

**FUTURE FINANCIAL PROBLEMS OF
CONVERSION
IN THE AIRCRAFT INDUSTRY**

By

TOM LILLEY

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*Business Research Studies
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HARVARD UNIVERSITY
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
GEORGE F. BAKER FOUNDATION
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MELVIN T. COPELAND, *Director of Research*

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FOREWORD

A year ago a report on the *Financial Position of the Aircraft Industry*, prepared by Professor Bollinger and Professor Lilley of our aviation research staff, was published at the Harvard Business School. Since then several research projects relating to the aircraft industry, including a report to the United States Army Air Forces on *Surplus Aircraft and Major Components Thereof*, have been carried on at the School. The results of one of those projects are presented in this bulletin.

One purpose of the present study is to bring up to date the basic financial data presented in last year's report. Because of the very real progress made during 1944 by the government and by the aircraft industry in planning for conversion to peacetime operations, the industry's transition problems now can be evaluated in more specific terms than were possible a year ago. Hence in the present study an attempt has been made to appraise quantitatively the financial problems which will influence the industry's technical progress, its production, and its employment levels in the immediate postwar period.

Because of the rapidity with which the aircraft industry has been forced to expand its operations during the war years, the problems of postwar readjustment for the industry not only are particularly difficult but they have far-reaching ramifications into many parts of the American business structure. No one can know now when the war will end, or just what conditions will be faced when the end does come, and the authors of this report, Professor Lilley and Mr. Horton, make no predictions on those subjects. The authors do analyze the industry's financial problems of postwar reconversion in the light of information now available. Periodically, as further changes in conditions warrant, members of the School's aviation research staff plan to re-examine the industry's current status and prospects.

The cost of this research project was met from funds contributed by the aviation industry.

MELVIN T. COPELAND
Director of Research

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The authors wish to acknowledge their indebtedness to the many persons whose cooperation and advice made possible the publication of the present report. The accounting departments of ten leading manufacturers of airframes furnished the basic 1943 financial data presented herein. Many individuals in the aircraft industry, in government agencies, and in banking institutions contributed extremely helpful information. We are also grateful for the assistance of many members of the School's faculty, particularly for the aid of Professor Lynn L. Bollinger. The authors are, of course, solely responsible for the estimates made in devising projected future financial statements, and for the conclusions of this study.

TOM LILLEY
L. LAVERNE HORTON

Boston, Massachusetts
November, 1944

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APPENDIX A

NOTES REGARDING INDUSTRY COMPOSITE DATA OF TEN MAJOR AIRFRAME MANUFACTURERS

Summary Notes Regarding Balance Sheet, Income Statement, and Other Data

The Balance Sheets and Income Statements of the average airframe manufacturer for 1942 and 1943 are shown in Tables 1 and 2. A composite statement was compiled based on the individual statements of ten major airframe manufacturers. The average company statement simply represents the composite financial figures reduced to an average by dividing the totals by ten. Composite statements are not shown herein; persons wishing to obtain composite statements may multiply each item on Tables 1 and 2 by ten.

Changes in 1942 Statements

The 1942 statements are essentially similar to those presented in a study published last year on the "Financial Position of the Aircraft Industry."¹ However, three adjustments have been made in the 1942 data as originally published in order to make them comparable with the available data for 1943.

Ten Companies instead of Eleven

During 1943, two of the eleven companies included in the 1942 study were merged. Therefore, reference is made in this study to ten airframe manufacturers, but the data actually represent the same eleven manufacturers referred to in last year's study. In all cases where figures of the average airframe manufacturer are shown, they represent the composite figures divided by ten, because only ten companies are now in existence. The financial ratios and relationships for this average company are not affected by this change.

Substitution of One Company

Since the necessary financial data for one of the companies included in the 1942 study were not available for 1943, it was necessary to exclude this company from the data for both 1942 and 1943. A company of comparable size, for which both 1942 and 1943 data were available, was substituted. This change did not significantly alter the amounts of the composite data; for example, the composite net sales were decreased by less than one-half of one per cent.

¹*Financial Position of the Aircraft Industry* (Harvard Business School, Division of Research, Business Research Studies, No. 28, 1943).

Additional Renegotiation

As stated in the 1942 study, renegotiation settlements were not final for two companies. Since that time, one of these two companies has completed renegotiation on 1942 operations and the other has reached a tentative agreement with the government. In both cases the 1942 financial statements have been revised to take into account the additional amount of renegotiation refund. The effect of these adjustments reduced the composite net profit after taxes less than one per cent.

Sources of Information

The basic sources of information were identical to those used in the 1942 study, that is, the audited statements obtained from the accounting departments of the ten companies. Nine of these ten companies manufactured airframes and spare parts therefor. For the tenth company the audited statements of the Airplane Division were used. Again this year it was necessary to allocate to this Airplane Division an equitable portion of the entire corporation's cash, United States securities, postwar tax refund, provision for federal taxes, and net worth.

The income statements shown in Table 1 are for the fiscal years 1942 and 1943, and the balance sheets shown in Table 2 are as of the end of the fiscal years 1942 and 1943. Of the ten companies included in this study, the fiscal year of six ended on December 31, two on November 30, and two on September 30.

Adjustments

Five types of adjustment were made in the 1942 and 1943 audited statements of nine companies and of the Airplane Division of the tenth company:

(1) Balance sheet and income statement items were reclassified and further breakdowns made in order to obtain uniform classifications of accounts. None of these adjustments involved any change in earned surplus.

(2) Where necessary, income and expense items were adjusted and net profit decreased to allow for the estimated effect of renegotiation of the companies' contracts with the United States Government. The

effect of these adjustments was to reduce net profit after taxes of the ten companies combined by slightly less than 21% in 1943 and 41% in 1942.

One company had already reached an agreement with the Price Adjustment Board regarding its renegotiation refund for the year 1943 at the time its annual report was published. In the case of six companies, either preliminary or final agreements had been reached at the time these data were obtained. In the case of the three remaining companies, the amounts of the renegotiation refunds were estimated, based on statistics furnished by the companies and data regarding refunds made by other companies. Final agreements regarding 1942 renegotiation refunds have been made by all of the companies except one, and that company has made a tentative agreement with the Price Adjustment Board.

(3) In the case of several companies, adjustments were made to obtain uniformity in the accounting treatment of cost-plus-fixed-fee contracts. A majority of the companies took fees under cost-plus-fixed-fee contracts into income on the basis of expenditures made (i.e., amounts billable to the government). Some companies, however, accrued fees on some other basis, such as actual deliveries of aircraft. In these latter cases in 1942, adjustments were made to accrue fees on the basis of expenditures. After this adjustment, net sales of all companies included expenditures and accrued fees, and operating expenses included all expenditures to date under cost-plus-fixed-fee contracts.

Similar adjustments were made in the 1943 statements; however, only those expenditures made in the fiscal year 1943 and the accrued fees thereon were included in the 1943 income statement.

Notes Regarding Specific Balance Sheet and Income Statement Accounts and Other Data

The following notes briefly describe the nature of each account and of each statistical item included in the foregoing statements.¹

Asset Accounts

Cash, Unrestricted. Cash the use of which is not restricted by contract with the United States Government or banks.

Cash, Restricted. Cash the use of which is restricted by contract with the United States Government or banks.

¹A more detailed description of the types of reclassifications and adjustments made in both 1942 and 1943 data is given in *Financial Position of the Aircraft Industry* (Harvard Business School, Division of Research, Business Research Studies, No. 28, 1943), pp. 35-41. With the exceptions noted above, the types of reclassifications and adjustments are the same for both 1942 and 1943.

