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ARMY TROOP SUPPORT AND AVIATION MATERIEL READINESS CO--ETC F/G 9/2
HISTORICAL INFLATION PROGRAM. (A COMPUTER PROGRAM GENERATING HI--ETC(U)
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USATSARCOM TECHNICAL REPORT 79-1

HISTORICAL INFLATION PROGRAM

LEVEL III

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(A COMPUTER PROGRAM GENERATING HISTORICAL INFLATION INDICES FOR ARMY AIRCRAFT)

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WARREN H. GILLE, JR.

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FINAL REPORT

FEBRUARY 1979

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U.S. ARMY TROOP SUPPORT
AND AVIATION MATERIEL
READINESS COMMAND
COMPTROLLER
COST ANALYSIS DIVISION
4300 GOODFELLOW BLVD.
ST. LOUIS, MISSOURI 63120



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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report extends and revises Technical Report 77-4 which presents and describes the Historical Inflation Program, a computerized program generating historical inflation indices for the procurement of Army aircraft. The program can be updated monthly, is easily revised for changes in Bureau of Labor Statistics methods, and capable of handling data for all fiscal year formats. Output is expressed as monthly, quarterly, calendar year inflation indices (in Calendar Year 1967 base) and inflation factors (in any Fiscal Year base). This report contains updated tables of inflation factors, expressed in a FY 79 base.		

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20. ABSTRACT.

These indices and factors provide a means of adjusting historical cost data for the procurement of Army aircraft to constant year dollars. Additional features include: computations for the Derivation of Revised Weighting Factors, detailed indices enabling the adjustment of historical Labor and Material cost separately, a discussion of aggregate weighting factors for Labor and Materials, including trends from sensitivity analysis with more background materials and additional documentation, aimed at making the report useful to a large cross section of the DOD/Rotary Wing Aircraft Community.

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DISCLAIMER STATEMENT

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other documentation.

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The author extends his appreciation to Mr. Mike Putnam of the Kansas City Regional Office of the Bureau of Labor Statistics, U.S. Department of Labor, for his assistance with wage and price data.

Credit is due Mr. Ralph Lilge, USAAVRADCOM, who played a primary role in automating the Historical Inflation Program in 1975.

Mrs. Anne Clark, Mrs. Joan Phelan, and Miss Paula Smith provided excellent clerical support in the revision of this paper.

I. APPLICABILITY. The inflation indices and factors published in this report are applicable to the adjustment of historical costs for the procurement of Army aircraft. These costs are currently funded by the Aircraft Procurement, Army appropriation.

II. AN OVERVIEW OF THE HISTORICAL INFLATION PROGRAM.

A. History.

The Historical Inflation Program for Army aircraft procurement was developed using a sequence of documents, the first being Aerospace Price Indices, by H.G. Campbell (RAND # R-568-PR, 12/70). Essentially, the RAND document established a basis for the construction of general indices, identified items of special interest and concern, and indicated that no substitute exists for thorough analysis of the specific items being characterized by an historical index. Several indices, designed specifically for rotary wing aircraft, have been developed for the adjustment of procurement cost since that time by the United States Army Aviation Systems Command, and this function has been carried over to the Components and Operational Studies Branch, Cost Analysis Division, Office of the Comptroller, USATSARCOM.

The current indices are based on research done in the period 1972 to date. In June 1973, the Office of the Comptroller, Cost Analysis Division, made a study of materials used in the Army helicopter systems then, or most recently, in production. Cost Information Reports were assembled, and contractors were requested to supply lists of materials for both airframe and engine, on the basis of contribution to weight. Contractor technical and engineering personnel provided assistance with data interpretation and definitions for those items whose composition was unclear from engineering documents and Detailed Weight Statements.

The following aircraft were selected:

UH-1H	OH-6A	AH-1G
CH-47C	OH-58A	CH-54B

These are currently deemed typical, for several reasons. First, the time period June 1973 is the approximate center of the 1969-1978 range. Second, a number of these aircraft had been produced on a long term, continuing basis in previous versions. And, third, and most important, they are among the systems most likely to be used in developing Cost Estimating Relationships for new systems by use of parametric techniques.

The September 1973 Historical Inflation Cost Research Report, cited in the references, was the first report to make full use of this information. It was updated by the August 1974 Cost Research Report, and then by a series of expanded analyses under current title, Historical Inflation Program, since that time. A list of the assumptions and changes in methodology over the period referenced are included in the body of the Technical Section.

B. Construction of Indices - Methodology.

The indices are developed by a stepwise, building process, which computes the contributions to cost on a weighted value-added basis.

1. First, the contribution to cost of small parts and other purchased equipment is calculated.
2. Next, this cost contribution of purchased parts is combined with that of raw materials to get the cost of purchased materials.
3. Purchased material cost is then combined with contractor

labor cost to compute the index for products such as engine or airframe.

4. The indices for engine, airframe, and avionics are combined to get an overall index for aggregate aircraft.

C. Indexing Technique.

The procedure used is "Cost-Weighting". The information obtained from 1973 research on "helicopter materials" established percentages based on weight. Because the indices used to track material costs are based on monetary considerations (e.g., Producer Price Index; Wages, by Standard Industrial Code), percentages by weight had to be transformed into percentage contributions to cost, if PPI and SIC inflation factors were to be applied directly. Based on the premise of profit maximization, contractors should tend to minimize the use of expensive materials subject to maintaining acceptable performance standards; essentially, materials with a high cost per unit weight ratio would be used sparingly. Adjusting a percentage based on weight using a monetary index would not only result in an improper index initially, but also one with diminishing reliability. The latter bias is avoided by calculating the contribution to cost, instead of merely the contribution to weight.

D. Weighting Factors. Although the model is developed by an iterative, stepwise process, the revised weighting factors in the table (at the end of Appendix B) implicitly include all calculations. The index, as stated, is merely the direct sum of

the products of the weights and their corresponding material index values. The development of weighting factors is illustrated in the Technical Section.

E. Data. The data used appear in two different forms. Yearly data are presented by Calendar Year 1947 to date, and monthly data for 1967 to date. The yearly data, pre 1958, are condensed into three columns; the data for 1958 and later are presented in an 18 column format - 14 columns for material inputs, and 4 for labor. Beginning with report 76-1B, all columns of the data set are identified by PPI and SIC code, as well as a verbal description in the column heading. PLEASE NOTE: The data, their characterization, and any redefinition, by the Bureau of Labor Statistics over the years, are tracked in line diagram C-2.

F. Validity and Firmness of Data.

The Producer Price Index and Wage Data was supplied by the Kansas City Regional Office of the Bureau of Labor Statistics, U.S. Department of Labor. The data comes in three types of published form: (1) a cumulative history covering all relevant past years on a monthly basis, (2) A yearly edition (such as Wage and Price Index Annual Supplement) which lists the previous 12 months, and (3), monthly publications which list the most current month and several other months for comparison.

For data to be "firm" it must be at least 18 months old, in most cases, because it is benchmarked and adjusted after the fact. For example, small samples are taken throughout the year; however, during one month (the benchmark month), a much more comprehensive

sample is taken. Due to its significantly larger sample size, the benchmark month's sample is felt to be more representative than those of other individual months, and if the benchmark diverges from the pattern, the other months are adjusted proportionately to conform to its base as benchmark.

