Film Corporation
Mr. B. Van Lear
Mr. Gar Wood
Metal Boats

Utility

Ruggedness

Speed

Stability
Truck Bodies

Trans-India Expedition

Refrigerated Body

Emergency for New York Port Authority
The purpose of this report is to give to present stockholders information about the Company. It is not a prospectus in respect of any stock or other security of the Company and is not con- nected in any way with any sale or offer to sell or subscription or otherwise to buy any stock or other security of the Company. No reliance is to be placed on the facts herein contained or that any matter herein stated.

Grumman Aircraft Engineering Corporation

Bethpage Long Island New York