(4) In 1942 adjustments were made to consolidate into the balance sheet of one company a wholly owned subsidiary formed to construct a plant under an Emergency Plant Facilities contract. This subsidiary had not been consolidated in the published balance sheet. However, the assets of this subsidiary were purchased by the government shortly after the close of the 1943 fiscal year. In order to present a more accurate, up-to-date breakdown between company- and government-owned plant facilities, adjustments have been made in the 1943 balance sheet, giving effect to the dissolution of this subsidiary and the purchase of its assets by the government.

(5) In 1942 only, adjustments were made to eliminate intercompany accounts and items of two companies. One of these companies had a substantial investment in the other at the close of the 1942 fiscal year. Because these two companies were merged in 1943, similar adjustments were not necessary in 1943.

Other Data

Certain additional composite statistics are presented along with the statements. These data are:

Wage and salary expenditures in the first quarters of 1943 and 1944.

Expenditures for materials in the first quarters of 1943 and of 1944.

Government-owned cost-plus-fixed-fee inventories at the end of the fiscal years, 1942 and 1943.

Government-owned plant, property, and equipment at the end of the fiscal years, 1942 and 1943.

In certain companies, precise accounting measures of these data were not available, and company estimates based on statistical data were used.

United States Government and Other Marketable Securities. United States Treasury securities and marketable short-term notes.

Accounts Receivable: United States Government Fixed-Price Contracts. Receivables from the United States Government under the terms of fixed-price contracts.

Accounts Receivable: United States Government Cost-Plus-Fixed-Fee Contracts. Unreimbursed expenditures and accrued fees under cost-plus-fixed-fee contracts, and advances made to subcontractors under such contracts.

Miscellaneous United States Government and Other Accounts Receivable. All accounts receivable other than those due from the United States Government under fixed-price and cost-plus-fixed-fee contracts.

Advances to Vendors. Advances to or deposits with

vendors against unfilled orders for materials and parts.

Inventories. Total company-owned inventories, including shop supplies, perishable tools, and company-owned material in the hands of vendors.

Plant, Property, and Equipment: Regular Facilities (other than emergency facilities). All company-owned fixed assets except emergency facilities covered by certificates of necessity (to be amortized over 60 months) and emergency plant facilities (the cost of which is to be reimbursed by the United States Government over 60 months).

Plant, Property, and Equipment: Emergency Facilities (constructed under certificates of necessity). Emergency facilities covered by certificates of necessity and hence amortizable over a period of 60 months.

Reserve for Depreciation and Amortization. All depreciation and amortization reserves against the above two Plant, Property, and Equipment accounts.

Expenditures under Emergency Plant Facilities Contracts, Net of Amortization. Expenditures under Emergency Plant Facilities contracts, net of amounts reimbursed by the United States Government.

Postwar Tax Refund. Estimated postwar refund of federal excess profits tax.

Deferred Charges and Miscellaneous Assets. Items carried in the audited statements of the companies as deferred charges, and other assets which could not be classified as current assets or fixed assets.

Government-Owned Assets

Government-Owned Inventories (under cost-plus-fixed-fee contracts). Government-owned inventories related to cost-plus-fixed-fee contracts as of the end of the 1942 and 1943 fiscal years of the companies.

Government-Owned Plant, Property, and Equipment. The investment of the United States Government and its agencies in fixed assets used by the companies, as of the end of the 1942 and 1943 fiscal years of the companies.

Liability Accounts

Accounts Payable and Miscellaneous Current Liabilities. Items carried in the audited statements of the companies as accounts payable and all miscellaneous current liabilities which could not properly be classified in the various other current liability accounts shown.

Wages and Salaries Payable. Wages and salaries payable as shown in the audited statements of the companies.

Notes Payable to Banks. Notes payable to banks shown as current liabilities in the audited statements.

Provision for Taxes other than Federal Income Taxes. Provision for all taxes other than federal income and excess profits taxes.

Advances other than United States Government. Advances other than those received from the United States Government.

Provision for Federal Income and Excess Profits Taxes. Estimated provisions for federal income and excess profits taxes before deduction of postwar refunds.

Refunds Due United States Government. Refunds due the United States Government for contract price adjustments and for renegotiation of government contracts.

United States Government Advances and Progress Payments. Advances and progress payments received from the United States Government in connection with fixed-price and cost-plus-fixed-fee contracts.

Bank Loans under Emergency Plant Facilities Contracts. Loans payable to banks in connection with Emergency Plant Facilities contracts, under which the government reimburses the cost of such facilities over a 60-month period.

Other Noncurrent Liabilities. Includes only deferred income.

Reserves for Specific Liabilities. Reserves for self-insurance and service guarantees.

Reserves for Postwar and General Contingencies. Reserves which are not for specific liabilities but for postwar or general contingencies.

Capital Stock and Capital Surplus. Capital stock (including preferred and common stock) and capital surplus (including paid-in surplus) as shown in the audited statements of the companies.

Earned Surplus. Earned surplus as shown in the audited statements of the companies, adjusted to allow for the adjustments made in net profits resulting from changes related to cost-plus-fixed-fee contracts and renegotiation.

Income Statement Accounts

Net Sales: Fixed-Price Contracts. Net sales under fixed-price contracts, less provisions for refunds to the United States Government (including refunds for contract price adjustments and refunds to provide for renegotiation settlements).

Net Sales: Cost-Plus-Fixed-Fee Contracts. Expenditures and accrued fees under cost-plus-fixed-fee contracts.

Operating Expenses: Fixed-Price Contracts. All costs and expenses applicable to products sold under fixed-price contracts.

Operating Expenses: Cost-Plus-Fixed-Fee Contracts. Expenditures applicable to cost-plus-fixed-fee contracts.

Other Income (Net). Miscellaneous income, which it was not considered proper to include in Net Sales, less miscellaneous deductions, which it was not considered proper to include in Operating Expenses.

Provision for Federal Income and Excess Profits Taxes (Net of Postwar Tax Refund). Estimated provision for federal income and excess profits taxes after deducting the postwar refund of excess profits taxes.

Net Profit. Net profit after taxes but before deducting Provision for Postwar and General Contingencies.

Disposition of Earnings: Dividends Paid. Preferred and common stock dividends paid by the companies.

Disposition of Earnings: Provision for Postwar and

General Contingencies. Provision for postwar contingencies and other general contingencies.

Disposition of Earnings: Balance to Surplus. Net Profit less Dividends and Provision for Postwar and General Contingencies.

Average Monthly Expenses, First Quarters of 1943 and 1944

Wages and Salary Expense. Average monthly expenses for all wages and salaries during the first quarters of 1943 and 1944.

Material Expense. Average monthly expenses for all materials, purchased parts, and subcontract items during the first quarters of 1943 and 1944.

APPENDIX B

DERIVATION OF THE PROJECTED BALANCE SHEETS OF THE AVERAGE AIRFRAME MANUFACTURER

Balance sheets showing the estimated effects of conversion from war to peacetime operations upon the average airframe manufacturer's financial status are projected in Tables A, B, and C. These tables show the three following projected, or pro forma, balance sheet statements as of December 31, 1946, one year after the date on which it is assumed most war contracts will be canceled:

(1) *Reasonably Optimistic Balance Sheet, Table A.* The purpose of this statement is to indicate the company's financial status if reasonably optimistic assumptions are made regarding termination losses and unreimbursed expenditures incurred in 1946.

(2) *Out-of-Cash Balance Sheet, Table B.* The purpose of this statement is to indicate the maximum unreimbursed expenditures the company can absorb in the year following major terminations without eliminating all cash. It is based on the assumption that termination losses will remain at the reasonably optimistic level indicated in Table A.