The data in the cumulative history "type" publication is felt to be firm or "final". Basically, such publications provide a chronological listing of all firm data available for the past history of those indices. However, the data in such publications is usually 18 to 24 months behind the current period. The data for each month listed in the Annual Supplements is not necessarily firm because benchmarks occur during the Calendar Year, and at different times for different series. Adjustments may not have been made before the Annual Supplements are published. The monthly publications which contain information on the most current periods are even more tentative. In general, the Producer Price Index Data are firm before Wage Indices for the corresponding month, probably due to the fact that it is easier to define and measure price changes for commodities than for human skills.

G. Particular Problems.

1. The Wage Data for the period CY 1971-CY 1973 changed, in many cases, during FY 75-FY 76. The wage-price freeze disallowed certain salary and wage increases, but a number of these were awarded on a retroactive basis based on legal decisions rendered several years after the fact. Because such payments involved costs directly attributable to labor services, this

component had to be included in the indices to provide an accurate measure of labor earnings.*

2. With the September 1978 issue of Employment and Earnings, the reporting categories for a number of types of production labor were changed. In effect, the 1967 Standard Industrial Classification Code has been supplanted by the 1972 SIC Code.

The Changes are as follows:

<u>SIC Code & Title</u>	-to-	<u>SIC Code & Title</u>
3674,9 Electronic Devices & Components		367X Electronic Components and Accessories
3722 Aircraft Engines and Engine Parts		3724 Aircraft Engines and Engine Parts
3723,9 Aircraft Parts and Equipment		3728 Aircraft Equipment

The reclassification had little or no impact on this study due to the essential similarities, by definition, of the old and new labor categories.

3. Potential discrepancies in the data set were eliminated by comparing data elements with the most recent data on microfiche for the 14 material and 4 labor categories used in the report. All data were verified to be the latest and most accurate available, on 20 January 1979.

*See BLS Bulletin No. 1312-10, Employment and Earnings 1909-75 for a detailed explanation (esp. p. 769).

H. Change in Content from the Previous Reports.

A printout of the computer program used for the Historical Inflation Program is not included in this report, for two reasons. First, it was found that a list of structural equations would better serve the purpose of elucidating the model. At the same time, with the reduced form equations and clearly identifiable data sets, any index figure can be checked by direct calculation (See Appendix B, page B-4). Second, direct duplication of the deck from the original is more accurate and efficient than keypunching copies from the program source listing, should such an external need ever develop.

A sensitivity analysis, which displays the effects resulting from a change in the relative weights of labor and material in the Historical Index, has been included in this revision. The percentage contribution to cost attributable to labor and materials varies among aircraft systems, and the values used in this report--.378 (materials) and .622 (labor)--are an average for the six systems referenced. The sensitivity analysis yields a measure of the extent to which the index for a single aircraft system would vary, if that system is built with an aggregate labor/material mix which differs from the six system average. The accuracy of the reweighted index, however, also requires that the other assumptions be well satisfied, i.e., the 14 material and 4 labor indices are typical of the system being reviewed. Because such weighting is a concern in developing estimates in inflated dollars, the effect of such "weighting changes" should be of significant interest to many readers.

TECHNICAL SECTION

III. ANALYSIS: (TECHNICAL SECTION).

A. Chronology. Previous efforts related to the development of inflation indices include Aerospace Price Indexes by H.G. Campbell, RAND Corporation, December 1970 (Reference 1) and two Cost Research Reports: Historical Inflation Indices for Army Aircraft, Cost Analysis Division, Office of the Comptroller, US Army Aviation Systems Command, September 1973 (Reference 3), and Historical Inflation Indices for Army Aircraft, Cost Analysis Division, Office of the Comptroller, US Army Aviation Systems Command, August 1974 (Reference 4).

1. Characteristics of the RAND Report.

a. Specific Producer Prices and Price Indexes (Reference 7) and Employment and Earnings (Reference 2) data have been selected as proxy series for similar commodity and labor categories experienced in the procurement of Army aircraft. Aircraft inflation indices are constructed from a weighted average of these proxy series. The weighting factors for this average are derived from estimates of the relative contribution to the total aircraft cost made by each component (commodity or industry labor group) comprising the index. The index is thus a "cost-weighted" series.

b. A 2½ percent compounded annual rate for growth of overhead ratios is assumed.

c. No adjustment is made for productivity increases.

d. Indices are developed on a Calendar Year basis.

2. Characteristics of the September 1973 Cost Research Report.

a. As with the RAND Report, aircraft inflation indices have been constructed from a weighted average of Producer Prices and Price Indexes and Employment and Earnings data selected as proxy series for their similarity to those commodities and labor categories experienced in the procurement of Army aircraft. Weighting factors are proportional to the relative physical weights or masses, rather than the relative costs (as in the RAND Report), of commodities comprising the "composite material" portion of the index. Thus, the "composite material" portion of the index represents a "weight-weighted" series.

b. Like the RAND Report, a 2½ percent annual growth in the overhead ratio is assumed.

c. No adjustment is made for productivity increases.

d. Indices are developed on a Calendar Year basis.

e. For years for which certain specified Producer Price Indexes were unavailable, data has been projected from adjacent years.

3. Characteristics of the August 1974 Research Report.

a. As before, Producer Prices and Price Indexes and Employment and Earnings data have been selected as proxy series most similar to those commodities and labor categories experienced in the procurement of Army aircraft. The indices have been constructed from a weighted average of these proxy series utilizing the weighting factors used in the September 1973 Cost Research Report. The "composite material" portion of the index represents a "weight-weighted" series.

b. Unlike RAND and the September 1973 Cost Research Report, no adjustment for overhead growth is assumed.

c. No adjustment for productivity increases is assumed.

d. Indices have been extended to FY 1974 by assuming that data for the September 1973 Cost Research Report represented December and hence the Fiscal Year midpoint, rather than the annual average, of each calendar year.

e. For years for which certain specified Producer Price Indexes were unavailable, data has been projected from adjacent years.

B. Data Sources. Data sources for this report are Producer Prices and Price Indexes (reference 7) and Employment and Earnings (reference 2). To insure that the latest revisions were incorporated into the data base, data was obtained from the Bureau of Labor Statistics Information Center, and Annual Supplements to the Producer Prices and Price Indexes. For Employment and Earnings, data for any given month was obtained from the latest available source. Data used in this report are displayed in Appendices D, E, G, and H.

C. Methodology.

1. Overhead and Productivity Adjustments. On the basis of data covering a ten year period, the RAND Report concluded that there exists a secular growth trend of $2\frac{1}{2}$ percent per year in the production overhead rate. The report also concludes that there has been little, if any, improvement in productivity to counteract the observed trend in overhead growth. This conclusion appears to

be unwarranted, particularly in light of productivity gains recorded (as measured by Industrial Production Indices) for similar sectors of industry. Thus, in order not to unduly bias the results of the analysis, this report makes no adjustment for either overhead growth or improvements in productivity.

2. Revision of Weighting Factors. From a number of Cost Information Reports, the following weighting factors were developed and reported in the September 1973 Cost Research Report. For the Airframe:

(.378) Raw Material + (.622) Labor 3723,9 (3728)
= Purchased Equipment

(.582) Purchased Equipment + (.418) Raw Material
= Total Material

(.378) Total Material + (.622) Labor 3721 = Total Airframe

For the Engine:

(.599) Raw Material + (.401) Labor 3723,9 (3728)
= Purchased Equipment

(.295) Purchased Equipment + (.705) Raw Material
= Total Material

(.599) Total Material + (.401) Labor 3722 (3724)
= Total Engines

And for Avionics:

(.315) Material + (.685) Labor 3674,9 (367x) = Total Avionics

In the previously published indices, the weighting factors used to develop the material portion of the indices were made proportional to the relative physical weights of the various commodities used in the construction of the aircraft. The material portion of these indices thus represent a "weight-

weighted" series. In order to be consistent with the intended purposes of an inflation index, the methodology in this program uses index weighting factors proportional to the numerical products obtained from multiplying the relative physical commodity weights by the appropriate base year cost per pound. This yields a "cost-weighted" index giving more weight to such expensive commodities as titanium. Unfortunately, however, price per pound data are not published in Producer Prices and Price Indexes for each of the commodities used in constructing the indices. To overcome this difficulty, the per pound price is estimated from the available data of the most closely related commodities. To minimize the effect from related commodities which have relatively little economic impact, each price per pound estimate has been developed from a weighted average of available data utilizing the Bureau of Labor Statistics 1975 revised relative weights published in the 1975 Annual Supplement to Producer (Formerly Wholesale) Prices and Price Indexes. The available data then constitutes a weighted sample from which a surrogate price per pound is computed for the Producer Price series in question. See Appendix A for the Computations for the Derivation of these Revised Weighting Factors, along with their associated cost contribution per pound.

3. Construction of Indices.

a. Calendar Year 1967 has been taken as the base of these indices because this year represents the approximate midpoint of the period (1958-1978) for which the data supports the develop-

ment of each of the indices, including those which account for avionics. Furthermore, 1967 conforms to the base used by the Bureau of Labor Statistics for Producer Price Indexes.

b. Appendix B contains the current Producer Price Index series, Earnings series, and the associated weighting factors used in the construction of the indices published in this report. Since some of these series have been in existence for only a limited time, other closely related series have been substituted with appropriate mathematical adjustments to insure continuity of the indices. This technique is considered preferable to the synthesis of data by projection from adjacent years. Appendix C depicts the historical flow and identifies the effective dates of series conversions, for the Producer Price Index and Earnings data used in the development of the indices published in this report.

c. The term "aggregate" has been selected to indicate inflation indices applicable to the combined Airframe and Engine (aggregate Air Vehicle Excluding Avionics) and to the combined Airframe, Engine, and Avionics (Aggregate Air Vehicle Including Avionics) to avoid confusion with the term "composite" as in "composite escalation indices". Aggregate indices are based upon a standard 70-20-10 weighting (see Reference 5) of the Airframe, Engine and Avionics Indices respectively. Aggregate indices are intended for the adjustment of historical cost data for which the distribution of costs for the Airframe, Engine, and Avionics components is unavailable.

d. A new section depicting the raw material portion of

the inflation indices is published as Appendix I. It is intended for applications requiring greater accuracy. Appropriate labor indices can be obtained from the Bureau of Labor Statistics Employment and Earnings series (Reference 2) as follows:

<u>Labor Category</u>	<u>1967 SIC Code</u>	<u>1972 SIC Code</u>	<u>Industry</u>
Airframe Contractor	3721	3721	Aircraft
Airframe Subcontractor	3723,9	3728	Other aircraft part & equipment
Engine Contractor	3722	3724	Aircraft engines & engine parts
Engine Subcontractor	3723,9	3728	Other aircraft parts & equipment
Avionics	3674,9	367X	Other electronic components
Aggregate Air Vehicle Excluding Avionics	372	372	Aircraft and parts

e. The basic Computational methodology is as follows:

(1) For Components: Airframe, Engine, and Avionics.

(a) Calendar Year indices are computed using sum of weighted calendar year labor and material indices.

(b) Fiscal Year indices are computed in a manner similar to Calendar Year, but the yearly fiscal averages are generated from the monthly data.

(c) Quarterly Indices - three months are averaged from monthly data set.

(d) Monthly - direct calculations using monthly data. A weighted average of monthly figures computed in the same manner as calendar year indices.

(2) Aggregate Vehicle.

(a) Aggregate Vehicle without Avionics =

$$\frac{(.7) \text{ Airframe} + (.2) \text{ Engine}}{.9}$$

(b) Total Vehicle = .9 (Agg. w/o) + (.1) Avionics

$$= (.9) \left[\frac{(.7) \text{ Airframe} + (.2) \text{ Engine}}{.9} \right] + (.1) \text{ Avionics}$$

$$= .70 \text{ Airframe} + .20 \text{ Engine} + .10 \text{ Avionics}$$

(70-20-10) as stated.

(3) Reduced form equations are specified in Appendix B-3.

IV. DESCRIPTION OF COMPUTER PROGRAM AND ASSOCIATED APPENDICES.

The Historical Inflation Program is a computerized program for generating historical inflation indices for the procurement of Army aircraft. Appendices D and G contain the annual data used by the program, while the monthly data, commencing July 1967, are in Appendices E and H. Producer Price Index and Earnings data in these Appendices have been arrayed into columns with the same numerical code sequence used in Appendix B. Historical inflation indices and factors are published in Appendix F. Fiscal Year, quarterly, and monthly indices have been developed from the appropriate monthly data. A section containing the raw material portion only of these indices is published as Appendix I. The labor portion of these indices may be obtained by applying the methodology described in paragraph III.C.3 d, to the data contained in Appendices D and E. Appendix J contains a sensitivity analysis which displays the effect on the indices resulting from changing the labor to material ratio, in terms of percentage contribution to cost.

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APPENDIX A
COMPUTATIONS FOR THE DERIVATION
OF REVISED WEIGHTING FACTORS
FOR THE HISTORICAL INFLATION PROGRAM

COMPUTATIONS FOR THE DERIVATION OF
REVISED WEIGHTING FACTORS
FOR THE HISTORICAL INFLATION PROGRAM

<u>PPI CODE</u>	<u>Commodity¹</u>	<u>1967 Price Per Pound</u>	<u>Weight²</u>	<u>Product³</u>	<u>Weighted⁴ 1967 Price Per Pound</u>
	<u>RUBBER AND PLASTIC PRODUCTS</u>				
07	Latex	.2642	.006	.001585	.2376
07 11 01 01	No. 1 Ribbed Smoked Sheets	.1992	.009	.001793	
02	No. 2 Ribbed Smoked Sheets	.1951	.021	.004097	
03	No. 3 Amber Blanket	.1820	.021	.003822	
04	Butyl, Regular	.25	.012	.003	
02 11	Neoprene, GN Type	.41	.020	.008199	
12	Styrene Butadiene, Hot	.2224	.021	.004671	
13	Polybutadiene, Non-Staining	.2476	.009	.002228	
15	Whole Tire Reclaim	.113	.009	.001017	
03 21			.128	.030412	
	<u>SHEETS, C.R., CARBON</u>	.0737			.0737
10 13 02 62					
	<u>SHEETS, C.R., STAINLESS</u>	.5531			.5531
10 13 02 64					
	<u>STEEL CASTINGS</u>				
10 15 01 41	<u>CLOSED DIE FORGINGS</u>	.0497			.0497
10 15 01 53	Ingot Molds				
10 15 01 11					
	<u>LEAD, PIG, COMMON</u>	.14			.14
10 22 01 11					
	<u>MAGNESIUM, PIG INGOT</u>	.3595			.3595
10 22 01 51					
	<u>ALUMINUM SHEET</u>	.4185			.4185
10 25 01 01					