(3) *Out-of-Cash Balance Sheet, Table C.* The purpose of this statement is to indicate the maximum termination losses the company can absorb without eliminating all cash. It is based on the assumption that unreimbursed expenditures in 1946 will remain at the reasonably optimistic level indicated in Table A.

In the derivation of the reasonably optimistic balance sheet, the actual balance sheet of the average airframe manufacturer on December 31, 1943, is used as a starting point and is indicated as Balance Sheet No. 1 on Table A. Adjustments are first made to this statement to reflect the effect of two years of continued large-scale wartime operations; Balance Sheet No. 2, as of December 31, 1945, gives effect to these adjustments. Then adjustments are made to

this No. 2 statement to reflect the liquidation of assets and liabilities during 1946; Balance Sheet No. 3 reflects these changes. The remaining adjustments are then made to reflect the effect of termination losses and unreimbursed expenditures in 1946 (as optimistically estimated). The reasonably optimistic statement as of December 31, 1946, is then shown as Balance Sheet No. 4 in the last column of Table A.

In the derivation of the out-of-cash balance sheets (Tables B and C), the same assumptions are made regarding all factors except that the higher levels of termination losses or unreimbursed expenditures are assumed. Therefore, all of those adjustments reflected in Balance Sheet No. 3 on Table A are the same for both the optimistic and the out-of-cash statements. Hence, Balance Sheet No. 3 is used as the starting point in Tables B and C. On both of these tables, adjustments are made to indicate the effect of termination losses and unreimbursed expenditures sufficiently high to eliminate all cash. In Table B, expenditures are increased while termination losses remain at the optimistically estimated low level. In Table C, termination losses are increased and expenditures are kept at the optimistic level. In this manner, the two out-of-cash balance sheets for December 31, 1946, are derived.

The specific adjustments made in deriving the various balance sheets, the basic assumptions upon which each adjustment is based, and comments thereon, when necessary, are stated below. For the person who wishes to follow in detail each adjustment in Tables A, B, and C, the debits and credits to individual accounts are shown for each specific adjustment.

Table A. Derivation of Reasonably Optimistic Projected Balance Sheet of the Average Airframe Manufacturer: December 31, 1946

(In thousands)

Items	Balance Sheet No. 1	Adjustments for Continued War Operations		Balance Sheet No. 2	Adjustments for Year Following Major Terminations (Year 1946)				Balance Sheet No. 4	
	Actual Balance Sheet December 31, 1943	Retained Cash Profits	Partial Liquidation of Assets and Liabilities	Projected Balance Sheet December 31, 1945	Adjustments for Liquidation of Assets and Liabilities		Balance Sheet No. 3	Adjustments for Unreimbursed Expenditures and Termination Losses		Final Projected Balance Sheet, December 31, 1946
					Tax Adjustments	Other Adjustments	Preliminary Projected Bal. Sheet, Dec. 31, 1946	Losses and Unreimbursed Expenditures	Tax Claims	
ASSETS										
CURRENT ASSETS:										
Cash and Marketable Securities.....	\$ 59,548	{ \$7,155 ^a 2,400 ^b	\$38,052 ^d	\$ 31,051	\$7,190 ^e	{ 340 ^g \$11,195 ^h	\$27,386	{ \$11,200 ^j 1,618 ^k		\$17,804
Accounts Receivable, including Advances to Vendors.....	107,750		32,325 ^d	75,425		67,344 ^h	8,081			8,081
Inventories.....	45,357		13,607 ^d	31,750		27,214 ^h	4,536			4,536
Contract Termination Claims.....	.....		.....	.....		27,214 ^h	27,214	27,214 ^k		.....
Total Current Assets.....	\$212,655			\$138,226			\$67,217			\$30,421
FEDERAL TAX REFUND CLAIMS.....					{ 272 ^e 1,116 ^f		1,388		\$8,257 ⁿ	9,645
NET PLANT, PROPERTY, AND EQUIPMENT.....	8,077	2,400 ^b		5,677	2,535 ^f		3,142	{ 560 ^j 403 ^m		3,299
EXPENDITURES UNDER EMERGENCY PLANT FACILITIES CONTRACTS, NET OF AMORTIZATION.....	810	409 ^c		401		401 ^g	.....			.....
POSTWAR TAX REFUND.....	3,473	4,095 ^a		7,568	7,568 ^e		.....			.....
DEFERRED CHARGES AND MISCELLANEOUS ASSETS.....	1,821			1,821			1,821	1,966 ^m		455
CAPITALIZED DEVELOPMENT EXPENDITURES	.....			.....			.....	2,800 ^j		2,800
TOTAL ASSETS.....	\$226,836			\$153,693			\$73,568			\$46,620
LIABILITIES										
CURRENT LIABILITIES:										
Accounts Payable and Miscellaneous Current Liabilities.....	\$ 48,729		14,619 ^d	\$ 34,110		31,674 ^h	\$ 2,436			\$ 2,436
Provision for Federal Income and Excess Profits Taxes.....	36,490		21,140 ^d	15,350	709 ^f	14,641 ^h	.....			.....
Refunds Due U. S. Government.....	22,048		22,048 ^d	.....		.....	.....			.....
Advances, Progress Payments, and Bank Loans	87,257		26,177 ^d	61,080		32,224 ^h	28,856	24,493 ^k		4,363
Total Current Liabilities.....	\$194,524			\$110,540			\$31,292			\$ 6,799
BANK LOANS UNDER EMERGENCY PLANT FACILITIES CONTRACTS.....	470	409 ^c		61		61 ^g	.....			.....
OTHER NONCURRENT LIABILITIES.....	311			311			311			78
NET WORTH.....	31,531	11,250 ^a		42,781	{ 106 ^e 710 ^f		41,965	{ 233 ^m 7,840 ^j 1,103 ^k 1,536 ^m	8,257 ⁿ	39,743
TOTAL LIABILITIES.....	\$226,836			\$153,693			\$73,568			\$46,620
NET WORKING CAPITAL (current assets less current liabilities).....	\$ 18,131			\$ 27,686			\$ 35,925			\$23,622

NOTE: The assumptions underlying each of the above adjustments are explained in the accompanying notes. For convenience, each set of adjustments is lettered and the notes segregated according to these letters. Amounts in italics are credit entries, indicating a decrease in assets or an increase in liabilities. Amounts not in italics are debit entries, indicating an increase in assets or a decrease in liabilities.

Derivation of Reasonably Optimistic Balance Sheet, Table A

Adjustments to Balance Sheet No. 1 Giving Effect to an Estimated Two Years of Continued War Operations

Adjustment a: adjustment for profits retained in the company during 1944 and 1945.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Cash and Marketable Securities	\$7,155,000	
Increase in Postwar Tax Refund	4,095,000	
Increase in Net Worth		\$11,250,000

BASIC ASSUMPTION:

Retained profits (net profits less dividends) in 1944 will be the same as in 1943, while cutbacks and partial cancellations will reduce 1945 retained profits to 50% of the 1944 level.

COMMENT:

In the construction of estimated profit and loss statements for 1944 and 1945, the assumption has been made that the present federal income tax law will remain in effect throughout 1944 and 1945. No attempt has been made to take into account any changes in the nature of the company's business, such as a further shift to cost-plus-fixed-fee business or to commercial business.

Adjustment b: adjustment to include the unexpended portion of depreciation and amortization charges for 1944 and 1945 as a source of funds.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Cash and Marketable Securities	\$2,400,000	
Decrease in Net Plant, Property, and Equipment:		
Increase in Reserve for Depreciation and Amortization	\$4,000,000	
Less: Increase in Plant, Property, and Equipment	1,600,000	
		\$2,400,000

BASIC ASSUMPTION:

An amount equivalent to 40% of the total depreciation and amortization expense for 1944 and 1945 will be expended to increase plant, property, and equipment. Cash will increase to reflect the unexpended depreciation and amortization charges, the increase being 60% of the charges during 1944 and 1945.