<u>PPI CODE</u>	<u>Commodity</u> ¹	<u>1967 Price</u> <u>Per Pound</u>	<u>Weight</u> ²	<u>Product</u> ³	<u>Weighted</u> ⁴ <u>1967 Price</u> <u>Per Pound</u>
10 25 01 13	<u>ROD, SCREW, MACHINE STOCK</u>	.6315			.6315
10 25 01 17	<u>EXTRUSION, SOLID CIRCLE SIZE 4 TO 5</u>				
10 25 01 13	Rod, Screw, Machine Stock	.6315			.6315
10 25 02	<u>COPPER AND BRASS MILL SHAPES</u>				.6216
31	Cartridge Brass Strip, 70-30 Alloy	.6033	.121	.073	
32	Yellow Brass Rod (62-35-3 Alloy)	.4602	.082	.03774	
33	Yellow Brass Tube (70-30 Alloy)	.7841	.048	.03764	
55	Copper Sheet or Strip	.6924	.108	.07478	
			.359	.22316	
10 25 04 63	<u>MONEL SHEET, CR 400 ALLOY</u>	1.3752			1.3752
10 25 05	<u>TITANIUM MILL SHAPES</u> ⁵				5.2926
25	Titanium Bar, Ground, 6AL-AV	5.2926			5.2926

NOTES: 1. Capitalized and Underlined Commodity Titles indicate PPI Series actually used in the Historical Inflation Program.

2. Weight is Bureau of Labor Statistics Revised Relative Weight for the Wholesale Price Index. Source: 1975 Annual Supplement to Producer Prices and Price Indexes.

3. Product = (1967 Price Per Pound) x (Weight).

4. Weighted 1967 Price Per Pound = $\frac{\text{Product}}{\text{Weight}}$

NOTES (Continued):

5. 1967 Titanium Bar Price Per Pound computed by utilizing Titanium Sponge index as surrogate for 1967 - Dec 1970. Titanium Mill Shapes index established December 1970. Titanium Sponge index for December 1970 is 95.5.

Figures may not compute due to rounding.

COMPUTATIONS FOR THE DERIVATION OF
REVISED WEIGHTING FACTORS
FOR THE HISTORICAL INFLATION PROGRAM

PPI Code	Commodity	contrib. to weight		1967 COST Per Pound	contr. to cost per lb. Airframe		contr. to cost per lb. Engine	
		Airframe	Engine		Airframe	Engine	Airframe	Engine
07	Rubber and Plastic Products	.17	.012	.2376	.04039	.00285	.0211	.0023
10 13 02 62	Sheets, C.R., Carbon	.055	.584	.0737	.00405	.32301	.0021	.2625
10 13 02 64	Sheets, C.R., Stainless	.22	.146	.5531	.01093	.00725	.0057	.0059
10 15 01 41	Steel Castings	.01	.077	.0497	.0014	.00725	.0007	.0025
10 15 01 53	Closed Die Forgings	.033	.021	.14	.01186	.02768	.0062	.0225
10 22 01 11	Lead, Pig, Common	.0256	.004	.3595	.10715	.00879	.0560	.0071
10 22 01 51	Magnesium, Pig Ingot	.043	.001	.4185	.02715	.00253	.0142	.0021
10 25 01 01	Aluminum Sheet	.128	.005	.6315	.08083	.00632	.0422	.0051
10 25 01 13	Rod, Screw, Machine Stock	.049	.122	.6216	.03046	.00311	.0159	.0025
10 25 01 17	Extrusion, Solid Circle Size 4 to 5	.011	.019	1.3752	.01513	.16777	.0079	.1364
10 25 02	Copper and Brass Mill Shapes	.025	.019	5.2926	.13231	.10056	.0691	.0817
10 25 04 63	Monel Sheet, CR 400 Alloy							
10 25 05	Titanium Mill Shapes							
		1.000	1.000		.46167	.64986	.2411	.5281

NOTE: Revised Weighting Factors Proportional to Cost Contribution Per Pound.
 Previous Weighting Factors expressed as a proportion of "composite material" index.
 Revised Weighting Factors expressed as a proportion of the total index.
 Previous Technical Report (TR 76-1) omitted nickel component (represented by Monel Sheet) from Engine index.

COMPUTATIONAL
FORMULA

$$\left[\begin{array}{l} \text{CONTRIBUTION TO WEIGHT :} \\ \text{PREVIOUS WEIGHTING FACTORS} \end{array} \right] \times \left[\begin{array}{l} 1967 \text{ COST} \\ \text{PER LB.} \end{array} \right] \times \left[\begin{array}{l} \text{ADJUSTMENT FACTOR} \\ \text{FOR} \\ \text{(RELATIVE IMPORTANCE} \\ \text{OF MATERIAL (RAW)} \\ \text{IN OVERALL INDEX)} \end{array} \right] = \left[\begin{array}{l} \text{RAW MATERIAL} \\ \text{CONTRIBUTION TO COST} \\ \text{WEIGHTING FACTORS.} \end{array} \right]$$

APPENDIX B
WHOLESALE PRICE INDEXES AND EARNINGS SERIES
USED IN
HISTORICAL INFLATION PROGRAM
WITH REVISED WEIGHTING FACTORS

PRODUCER PRICE INDEXES AND EARNINGS SERIES
USED IN HISTORICAL INFLATION PROGRAM AND
REVISED WEIGHTING FACTORS

<u>Var</u>	<u>PPI Code</u>	<u>Commodity</u>	<u>Airframe</u>	<u>Engine</u>	<u>Avionics</u>	<u>Remarks</u>
(1)	07	Rubber and Plastic Products	.0211	.0023		
(2)	10 13 02 62 .04	Sheets, C.R., Carbon	.0021			
(3)	10 13 02 64	Sheets, C.R., Stainless		.2625		
(4)	10 15 01 41 .05	Steel Castings	.0057			
(5)	10 15 01 53 .06	Closed Die Forgings		.0059		
(6)	10 22 01 11	Lead, Pig, Common	.0007			
(7)	10 22 01 51	Magnesium, Pig Ingot	.0062	.0225		
(8)	10 25 01 01 .02	Aluminum Sheet	.0560	.0071		
(9)	10 25 01 13	Rod, Screw, Machine Stock	.0142	.0021		
(10)	10 25 01 17 .02	Extrusion, Solid Circle Size 4 to 5	.0422	.0051		
(11)	10 25 02	Copper and Brass Mill Shapes	.0159	.0025		
(12)	10 25 04 63	Monel Sheet, CR 400 Alloy **	.0079	.1364		
(13)	10 25 05	Titanium Mill Shapes	.0691	.0817		
(14)	11 78	Electronic Components			.3150	** MONEL METAL Previous Technical Report (TR 76-1) omitted nickel component from Engine Index Multiply Dec 70 Based Index by .955 to convert to 67 Base
<u>SIC Code</u>						
(15)	3674,9 (367X)	Other Electronic Components			.6850	
(16)	3721	Aircraft	.6220			
(17)	3722 (3724)	Aircraft Engines and Engine Parts		.4010		
(18)	3723,9 (3728)	Other Aircraft Parts and Equipment	.1369	.0709		
			1.0000	1.0000	1.0000	1.0000

COMPUTATIONAL FORMULAS : Labor Cost Indexes

The data concerning cost of labor services is supplied by the Bureau of Labor Statistics, as hourly wage rates by Standard Industry Codes, and is reported on a regular basis in Employment and Earnings. Because the material indices are percentages, and wages are expressed in dollars/hour, labor cost must be converted to a percentage (index). Before calculations can be made. The dollar to percentage conversions for the labor categories are

made as follows:

	<u>SIC Code</u>	<u>Industry</u>			
(15)	3674,9 (367X)	Other Electronic Components	Current Hr. Wage	÷	2.34 × 100% = INDEX
(16)	3721	Aircraft Production Workers	Current Hr. Wage	÷	3.49 × 100% = INDEX
(17)	3722 (3724)	Aircraft Engines and Engine Parts.	Current Hr. Wage	÷	3.42 × 100% = INDEX
(18)	3723,9 (3728)	Other Aircraft Parts and Equipment.	Current Hr. Wage	÷	3.35 × 100% = INDEX

REDUCED FORM EQUATION

$$\begin{aligned} \text{Airframe} &= .0211 (V-1) + .0021 (V-2) + .0057 (V-4) + .0007 (V-6) \\ &+ .0062 (V-7) + .056 (V-8) + .0142 (V-9) + .0422 (V-10) \\ &+ .0159 (V-11) + .0079 (V-12) + .0691 (V-13) + .622 (V-16) (100/3.49) \\ &+ .1369 (V-18) (100/3.35) \end{aligned}$$

$$\begin{aligned} \text{Engine} &= .0023 (V-1) + .2625 (V-3) + .0059 (V-5) + .0225 (V-7) \\ &+ .0071 (V-8) + .0021 (V-9) + .0051 (V-10) + .0025 (V-11) \\ &+ .1364 (V-12) + .0817 (V-13) + .401 (V-17) (100/3.42) \\ &+ .0709 (V-18) (100/3.35) \end{aligned}$$

$$\text{Avionics} = .3150 (V-14) + .6850 (V-15) (100/2.34)$$

Variables (V-1) thru (V-18)
are defined on page B-2

DATA/DEVELOPMENT

- (1) Calendar Year Data - As given on printout.
- (2) Monthly Data - As specified on printout.
- (3) Quarterly Data - Development from Monthly.
$$\text{Quarterly} = \frac{[(\text{Monthly}_{T-1}) + (\text{Monthly}_T) + (\text{Monthly}_{T+1})]}{3}$$
- (4) Fiscal Year Data - Developed using appropriate quarterly data.

$$\begin{aligned} \text{Fiscal Year Average} &= \frac{Q1 + Q2 + Q3 + Q4}{4} \\ &(\text{Quarters of Fiscal Year}) \end{aligned}$$

Variables specified on preceding chart.

Numerical Coefficient for Titanium Index (V-13) must be multiplied by .955 for data after DEC 1970 due to change in definition of products by the Bureau of Labor Statistics.
ADJUSTED COEFF. = .0691 (.955) = .0660.

NOTE :

APPENDIX C.

HISTORICAL FLOW OF WHOLESALE PRICE INDEXES AND
EARNINGS SERIES USED IN HISTORICAL INFLATION
PROGRAM WITH REVISED WEIGHTING FACTORS

**Historical Flow of Producer Price Indexes
and Earnings Series used in Historical
Inflation Program**

Index	Calendar Year	PPI Code
Rubber and Plastic Products	47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78	07
Metals and Metal Products		10
Steel Sheets		10 13 02 62
Stainless Steel Sheets		10 13 02 64
Steel Castings		10 15 01 41
Alloy Steel Forgings		10 15 01 53
Lead		10 22 01 11
Magnesium Ingot		10 22 01 51
Titanium Sponge		10 22 01 56
Aluminum Shapes		10 25 01
Aluminum Sheet		10 25 01 01
Aluminum Rod		10 25 01 13
Aluminum Extrusion		10 25 01 17
Copper and Brass Mill Shapes		10 25 02
Monel Sheet		10 25 04 63
Titanium Mill Sheets		10 25 05
Machinery and Equipment		11
Electrical Machinery and Equipment		11 7
Electronic Components		11 78
		D
		E
		C
		7
		0
<u>Industry</u>	<u>SIC Code</u>	
Electronic Components	3674,9 (367X)	
Aircraft and Parts	372	
Aircraft Engines	3721	
Other Aircraft	3722 (3724)	
	3723,9 (3728)	

APPENDIX D

ANNUAL DATA FOR THE HISTORICAL INFLATION PROGRAM FOR U. S.
ARMY ROTARY WING AIRCRAFT

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	BEFORE '58			ANNUAL CALENDAR YEAR													LABOR RATE DATA					
	1	2	3	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
47	70.5	54.9	1.372	93.20	95.76	100.00	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60
48	72.8	52.5	1.487	96.40	97.20	100.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00
49	70.5	63.0	1.560	96.80	96.20	100.00	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60
50	65.9	66.3	1.637	97.00	77.60	100.00	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30
51	105.4	73.8	1.780	97.00	58.70	100.00	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70
52	95.5	73.9	1.890	97.00	79.60	100.00	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90
53	89.1	76.3	1.990	97.10	97.00	100.00	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40
54	90.4	76.9	2.070	97.10	97.00	100.00	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40
55	102.4	82.1	2.160	98.10	114.30	100.00	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40
56	103.8	89.2	2.270	98.00	107.20	100.00	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50
57	103.4	91.0	2.350	100.00	103.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
58	103.30	93.10	125.70	93.20	95.76	100.00	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60	107.60
59	102.90	94.70	121.50	96.40	97.20	100.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00	106.00
60	103.10	94.70	120.20	96.80	96.20	100.00	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60
61	99.20	94.70	116.60	97.00	77.60	100.00	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30	111.30
62	96.30	94.70	115.40	97.00	58.70	100.00	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70	108.70
63	96.80	96.90	107.00	97.00	79.60	100.00	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90	102.90
64	95.50	98.00	94.80	97.10	97.00	100.00	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40	101.40
65	95.90	98.00	91.40	98.10	114.30	100.00	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40	99.40
66	97.80	98.40	91.50	98.00	107.20	100.00	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50	98.50
67	100.00	100.00	100.00	100.00	103.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
68	103.40	104.70	103.10	105.70	102.00	100.00	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40	102.40
69	105.30	109.50	112.50	113.40	108.10	100.00	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70	109.70
70	108.30	116.40	130.90	119.50	117.10	100.00	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60	110.60
71	109.10	123.40	135.00	125.30	122.90	100.00	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70	106.70
72	109.30	135.60	126.40	129.00	130.50	100.00	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60	103.60
73	112.40	135.30	122.10	132.20	136.90	100.00	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40	106.40
74	136.20	167.60	157.10	163.90	161.30	100.00	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20	173.20
75	150.20	189.30	165.30	194.80	191.30	100.00	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10	228.10
76	159.20	205.00	188.00	216.30	215.20	100.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00	249.00
77	167.60	230.00	197.10	234.40	235.90	100.00	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50	270.50