COMMENT:

The estimates of depreciation and amortization charges are based on individual company reports and on Form 10K reports on file with the Securities and Exchange Commission.

Adjustment c: adjustment for the reimbursements received during 1944 and 1945 from the United States Government for reimbursable costs incurred in the acquisition or construction of fixed assets under Emergency Plant Facilities contracts.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Decrease in Bank Loans under Emergency Plant Facilities Contracts	\$409,000	
Decrease in Net Unreimbursed Expenditures under Emergency Plant Facilities Contracts		\$409,000

BASIC ASSUMPTION:

Expenditures under Emergency Plant Facilities contracts will be reimbursed by the United States Government at a rate of 20% per year. Payments received will be used to reduce the bank loan made under these contracts.

Adjustment d: adjustment for a reduction in current assets and current liabilities to reflect 30% cutbacks and partial cancellations during 1945.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Decrease in Accounts Payable and Miscellaneous Current Liabilities	\$14,619,000	
Decrease in Provision for Federal Income and Excess Profits Taxes	21,140,000	
Decrease in Refunds Due United States Government	22,048,000	
Decrease in Advances, Progress Payments, and Bank Loans	26,177,000	
Decrease in Cash and Marketable Securities		\$38,052,000
Decrease in Accounts Receivable		32,325,000
Decrease in Inventories		13,607,000

BASIC ASSUMPTION:

Large-scale wartime production will continue until December 31, 1945, but cutbacks will reduce 1945 sales 30% below the 1944 level. The cutback will decrease accounts receivable, inventories, accounts payable and miscellaneous current liabilities, and advances, progress payments, and bank loans to a level 30% below the December 31, 1943, level. The federal income and excess profits tax liability will decrease to reflect the lower profits during 1945. Refunds due the United States Government at the end of 1943 will be paid and no further liability for refunds will be incurred. Final termination settlements on contracts canceled during 1944 and 1945 will be made before December 31, 1945.

Adjustments to Balance Sheet Statement No. 2 Giving Effect to Liquidation of Assets and Liabilities during 1946

Adjustment e: adjustment for the conversion of the postwar tax refund into cash.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Cash and Marketable Securities	\$7,190,000	
Increase in Federal Tax Refund Claim	272,000	
Decrease in Net Worth	106,000	
Decrease in Postwar Tax Refund		\$7,568,000

BASIC ASSUMPTION:

Before December 31, 1946, the postwar tax refund will be converted into cash at a 5% discount.

COMMENT:

The postwar tax refund certificates become negotiable after the declared cessation of hostilities. Because they pay no interest and will mature at varying periods several years hence, they will have to be sold at a discount. Approximately the same effect on cash would result if the company borrowed 95% on the face value of its refund certificates.

It has been assumed that the loss resulting from the 5% discount be considered as a loss incurred in 1946 and that the company will file a claim for a refund of prior years' taxes under the loss carry-back provision of the federal tax law. Therefore, a federal tax claim has been set up. This tax claim is classed as a noncurrent asset. Even if the loss carry-back provision of the present tax law remains in effect, it will probably take considerably longer than one year after December 31, 1946, to submit a claim, to have it processed by the Bureau of Internal Revenue, and to receive payment of the claim.

Adjustment f: adjustment for accelerated amortization of emergency plant facilities constructed under certificates of necessity.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Federal Tax Refund Claim	\$1,116,000	
Decrease in Provision for Federal Income and Excess Profits Taxes	709,000	
Decrease in Net Worth	710,000	
Decrease in Net Plant, Property, and Equipment		\$2,535,000

BASIC ASSUMPTION:

The amortization of emergency plant facilities constructed under certificates of necessity will be recomputed during 1946 and claims for refunds of prior years' taxes will be filed (except for the year 1945). It is assumed that the company will revise its 1945 federal income tax return before making full tax payments in 1946 to allow for accelerated amortization. Hence, the current tax liabilities paid in 1946 will be lowered accordingly.

COMMENT:

The accelerated amortization carried back against 1945 and prior years is estimated on the basis of individual company reports and Form 10K reports on file with the Securities and Exchange Commission.

Adjustment g: Adjustment for the payment of the net unreimbursed expenditures incurred in the acquisition or construction of fixed assets under Emergency Plant Facilities contracts.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Cash and Marketable Securities	\$340,000	
Decrease in Bank Loans under Emergency Plant Facilities Contracts	61,000	
Decrease in Net Unreimbursed Expenditures under Emergency Plant Facilities Contracts		\$401,000

BASIC ASSUMPTION:

Expenditures under Emergency Plant Facilities contracts still unreimbursed by the United States Government on December 31, 1945, will be reimbursed in 1946, and any remaining bank loans made under these contracts will be liquidated. Title to these facilities will pass to the United States Government at that time.

Adjustment h: adjustment to reduce current assets and liabilities to the level necessary for immediate postwar operations.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Contract Termination Claims	\$27,214,000	
Decrease in Accounts Payable and Miscellaneous Current Liabilities	31,674,000	
Decrease in Provision for Federal Income and Excess Profits Taxes	14,641,000	
Decrease in Advances, Progress Payments, and Bank Loans	32,224,000	
Decrease in Cash and Marketable Securities		\$11,195,000
Decrease in Accounts Receivable		67,344,000
Decrease in Inventories		27,214,000

BASIC ASSUMPTION:

By December 31, 1946, all federal tax liabilities will be paid. Cutbacks and cancellations of contracts will reduce other current assets and current liabilities to levels considered normal for a volume of sales equal to 5% of the 1944 level. The following normal levels are expressed as percentages of the December 31, 1943, level: accounts receivable, 7½%; inventories, 10%; accounts payable and miscellaneous current liabilities, 5%; and advances, progress payments, and bank loans, 5%. It is further assumed that contract termination claims equal to the reduction in inventories will be set up, and that additional advances or bank loans will be obtained amounting to 90% of these contract termination claims.

¹The December 31, 1943, level is assumed to be the same as the December 31, 1944, level. Since no end-of-the-year balance sheet is given for 1944, the percentages are expressed as of the 1943 level.

COMMENT:

The levels assumed for accounts receivable, inventories, accounts payable and miscellaneous current liabilities, and advances and progress payments are considered normal for a dollar volume of sales equal to 5% of the 1944 volume. These estimates are based on a study of prewar levels of current assets and liabilities of airframe manufacturers and on discussions of the variables involved with industry and government executives.

It is assumed that the company will submit termination claims in an amount equal to the reduction in company-owned inventories. Actually, claims may not be submitted for all such inventories. This possible decrease may be offset or more than offset by other claims submitted, including claims for profits allowed on work-in-process not yet delivered under fixed-price contracts.

Adjustments to Balance Sheet Statement No. 3 Giving Effect to Reasonably Optimistic Estimates of Termination Losses and Unreimbursed Expenditures during 1946

Adjustment j: adjustment for reasonably optimistic estimate of unreimbursed expenditures during 1946.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Decrease in Net Worth (excluding federal income tax adjustments)	\$7,840,000	
Increase in Capitalized Development Expenditures	2,800,000	
Increase in Net Plant, Property, and Equipment		560,000
Decrease in Cash and Marketable Securities		\$11,200,000

BASIC ASSUMPTION:

Unreimbursed expenditures during the year after major terminations, 1946, will total 2% of the war peak level of annual expenses. It is arbitrarily assumed that 70% of the total unreimbursed expenditures will be charged to current operations, 25% to capitalized development expenditures, and 5% to fixed assets.