MATERIAL COST DATA

APPENDIX E

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM :

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MONTHLY DATA FOR MATERIALS LABOR RATES

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
007X	130242	130264	150194	130153	220111	220151	201011	250113	250117	102022	250125	2505XX	1179X	ELECT	ACFT	ENG	OT&EK		
CY/MO	CR	STL	STL	US	CAS	FORGE	LEAD	ALUMIN	SC	STK	EXTRU	CP	BRK	MO	MI	AMIL	ELECT		
67JUL	99.80	100.00	99.10	100.00	99.90	100.00	100.00	100.10	100.10	100.10	95.70	96.90	100.00	99.80	2.36	3.46	3.41	3.33	68
67AUG	100.50	100.00	99.10	100.00	99.90	100.00	100.00	100.10	100.10	100.10	95.60	96.90	100.00	99.70	2.35	3.51	3.45	3.36	68
67SEP	101.80	100.00	99.10	100.00	99.90	100.00	100.00	100.10	100.10	100.10	98.47	98.90	100.00	99.50	2.35	3.52	3.48	3.39	68
67OCT	101.80	100.00	101.60	100.00	100.20	100.00	100.00	100.10	100.10	100.10	100.60	103.20	100.00	99.40	2.37	3.54	3.52	3.39	68
67NOV	102.40	100.00	102.20	100.00	101.30	100.00	100.00	100.10	100.10	100.10	105.10	103.20	100.00	99.10	2.33	3.56	3.49	3.42	68
67DEC	102.80	100.00	103.20	100.00	101.30	100.00	100.00	100.10	100.10	100.10	107.50	103.20	100.00	99.90	2.41	3.61	3.56	3.46	68
68JAN	102.80	103.40	103.20	102.80	101.40	100.00	100.00	100.10	100.10	100.10	115.10	103.20	100.00	99.70	2.43	3.56	3.58	3.49	68
68FEB	102.80	103.40	103.20	103.10	101.40	100.00	100.00	100.10	100.10	100.10	119.50	105.40	100.00	99.40	2.46	3.56	3.59	3.47	68
68MAR	102.60	103.40	103.20	104.00	101.40	100.00	100.00	100.10	100.10	100.10	120.00	105.40	100.00	99.10	2.46	3.58	3.58	3.48	68
68APR	102.60	103.40	103.20	104.00	101.40	100.00	100.00	100.10	100.10	100.10	122.20	105.40	99.20	99.40	2.44	3.55	3.52	3.45	68
68MAY	102.70	103.40	103.20	104.00	101.40	100.00	100.00	100.10	100.10	100.10	107.40	105.40	99.20	99.50	2.47	3.58	3.61	3.49	68
68JUN	103.00	103.40	103.20	105.40	101.40	100.00	100.00	100.10	100.10	100.10	102.70	105.40	99.20	99.10	2.49	3.58	3.63	3.54	68
68JUL	103.00	103.40	103.20	106.80	101.40	100.00	100.00	100.10	100.10	100.10	99.30	105.40	99.00	2.49	3.57	3.63	3.55	69	
68AUG	104.00	103.40	104.10	106.80	101.40	100.00	100.00	100.10	100.10	100.10	98.90	105.40	99.20	2.51	3.63	3.67	3.55	69	
68SEP	104.00	107.20	103.30	103.00	101.40	89.20	100.00	86.20	104.50	99.80	98.90	105.40	99.00	2.52	3.59	3.70	3.56	69	
68OCT	104.20	107.20	103.30	103.00	101.70	92.90	100.00	86.20	104.50	99.10	99.10	105.40	99.00	2.53	3.73	3.72	3.57	69	
68NOV	104.30	107.20	103.20	104.00	104.50	92.90	100.00	86.20	104.50	101.00	101.00	105.40	99.10	2.55	3.80	1.76	3.61	69	
68DEC	104.40	107.20	103.20	106.00	105.60	92.80	100.00	86.20	104.50	102.60	105.40	99.20	99.10	2.56	3.31	1.56	3.65	69	
69JAN	103.20	107.20	105.40	109.50	105.60	96.50	100.00	86.20	104.50	104.50	109.30	110.50	99.20	2.56	3.61	3.91	3.65	69	
69FEB	103.60	107.20	105.40	109.50	105.60	100.00	100.00	100.10	100.10	108.90	109.20	110.50	99.20	2.59	3.36	3.41	3.67	69	
69MAR	104.10	107.20	105.40	110.50	105.60	100.00	100.00	100.10	100.10	109.40	110.40	110.50	99.20	2.58	3.45	3.80	3.68	69	
69APR	104.10	107.20	105.40	110.50	105.60	103.50	100.00	99.80	110.70	113.00	110.50	99.20	100.60	2.57	3.86	3.81	3.68	69	
69MAY	104.20	107.20	105.40	113.50	106.10	103.50	100.00	99.80	112.30	116.10	110.50	99.20	100.60	2.60	3.84	3.84	3.74	69	
69JUN	104.30	107.20	110.60	113.50	107.80	107.10	100.00	99.80	112.30	116.10	110.50	99.20	100.60	2.61	3.84	3.85	3.76	69	
69JUL	105.70	107.20	110.60	113.60	108.70	110.70	100.00	89.30	112.30	115.40	110.50	99.20	100.50	2.62	3.83	3.87	3.79	70	
69AUG	107.60	112.90	110.60	115.30	109.70	110.70	100.00	91.00	112.30	123.20	110.50	99.20	100.50	2.63	3.92	3.89	3.79	70	
69SEP	105.80	112.90	110.60	115.30	109.70	110.70	100.00	93.40	112.30	127.00	110.50	95.50	101.20	2.65	3.89	3.92	3.79	70	
69OCT	106.60	112.90	126.80	115.30	109.10	110.70	100.00	93.40	114.10	127.80	110.50	95.50	101.40	2.64	3.98	3.94	3.84	70	
69NOV	107.50	112.90	125.60	116.30	110.70	110.70	100.00	93.40	116.60	127.80	110.50	95.50	101.70	2.65	4.05	3.94	3.86	70	
69DEC	107.50	112.90	125.60	116.30	113.50	114.30	100.00	93.40	117.60	131.80	130.90	95.50	101.40	2.68	4.07	4.04	3.91	70	
70JAN	107.40	107.50	130.90	117.90	114.80	117.60	100.00	93.40	117.60	135.70	130.90	95.50	101.40	2.70	4.09	4.01	3.89	70	
70FEB	107.70	113.10	130.90	117.90	114.90	117.90	100.00	93.40	117.60	135.60	130.90	95.50	100.20	2.71	4.09	4.01	3.93	70	
70MAR	107.60	113.10	130.90	117.90	115.30	117.90	100.00	93.40	117.60	132.30	130.90	95.50	100.20	2.73	4.09	4.03	3.93	70	
70APR	107.50	113.10	130.70	117.90	115.30	117.90	100.00	93.40	119.00	135.10	130.90	95.50	100.60	2.74	4.10	4.05	3.94	70	
70MAY	107.20	113.10	130.90	117.90	115.70	117.90	100.00	93.40	121.50	136.70	130.90	95.50	99.30	2.77	4.11	4.06	3.95	70	
70JUN	107.10	119.40	130.90	117.90	117.30	117.90	100.00	93.40	121.70	136.70	130.90	95.50	101.20	2.79	4.11	4.09	3.98	70	
70JUL	103.50	119.40	130.90	120.40	119.40	110.40	100.00	93.40	121.70	133.70	130.90	95.50	101.20	2.81	4.12	4.11	4.03	71	
70AUG	109.20	119.40	130.90	120.40	119.40	107.10	100.00	93.50	121.90	132.40	130.90	95.50	101.00	2.82	4.22	4.14	4.02	71	
70SEP	109.20	119.40	130.90	120.40	119.40	109.40	100.00	93.50	121.90	124.50	133.10	95.50	101.50	2.83	4.27	4.15	4.04	71	
70OCT	109.10	119.40	130.90	121.50	119.40	105.40	100.00	93.50	121.90	123.90	133.10	95.50	101.50	2.84	4.27	4.17	4.07	71	
70NOV	109.10	119.40	130.90	121.50	119.40	105.40	100.00	93.50	121.90	123.00	136.00	95.50	101.90	2.86	4.34	4.19	4.09	71	
70DEC	109.20	119.40	130.90	121.60	119.30	103.60	100.00	93.50	121.90	116.80	136.00	95.50	101.90	2.89	4.33	4.29	4.15	71	
71JAN	109.30	119.40	130.90	122.60	119.80	96.40	103.60	93.40	121.50	113.20	136.00	100.30	102.80	2.89	4.32	4.28	4.11	71	
71FEB	109.10	119.40	130.90	122.60	119.80	96.40	103.60	93.40	121.50	113.20	136.00	100.30	103.30	2.89	4.31	4.31	4.11	71	
71MAR	109.00	119.40	130.90	122.60	119.80	96.40	103.60	93.40	121.50	112.60	140.40	101.70	103.70	2.90	4.32	4.31	4.08	71	
71APR	108.90	119.40	130.90	125.20	119.80	96.40	103.60	93.40	121.50	120.50	140.40	103.70	103.10	2.91	4.32	4.30	4.07	71	
71MAY	108.60	119.40	130.90	125.20	121.70	96.40	103.60	93.40	121.50	124.00	140.40	103.70	102.70	2.92	4.37	4.34	4.13	71	
71JUN	108.60	119.40	130.90	125.80	124.30	96.40	103.60	93.40	121.50	120.70	140.40	103.70	103.00	2.93	4.34	4.35	4.15	71	
71JUL	109.40	127.40	133.10	125.90	124.40	101.60	103.60	93.40	121.50	120.70	140.40	103.70	103.10	2.92	4.33	4.37	4.16	72	
71AUG	109.60	127.40	133.10	126.30	125.00	101.70	103.60	93.40	121.50	120.00	140.40	103.70	103.20	2.92	4.35	4.38	4.17	72	
71SEP	109.60	127.40	133.10	126.50	125.00	101.60	103.60	93.40	121.50	119.50	140.40	103.70	102.80	2.93	4.33	4.37	4.20	72	