COMMENT:

Unreimbursed expenditures include all expenditures for which the company is not reimbursed during the year following major terminations either by the government or by commercial customers. These unreimbursed expenditures could in part be represented by increased inventories. This assumption has not been made, however, since current assets were adjusted earlier on another basis (see *Adjustment h*).

Federal income tax adjustments arising because of the losses incurred are not included here, but are shown separately (see *Adjustment n*).

The company will of course be reimbursed for some expenditures made in 1946. It will receive payments under the terms of any active contracts, and it will receive reimbursement from the government for some post-termination expenses. To simplify the presentation, adjustments are not made to reflect the flow of funds due to these reimbursed expenditures. The crucial factor affecting the company's working capital position is the level of unreimbursed expenditures in 1946, and hence adjustments are made to reflect only these unreimbursed cash outlays.

Adjustment k: adjustment for reasonably optimistic estimate of termination settlement losses.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Cash and Marketable Securities	\$ 1,618,000	
Decrease in Advances, Progress Payments, and Bank Loans	24,493,000	
Decrease in Net Worth (excluding federal income tax adjustments)	1,103,000	
Decrease in Contract Termination Claims		\$27,214,000

BASIC ASSUMPTION:

The net loss on contract termination settlements will be limited to 1% of total inventories on December 31, 1945, including company-owned inventories and government-owned inventories connected with cost-plus-fixed-fee contracts. This loss excludes any loss arising from disallowance of post-termination expenses, which are taken into account in determining the level of unreimbursed expenditures (*Adjustment j*).

COMMENT:

It is estimated that total inventories on December 31, 1945, will be 30% lower than the actual inventories on December 31, 1943, because of the cutbacks and partial cancellations occurring in 1945.

Termination losses, as defined herein, represent the reduction in net working capital which will occur in making termination settlements. Hence, they are net losses rather than total disallowances of the company's termination claims; that is, they represent gross disallowances of claims less profits allowed on the terminated contracts less reserves for such losses already on the company's books.

For tax purposes, the company may be able to consider some

inventory losses connected with termination settlements as losses occurring in 1945, even though the amount of the loss is determined in 1946. If such losses are established before 1945 federal tax liabilities are paid, the company may be able to file an amended 1945 tax return and pay lower taxes. Because of the uncertainties involved, no allowance is made in the above adjustments for such a reduction in current tax liabilities.

Adjustment m: adjustment for partial liquidation of miscellaneous assets and liabilities and for depreciation during 1946.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Decrease in Net Worth (excluding federal income tax adjustment)	\$1,536,000	
Decrease in Other Noncurrent Liabilities	233,000	
Decrease in Deferred Charges and Miscellaneous Assets		\$1,366,000
Decrease in Net Plant, Property and Equipment		403,000

Table B. Derivation of Out-of-Cash Projected Balance Sheet of the Average Airframe Manufacturer, December 31, 1946, with Reasonably Optimistic Estimate of Termination Losses

(In thousands)

Items	Balance Sheet No. 3*	Adjustments for Unreimbursed Expenditures and Termination Losses		Balance Sheet No. 5
	Projected Balance Sheet, December 31, 1946	Losses	Tax Claims	Projected Balance Sheet, December 31, 1946
ASSETS				
CURRENT ASSETS:				
Cash and Marketable Securities.....	\$27,386	{ \$29,004p 1,618q		.....
Accounts Receivable, including Advances to Vendors.....	8,081			\$ 8,081
Inventories.....	4,536			4,536
Contract Termination Claims.....	27,214	27,214q		.....
Total Current Assets.....	\$67,217			\$12,617
FEDERAL TAX REFUND CLAIMS.....	1,388	{ 1,450p 403r	\$18,913s	20,301
NET PLANT, PROPERTY, AND EQUIPMENT.....	3,142				4,189
POSTWAR TAX REFUND.....	.....			.....
DEFERRED CHARGES AND MISCELLANEOUS ASSETS.....	1,821	1,366r		455
CAPITALIZED DEVELOPMENT EXPENDITURES.....	.....	7,251p		7,251
TOTAL ASSETS.....	\$73,568			\$44,813
LIABILITIES				
CURRENT LIABILITIES:				
Accounts Payable and Miscellaneous Current Liabilities.....	\$ 2,436			\$ 2,436
Provision for Federal Income and Excess Profits Taxes.....	.....			.....
Refunds Due U. S. Government.....	.....			.....
Advances, Progress Payments, and Bank Loans.....	28,856	24,493q		4,363
Total Current Liabilities.....	\$31,292			\$ 6,799
OTHER NONCURRENT LIABILITIES.....	311	233r		78
NET WORTH.....	41,965	{ 20,303p 1,103q 1,536r	18,913s	37,936
TOTAL LIABILITIES.....	\$73,568					$44,813
NET WORKING CAPITAL.....	\$35,925			\$ 5,818

*Balance Sheet 3 in Table A.

NOTE: The assumptions underlying each of the above adjustments are explained in the accompanying notes. For convenience, each set of adjustments is lettered and the notes segregated according to these letters. Amounts shown in italics are credit entries, indicating a decrease in assets or an increase in liabilities. Adjustments not shown in italics are debit entries, indicating an increase in assets or a decrease in liabilities.

BASIC ASSUMPTION:

Noncash adjustments during 1946 will decrease deferred charges and miscellaneous current assets, by 75% and will decrease miscellaneous noncurrent liabilities by 75%. The reserve for depreciation of fixed assets will increase because of the normal depreciation charges during the year. Net worth will decrease to the extent of the difference between these adjustments.

COMMENT:

As the scale of operations decreases, deferred charges will be written off against current operations, and some miscellaneous other assets will be liquidated. Also, the special reserves included in miscellaneous noncurrent liabilities will be decreased as losses are written off against them. In addition, the noncash expense of depreciation will be incurred by the company. Since the unreimbursed expenditures included in *Adjustment j* exclude losses arising from expenses not involving cash, these separate adjustments are necessary.

Adjustment n: adjustment for federal tax refund claims accrued in 1946.

SPECIFIC ADJUSTMENTS:

	<i>Debit</i>	<i>Credit</i>
Increase in Federal Tax Refund Claim	\$8,257,000	
Increase in Net Worth		\$8,257,000

BASIC ASSUMPTION:

The average company will make claims for federal tax refunds under the loss carry-back and the unused excess profits credit carry-back provisions of the law, thus increasing total federal tax refund claims. Because net worth was previously decreased by the amount of gross losses before any provision for changes in federal tax claims, these federal tax adjustments will increase the balance of net worth.

COMMENT:

The total 1946 losses to be carried back are determined by *Adjustments j, k, and m*. In addition to the carry-back of these 1946 losses, the company can also claim a refund of prior years' taxes due to the unused excess profits credit carry-back provision of the law. The resulting federal tax claims are treated as noncurrent assets, as discussed under *Adjustment e*. Data regarding tax computations of individual airframe companies were used in estimating the amount of the tax claims.

Derivation of Out-of-Cash Balance Sheet, Table B

The adjustments made in deriving this out-of-cash balance sheet are identical to those made in deriving the reasonably optimistic balance sheet in Table A, with two exceptions. First, the magnitude of unreimbursed expenditures in 1946 is increased to indicate the maximum unreimbursed expenditures the company can absorb without eliminating all cash. It is assumed that termination losses will remain at the reasonably optimistic level. Second, because of the larger expenditures, the magnitude of the federal tax refund claims is increased.

Balance Sheet No. 3, shown in Table A, is used as the starting point. Adjustments are made to this statement similar in nature to those shown in Table A but differing in magnitude to reflect the above two changes.

Adjustment p: adjustment for "out-of-cash" estimate of unreimbursed expenditures in 1946.

SPECIFIC ADJUSTMENTS:	<i>Debit</i>	<i>Credit</i>
Decrease in Net Worth (excluding federal income tax adjustment)	\$20,303,000	
Increase in Capitalized Development Expenditures		7,251,000

	<i>Debit</i>	<i>Credit</i>
Increase in Net Plant, Property, and Equipment	\$1,450,000	
Decrease in Cash and Marketable Securities		\$29,004,000

BASIC ASSUMPTION:

The magnitude of unreimbursed expenditures will be sufficiently high to reduce the company's cash to zero. The magnitude of termination losses will remain unchanged at the reasonably optimistic level.

Adjustment q: same as *Adjustment k*.

Adjustment r: same as *Adjustment m*.

Adjustment s: adjustment for the federal tax refund claims accrued in 1946.

	<i>Debit</i>	<i>Credit</i>
Increase in Federal Tax Refund Claim	\$18,913,000	
Increase in Net Worth		\$18,913,000

BASIC ASSUMPTION:

The average company will make claims for federal tax refunds under the loss carry-back and the unused excess profits credit carry-back provisions of the law, thus increasing total federal tax refund claims. Because net worth was previously decreased by the amount of gross losses before any provision for changes in federal tax claims, these federal tax adjustments will increase the balance of net worth.

COMMENT:

The losses to be carried back are determined by *Adjustments p, q, and r*.

Derivation of Out-of-Cash Balance Sheet, Table C

The adjustments made in Table C differ in only two respects from those made in deriving the reasonably optimistic statement (Table A). First, the magnitude of termination losses in 1946 is increased to indicate the maximum termination losses the company can absorb without eliminating all cash. It is assumed that unreimbursed expenditures will remain at the reasonably optimistic level (as shown

in Table A). Second, the magnitude of the federal tax refund claims is increased, because of the larger losses.

As in Table B, Balance Sheet No. 3 is used as the starting point. Adjustments are made to this statement similar in nature to those shown in Table A but differing in magnitude to reflect the above two changes.

Adjustment t: same as *Adjustment j*.
Adjustment u: adjustment for "out-of-cash" estimate of termination losses.

Adjustment v: same as *Adjustment m*.
Adjustment w: adjustment for the federal tax refund claim accrued in 1946.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Decrease in Advances, Progress Payments, and Bank Loans	\$24,493,000	
Decrease in Net Worth (excluding federal income tax adjustments)	18,907,000	
Decrease in Cash and Marketable Securities		\$16,186,000
Decrease in Contract Termination Claims		27,214,000

BASIC ASSUMPTION:

The magnitude of termination losses will be sufficiently high to reduce the company's cash to zero. The magnitude of unreimbursed expenditures will remain unchanged at the reasonably optimistic level.

SPECIFIC ADJUSTMENTS:	Debit	Credit
Increase in Federal Tax Refund Claim	\$22,678,000	
Increase in Net Worth		\$22,678,000

BASIC ASSUMPTION:

The average company will make claims for federal tax refunds under the loss carry-back and the unused excess profits credit carry-back provisions of the law, thus increasing total federal tax refund claims. Because net worth was previously decreased by the amount of gross losses before any provision for changes in federal tax claims, these federal tax adjustments will increase the balance of net worth.

COMMENT:

The losses to be carried back are determined by *Adjustments t, u, and v*.

Table C. Derivation of Out-of-Cash Projected Balance Sheet of the Average Airframe Manufacturer, December 31, 1946, with Reasonably Optimistic Estimate of Unreimbursed Expenditures

(In thousands)

Items	Balance Sheet No. 3*	Adjustments for Unreimbursed Expenditures and Termination Losses		Balance Sheet No. 6
	Projected Balance Sheet, December 31, 1946	Losses	Tax Claims	Projected Balance Sheet, December 31, 1946
ASSETS				
CURRENT ASSETS:				
Cash and Marketable Securities.....	\$27,386	{ \$11,200t 16,186u		.....
Accounts Receivable, including Advances to Vendors.....	8,081			\$ 8,081
Inventories.....	4,536			4,536
Contract Termination Claims.....	27,214	27,214u		.....
Total Current Assets.....	\$67,217			\$12,617
FEDERAL TAX REFUND CLAIMS.....	1,388		\$22,678w	24,066
NET PLANT, PROPERTY, AND EQUIPMENT.....	3,142	{ 560t 403v		3,299
POSTWAR TAX REFUND.....	.....			.....
DEFERRED CHARGES AND MISCELLANEOUS ASSETS.....	1,821	1,366v		455
CAPITALIZED DEVELOPMENT EXPENSE.....	.....	2,800t		2,800
TOTAL ASSETS.....	\$73,568			\$43,237
LIABILITIES				
CURRENT LIABILITIES:				
Accounts Payable and Miscellaneous Current Liabilities.....	\$ 2,436			\$2,436
Provision for Federal Income and Excess Profits Taxes.....	.....			.....
Refunds Due U.S. Government.....	.....			.....
Advances, Progress Payments, and Bank Loans.....	28,856	24,493u		4,363
Total Current Liabilities.....	\$31,292			\$ 6,799
OTHER NONCURRENT LIABILITIES.....	311			78
NET WORTH.....	41,965	{ 233v 7,840t 18,907u 1,536v	22,678w	36,360
TOTAL LIABILITIES.....	\$73,568			\$43,237
NET WORKING CAPITAL.....	\$35,925			\$ 5,818

*Balance Sheet 3 in Table A.

NOTE: The assumptions underlying each of the above adjustments are explained in the accompanying notes. For convenience, each set of adjustments is lettered and the notes segregated according to these letters. Amounts shown in italics are credit entries, indicating a decrease in assets or an increase in liabilities. Adjustments not shown in italics are debit entries, indicating an increase in assets or a decrease in liabilities.

APPENDIX C

POSSIBLE VARIATIONS IN ASSUMPTIONS UNDERLYING PROJECTED BALANCE SHEETS

All of the projected financial statements derived in Appendix B are based on a fixed set of assumptions regarding all factors other than the magnitude of termination losses and unreimbursed expenditures in the first postwar year. Obviously, actual future events will differ in greater or lesser degree from any set of assumptions made now. The purpose of this appendix is to analyze each type of possible variation from the fixed assumptions used and to assess the relative importance of these variations.

Four different types of variables will be considered, in the following order:

(1) variations in the amount of cash profits retained from continued wartime production;

(2) variations in the timing of contract cancellations and settlements which would allow any resulting losses to be offset against current tax liabilities to a greater or lesser degree;

(3) variations in the rapidity with which postwar tax refunds can be converted into cash and the extent to which current tax liabilities can be reduced by allowable accelerated amortization of fixed assets;

(4) variations in the extent of liquidation of current assets and liabilities from war peak levels.

Continued Wartime Operations

The length of the war and the future profits retained from wartime operations will clearly have a major influence on the ability of the aircraft industry to meet the financial stresses of conversion. So long as the average manufacturer's profits kept in the business continue near the 1943 level, working capital and cash will rise rapidly. After deduction of dividends, most profits will be added to working capital because expenditures for new plant facilities are almost certain to be small from now on.

In the projected balance sheets it is assumed that large-scale wartime production will continue on a moderately reduced scale until the end of 1945, with 1944 retained profits equal to those of 1943 and with 1945 retained profits amounting to 50% of the 1944 level. Obviously, these events cannot be precisely forecast. The company and government officials responsible for meeting the problems of transition from war to peace must recognize the possibility of a

sudden end of all hostilities and prepare for it. Similarly, gradual cutbacks and cancellations could extend over a longer period of time, with final cessation of hostilities in 1946 or later.