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FROM COPY FURNISHED TO DDC

MONTHLY DATA FOR MATERIALS

LABOR RATES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
CY/MO	KUBNER	CR	STL	STPLS	CAST	FORGE	LLAD	MAGNES	ALUMN	SC	STR	EXTRC	CP/BKS	KOWEL	IL	WIL	ELECT	FLCT	LNK	OTHR	
	130262	130264	150141	150153	220111	220151	250101	250113	250117	102502	250403	2505XX	117AXX	3721	3722	3723	3729	FT			
71OCT	109.40	127.40	135.10	125.30	125.00	101.40	100.40	109.60	93.40	121.50	119.50	140.40	103.70	102.00	2.89	4.41	4.41	4.18	72		
71NOV	109.30	127.40	138.10	125.30	125.00	101.60	100.80	108.60	93.40	120.90	118.10	140.40	103.70	102.60	2.90	4.45	4.44	4.17	72		
71DEC	109.30	127.40	137.10	126.80	125.00	101.10	100.30	108.60	93.40	120.90	117.70	140.40	103.70	102.50	2.94	4.46	4.52	4.26	72		
72JAN	109.30	127.40	137.10	127.60	127.60	101.10	103.60	105.60	93.40	121.60	119.70	140.40	103.70	102.40	2.96	4.44	4.50	4.22	72		
72FEB	109.20	134.50	137.10	127.60	129.00	103.60	103.60	105.60	93.40	121.60	121.60	140.40	106.80	103.40	2.98	4.59	4.54	4.28	72		
72MAR	108.50	134.50	135.10	127.80	129.70	110.70	103.60	105.10	93.40	121.60	125.40	140.40	107.10	103.40	2.99	4.64	4.56	4.30	72		
72APR	108.50	134.50	135.10	127.80	129.70	110.70	103.60	105.10	93.40	121.60	125.30	140.40	107.10	103.20	2.99	4.74	4.57	4.33	72		
72MAY	108.40	134.50	132.10	127.30	130.70	112.50	103.60	105.10	93.40	123.60	125.50	140.40	107.40	104.00	3.00	4.72	4.63	4.36	72		
72JUN	108.90	134.50	129.40	127.60	130.40	112.50	103.60	105.10	93.40	123.40	125.30	140.40	107.40	103.90	3.02	4.72	4.65	4.36	72		
72JUL	109.20	134.50	126.40	127.90	131.30	112.50	103.60	105.10	93.40	123.60	123.60	140.40	107.40	104.00	3.03	4.64	4.69	4.34	73		
72AUG	109.50	134.50	117.50	130.90	131.30	112.50	103.60	105.10	93.40	123.60	123.50	140.40	107.40	103.70	3.03	4.77	4.75	4.39	73		
72SEP	109.50	134.50	117.50	130.90	131.30	110.70	103.60	105.10	93.40	123.60	125.30	140.40	107.40	103.50	3.06	4.79	4.78	4.43	73		
72OCT	109.50	134.50	117.50	130.90	131.30	110.70	103.60	103.70	93.40	123.60	125.30	140.40	107.40	103.20	3.06	4.84	4.80	4.44	73		
72NOV	109.60	134.50	117.50	130.90	131.30	108.90	103.60	103.70	93.40	123.60	125.70	140.40	107.40	103.20	3.05	4.97	4.83	4.49	73		
72DEC	109.90	134.50	117.50	130.90	132.00	103.60	103.70	103.70	93.40	123.60	125.90	140.40	107.40	103.50	3.09	5.04	4.98	4.51	73		
73JAN	110.00	134.50	117.50	130.90	132.00	103.60	103.70	103.70	93.40	123.60	126.20	140.40	107.40	103.60	3.09	4.99	4.92	4.52	73		
73FEB	110.10	134.50	117.50	130.90	132.00	103.60	103.70	103.70	93.40	123.60	126.20	140.40	107.40	103.60	3.08	5.04	4.92	4.50	73		
73MAR	110.40	134.50	117.50	130.90	134.00	103.60	103.70	103.70	93.40	123.60	137.00	140.40	107.40	103.70	3.10	5.04	4.94	4.55	73		
73APR	110.60	134.50	117.50	132.30	134.00	103.60	103.70	103.70	93.40	123.60	137.00	140.40	107.40	103.70	3.10	5.04	4.94	4.55	73		
73MAY	111.60	134.50	123.40	132.30	133.00	103.60	104.40	104.40	93.40	125.20	141.90	149.80	106.40	104.40	3.12	5.08	4.95	4.57	73		
73JUN	112.60	134.50	123.40	132.30	133.00	103.60	104.40	104.40	93.40	125.20	142.10	149.80	108.20	104.50	3.13	5.07	4.99	4.62	73		
73JUL	112.90	134.50	124.50	132.30	133.20	103.60	104.40	104.40	93.40	125.20	142.60	149.80	108.20	104.50	3.15	5.05	5.07	4.65	74		
73AUG	113.10	134.50	124.50	133.00	133.20	103.60	104.40	104.40	93.40	125.20	140.80	149.80	107.00	104.60	3.20	5.17	5.05	4.63	74		
73SEP	112.30	134.50	124.50	133.00	133.20	103.60	104.40	104.40	93.40	125.20	143.50	149.80	111.10	104.60	3.20	5.16	5.09	4.73	74		
73OCT	114.00	137.50	124.50	133.00	135.20	103.60	106.70	106.70	93.40	125.90	146.50	149.80	111.10	104.80	3.22	5.27	5.12	4.77	74		
73NOV	114.30	137.50	124.50	133.00	135.20	103.60	106.70	106.70	93.40	125.90	146.50	149.80	111.10	104.80	3.24	5.29	5.15	4.82	74		