To indicate the importance of these alternatives, two varying sets of assumptions, one more favorable and one less favorable to the company, are stated below, and their effect on net working capital is presented:

1. *Alternative to Basic Assumptions More Favorable to Company*

Assume that wartime production will continue until December 1947. Retained profits in 1944 will equal the 1943 level and in 1945-1947 will be 70% of the 1943 level. An amount equivalent to only 10% of depreciation and amortization charges will be expended for additional fixed assets.

Effect on net working capital, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above More Favorable Assumptions</i>
Actual Net Working Capital, December 31, 1943	\$18,131	\$18,131
Add: Net Profits Retained from Continued Wartime Production	7,155	14,790
Add: Unexpended Depreciation and Amortization Charges during Continued Wartime Operation	2,400	5,770
Estimated Net Working Capital, End of Wartime Production	\$27,686	\$38,691
Increase in Net Working Capital under More Favorable Assumptions		\$11,005

NOTE: In addition, the average company's accrued postwar tax refunds would be \$11,933,000 under the more favorable assumptions instead of the \$7,568,000 estimated in Appendix B.

2. *Alternative to Basic Assumptions Less Favorable to Company*

Assume that wartime production will cease by March 1945. Retained profits in 1944 will be 80% of the 1943 level and 50% of the 1943 rate in the first quarter of 1945. An amount equivalent to 75% of depreciation and amortization charges will be expended for new fixed assets during 1944 and the first quarter of 1945.

Effect on net working capital, average
airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above Less Favorable Assumptions</i>
Actual Net Working Capital, December 31, 1943	\$18,131	\$18,131
Add: Net Profits Retained from Continued Wartime Production	7,155	4,410 ¹
Add: Unexpended Depreciation and Amortization Charges during Continued Wartime Production	2,400	640
Estimated Net Working Capital, End of Wartime Production	\$27,686	\$23,181
Decrease in Net Working Capital under Less Favorable Assumptions		\$4,505

NOTE: In addition, the average company's accrued postwar tax refunds would be \$5,998,000 under the less favorable assumptions instead of the \$7,568,000 estimated in Appendix B.

Variations in Timing of Cancellations and Settlements

In view of its large excess profits tax obligations, the average airframe manufacturer will clearly benefit if contract termination and conversion losses can be offset against current tax liabilities.² This can occur if cancellations and resulting losses are incurred while profits are still being retained on other active large-scale contracts. Then up to 80% of the losses would simply reduce tax liabilities and not constitute a net drain on cash.

In the projected balance sheets, the assumption was made that settlements on 30% partial cutbacks and cancellations would be completed in 1945 and that, after deduction of any resultant losses, retained profits would be 50% of the 1944 level. The completion of final settlements within the year 1945 and the small resultant losses from terminations and volume reduction are probably overoptimistic assumptions.

In another respect, however, the basic assumptions were overly pessimistic, because they stated that

¹The accrued federal taxes on profits during the first quarter of 1945 would probably be offset by losses incurred later in 1945 and hence would never have to be paid. This tax saving is not taken into account in the above computations, which are designed to isolate the effect of variations in profits retained from wartime operations. The effect of such tax savings is considered in the following section.

²Under the loss carry-back federal tax provision, the company can claim a refund of the prior two years' taxes to the extent that losses are incurred. This refund is not likely to be paid for several years and hence will not aid the company's cash position in the immediate postwar period under consideration. One of the recommendations of Section V is that estimated loss carry-back claims should be considered as allowable offsets against current tax liabilities. If this were made lawful, cash from such claims would be available for use at the time of most urgent need, and accidental variations in the timing of losses would be much less important.

Large-scale cancellations would occur just at the end of the 1945 fiscal year. It would be an unlikely accident if these cancellations did occur just at a fiscal year end. If they occurred in, say, June 1946 and if most resulting losses could be established before December of that year, the losses of the latter half could be offset against the profits of the first half of the year.³

The estimated effect of varying the basic assumptions to allow for these variations in timing are indicated below:

1. Alternative to Basic Assumptions More Favorable to Company

Consider that all termination losses and unreimbursed expenditures (except those not chargeable to current operations) can be offset against current tax liabilities. This could occur, because of gradual during-the-war cancellations and/or because losses resulting from large-scale cancellations were so timed that they could be offset against profits made earlier in the fiscal year. Assume, further, that losses are limited to the reasonably optimistic level.

Effect on net working capital, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above More Favorable Assumptions</i>
Estimated Peak Net Working Capital before Decreases Due to Termination and Conversion ⁴	\$35,925	\$35,925
Deduct: Gross Decrease Due to Termination Losses and Unreimbursed Expenditures	12,303	12,303
Subtotal	\$23,622	\$23,622
Add: Estimated Reduction in Current Tax Liability Because of Losses	.....	7,545
Estimated Net Working Capital, Year after End of War Production	\$23,622	\$31,167
Increase in Net Working Capital under More Favorable Assumptions		\$7,545

³One further way in which losses may be offset against current tax liabilities was not considered in the basic assumptions made. The company may be able to claim that inventory losses resulting from termination settlements were actually incurred in the prior year, although the amount was not determined until later. If the average company made final settlements before December, 1946, it might file an amended 1945 tax return claiming the losses were incurred in 1945, thus reducing the December tax payments. On the reasonably optimistic basis, termination losses are only \$1,100,000, and hence the resultant tax savings would be of minor importance. There is also considerable doubt as to the ability of the company to reach final settlements in less than a year.

⁴See Table A, Appendix B, for the derivation of this estimate.

2. *Alternative to Basic Assumptions Less Favorable to Company*

Assume that all contracts will be canceled at the end of the 1945 fiscal year, with no cutbacks or partial cancellations prior to that time. Because cancellations involve a 100% reduction from 1944 volume, instead of the 70% reduction previously assumed, raise the optimistic estimate of termination losses and unreimbursed expenditures proportionately.

Effect on net working capital, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above Less Favorable Assumptions</i>
Estimated Peak Net Working Capital before Decreases Due to Termination and Conversion ¹	\$35,925	\$35,925
<i>Deduct:</i> Gross Decrease Due to Termination Losses and Unreimbursed Expenditures	12,303	17,576
Estimated Net Working Capital, Year after End of War Production	\$23,622	\$18,349
Decrease in Net Working Capital under Less Favorable Assumptions		\$ 5,273

Variations in Immediate Tax Benefits

After the final cessation of hostilities, the average airframe manufacturer may not be able to realize fully the immediate tax benefits which the projected statements assume will be received. These benefits include conversion of postwar tax refunds into cash and a current tax saving due to allowable accelerated amortization of fixed assets.

It is estimated that the average company's postwar tax refund will amount to \$7,568,000 by the end of 1945 or 27% of total net working capital.² The company's liquid resources will obviously be greatly improved if, as was assumed in the projected statements, all of these refunds are converted into cash at a 5% discount.³ Two circumstances may, however, make it impossible for the company to

¹See Table A, Appendix B, for the derivation of this estimate.

²Since 1941, corporations have been allowed a postwar tax refund amounting to 10% of total federal excess profits tax payments, except in instances where the corporation made certain debt reductions in lieu of receiving refund certificates. See Appendix B for details regarding the estimates of the average airframe manufacturer's refund and net working capital at the end of 1945.

³Under the present tax law, postwar tax refund certificates become negotiable upon the official government declaration of cessation of hostilities but do not mature until several years later. Because they are non-interest-bearing, they would have to be sold at a discount. Practically, the company may elect to hold its refund certificates until they mature, several years hence. If it should so elect, the company should be able to obtain bank loans, using its refund certificates as collateral, and thus in effect increase its available cash.

convert its refund certificates into cash in the first year after large-scale war production ends. First, the official declaration of cessation of hostilities may be delayed until well after large-scale production ends, and since the certificates do not become negotiable until this declaration is made, they could not be sold and they might not be regarded as satisfactory collateral for a bank loan. Second, it is rather certain that not all of the actual refund certificates will be issued to the company in the first year after war production ends, for under the present tax law their issuance is not required until later.⁴ Hence, the company may not be able to use part or all of its postwar refunds in the year after major terminations.

In the projected balance sheets, it was further assumed that the company could reduce its current tax liabilities because of accelerated amortization of fixed assets constructed under certificates of necessity. Omitting the details of this transaction, the net effect of accelerated amortization will be to allow the company to claim a refund of federal taxes paid in previous years and, presumably, to reduce the actual tax payments accrued on the preceding year's income. Thus, the tax on 1945 income paid in 1946 is assumed to be reduced. Such a saving in current tax payments, however, may not be realized, either because of postponement of the date when acceleration is permitted or because of inability to file an amended tax return in 1946.

The effect of such variations on the immediate tax benefits received by the average company would be as follows:

1. *Alternative to Basic Assumptions More Favorable to Company*

Under the basic assumptions used in Appendix B, immediate tax benefits would be realized to the maximum probable degree. Hence, no "more favorable" assumptions will be shown.

2. *Alternative to Basic Assumptions Less Favorable to Company*

Assume that postwar tax refunds cannot be converted into cash in 1946 and that a current tax saving

⁴For any given year the actual certificates for postwar tax refunds are not required to be issued to the taxpaying company until three months after all taxes for the year are paid. Since the final payment of taxes on 1945 income will not occur until December 15, 1946, the certificates may not be issued to the company until March 15, 1947. Hence, certificates for that portion of the refund applicable to 1945 income may not be available until March, 1947. In the construction of the projected balance sheets, it was assumed that the certificates would be issued before December 31, 1946, and sold at a discount prior to that time.

cannot be realized because of accelerated amortization.

Effect on net working capital, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above Less Favorable Assumptions</i>
Estimated Net Working Capital, December 31, 1945 ¹	\$27,686	\$27,686
<i>Add:</i> Increase Due to Amortization of Expenditures under Emergency Plant Facilities Contracts	340	340
<i>Add:</i> Increase Due to Conversion of Postwar Tax Refund into Cash	7,190	.....
<i>Add:</i> Increase Due to Current Tax Saving from Accelerated Amortization of Fixed Assets	709	.....
Estimated Peak Net Working Capital before Decreases Due to Termination and Conversion Losses	\$35,925	\$28,026
Decrease in Net Working Capital under Less Favorable Assumptions		\$ 7,899

Variations in Liquidation of Current Assets and Liabilities

In adjusting from inflated war production to the much lower levels of peacetime production, the average airframe company will undoubtedly liquidate most of its current assets and pay off most of its current liabilities. Thus, in the projected balance sheets shown in Appendix B, the following drastic reductions in the average company's current assets and liabilities were estimated:

	<i>Amounts (in thousands) from Balance Sheets for Years Ended December 31:</i>		
	<i>1943 (Actual)</i>	<i>1945 (Projected)²</i>	<i>1946 (Projected—Reasonably Optimistic)³</i>
Current Assets:			
Cash	\$ 59,548	\$ 31,051	\$ 17,804
Receivables	107,750	75,425	8,081
Inventories	45,357	31,750	4,536
Total Current Assets	\$212,655	\$138,226	\$30,421
Less: Total Current Liabilities	194,524	110,540	6,799
Net Working Capital	\$ 18,131	\$ 27,686	\$23,622

These estimates, based on a 1946 level of sales equal to 5% of 1944 volume and based on a study of prewar working capital needs of the manufacturers, are believed to be realistic. They are, however, sub-

¹See Table A, Appendix B, for the derivation of this estimate.

²End of war production.

³Year after end of war production.

ject to a wide degree of error. For example, if postwar sales increased to 10% of the 1944 level or decreased to 2½%, the level of current assets and liabilities in December, 1946, would almost certainly be very different from the above estimates.

In addition, all of the projected statements are based on the assumptions, probably optimistic, that termination settlements will have been made by December, 1946. If final settlements were delayed, the company's December 31, 1946, balance sheet would show some funds invested in unsettled termination claims. Even if advances and loans up to 90% of total claims were used, the remaining 10% would have to be financed by the company.

Aside from losses involved in asset liquidation, which are considered separately, the amount of net working capital would not be affected by changes in the magnitude of individual current asset and liability items. The level of cash could, however, be substantially changed, as indicated by the following sets of assumptions:

1. *Alternative to Basic Assumptions More Favorable to Company*

Assume that postwar sales will decrease to 2½% of war peak sales and that the magnitude of current assets and liabilities will decrease proportionately. While such a low volume of operations will undoubtedly affect the company's profits adversely, more cash will be freed because of the greater liquidation of current assets.

Effect on cash balance, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above More Favorable Assumptions</i>
Estimated Cash Balance, December 31, 1945 ⁴	\$ 31,051	\$ 31,051
<i>Add:</i> Increase Due to Receivables and Inventories Liquidated in 1946	94,558	100,867
Subtotal	\$125,609	\$131,918
<i>Deduct:</i> Decrease Due to Current Liabilities Paid Off in 1946	103,032	106,432
<i>Deduct:</i> Net Decrease in Cash Due to Termination Losses, Unreimbursed Expenditures, and Other Adjustments ⁵	4,773	4,773
Total Deductions	\$107,805	\$111,205
Estimated Cash Balance, December 31, 1946	\$ 17,804	\$ 20,713
Increase in Cash Balance under More Favorable Assumptions		\$ 2,909

⁴Including restricted and unrestricted cash and marketable securities. See Table A, Appendix B, for the derivation of this estimate.

⁵Termination losses and unreimbursed expenditures are based on the reasonably optimistic estimates of these losses.

2. *Alternative to Basic Assumptions Less Favorable Company*

Assume that postwar sales will decrease only to 10% of war peak sales and that the magnitude of current assets and liabilities will decrease proportionately. Under the basic assumption it was considered that all payments connected with terminated contracts would be made by December 31, 1946, and it was further considered that advances and loans up to 90% of total claims would be made available to the company. As a less favorable alternate assume that government payments for company-owned inventories connected with terminated contracts will not have been made by December 31, 1946, and that termination claims for these inventories will remain on the books as a current asset. In addition, assume that advances and loans can be obtained for 80% of these claims.

Effect on cash balance, average airframe manufacturer, in thousands:

	<i>Under Basic Assumptions, Appendix B</i>	<i>Under Above Less Favorable Assumptions</i>
Estimated Cash Balance, December 31, 1945 ¹	\$ 31,051	\$ 31,051
Add: Increase Due to Receivables and Inventories Liquidated in 1946	94,558	59,263
Subtotal	\$125,609	\$ 90,314
Deduct: Decrease Due to Current Liabilities Paid Off in 1946	103,032	78,090
Net Changes in Cash Due to Termination Losses, Unreimbursed Expenditures, and Other Adjustments ²	4,773	4,773
Total Deductions	\$107,805	\$ 82,863
Estimated Cash Balance, December 31, 1946	\$ 17,804	\$ 7,451
Decrease in Cash Balance under Less Favorable Assumptions		\$ 10,353

¹Including restricted and unrestricted cash and marketable securities. See Table A, Appendix B, for the derivation of this estimate.

²Termination losses and unreimbursed expenditures are based on the reasonably optimistic estimates of these losses.

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