73DEC	114.50	137.50	124.50	133.00	135.20	103.60	106.70	106.70	93.40	125.90	146.50	149.80	111.10	104.80	3.24	5.29	5.15	4.82	74		
74JAN	117.70	137.50	126.50	142.60	142.20	135.70	116.40	117.60	102.00	130.20	165.20	149.80	114.70	106.20	3.26	5.36	5.26	4.82	74		
74FEB	119.40	137.50	123.40	143.50	142.50	135.70	116.40	117.60	102.00	130.20	165.20	149.80	114.70	106.20	3.26	5.41	5.29	4.88	74		
74MAR	123.30	142.00	137.50	143.50	144.50	135.70	123.75	117.30	103.00	136.10	176.30	149.80	121.60	107.20	3.30	5.43	5.30	4.84	74		
74APR	129.40	146.60	140.10	143.50	145.20	144.60	130.70	125.00	116.40	144.50	185.00	149.80	123.60	106.30	3.31	5.40	5.21	4.89	74		
74MAY	133.70	155.30	145.50	151.00	152.20	153.60	153.00	127.10	115.40	146.20	200.30	175.30	123.10	109.60	3.34	5.50	5.34	5.02	74		
74JUN	135.60	145.40	154.60	159.30	162.40	153.60	153.00	132.30	123.20	145.20	203.70	175.30	124.30	111.30	3.39	5.51	5.41	5.03	74		
74JUL	139.50	162.30	145.50	163.80	167.30	175.00	130.80	144.30	132.20	152.20	198.70	175.30	137.50	112.10	3.42	5.52	5.44	5.03	75		
74AUG	143.40	188.50	173.10	179.70	166.10	175.00	219.70	151.00	140.40	163.80	186.90	191.30	137.50	113.90	3.40	5.59	5.47	5.10	75		
74SEP	145.60	189.50	174.90	182.50	158.10	175.00	208.60	151.00	140.40	163.80	186.90	191.30	137.50	113.90	3.47	5.64	5.51	5.13	75		
74OCT	147.50	188.50	174.90	182.50	162.90	175.00	208.60	151.00	142.20	163.80	181.60	191.30	151.70	114.30	3.47	5.75	5.55	5.15	75		
74NOV	148.50	188.50	175.10	182.50	162.90	175.00	208.60	151.00	144.10	162.90	172.70	191.30	151.70	116.80	3.52	5.83	5.59	5.18	75		
74DEC	149.40	190.00	175.90	182.50	162.90	175.00	208.60	151.00	144.10	162.90	172.70	191.30	151.70	117.00	3.59	5.87	5.52	5.23	75		
75JAN	149.60	189.10	175.90	182.50	162.90	175.00	228.10	151.00	144.10	162.10	159.10	191.30	163.40	117.30	3.63	5.93	5.75	5.23	75		
75FEB	150.00	189.10	175.90	182.50	162.90	175.00	228.10	151.00	144.10	162.10	159.10	191.30	163.40	117.00	3.65	5.94	5.84	5.23	75		
75MAR	149.70	189.10	175.90	182.50	162.90	175.00	228.10	151.00	144.10	162.10	159.10	191.30	163.40	115.60	3.66	6.00	5.90	5.35	75		
75APR	149.40	189.10	175.90	182.50	162.90	175.00	228.10	151.00	144.10	162.10	159.10	191.30	163.40	115.60	3.71	6.07	5.90	5.39	75		
75MAY	148.90	189.10	175.90	182.50	162.90	175.00	228.10	151.00	144.10	162.10	159.10	191.30	163.40	115.60	3.73	6.12	5.96	5.47	75		
75JUN	148.40	185.00	182.40	184.40	195.40	155.70	228.10	151.00	144.10	165.50	147.90	219.60	170.80	115.70	3.77	6.20	6.03	5.49	75		
75JUL	150.10	194.00	182.40	201.10	195.40	155.70	228.10	151.00	147.20	171.00	145.60	219.60	171.80	115.60	3.81	6.22	6.00	5.55	76		
75AUG	150.00	194.00	182.40	201.10	195.40	155.70	228.10	151.00	147.20	171.00	145.60	219.60	171.80	115.60	3.79	6.26	6.04	5.62	76		
75SEP	150.30	194.00	182.40	201.10	195.40	155.70	228.10	151.00	147.20	171.00	147.10	219.60	171.80	114.50	3.81	6.30	6.12	5.65	76		
75OCT	151.60	197.00	182.40	201.10																	

MONTHLY DATA FOR

MATERIALS

LABOR RATES

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
 007X 130262 130264 150141 150153 220111 220151 250101 250113 250117 102502 250463 2505AX 1179AX
 CY/NO RUBBER CR STL SIMLS CAST FOUNGE LEAD MAGNES ALUMNA SC STM EXTRU CP/ERS MOUNCL TL-MIL ELECT 1674+9 3721 3722 3723,9 FY
 ELECT ACFT ENG OTHER

76JAN	152.30	197.00	162.50	214.80	198.40	135.70	242.00	157.80	147.20	169.40	149.20	241.50	171.60	114.50	3.89	6.47	6.32	5.74	76
76FEB	154.20	197.00	162.60	214.80	191.40	135.70	242.00	159.80	147.20	169.40	150.10	241.50	171.60	114.90	3.97	6.54	6.33	5.84	76
76MAR	155.50	197.00	162.60	214.80	191.40	135.70	242.00	163.50	147.20	169.40	152.10	241.50	171.60	115.70	3.84	6.50	6.27	5.86	76
76APR	156.70	197.00	162.60	214.80	213.20	130.90	242.00	163.50	147.20	169.40	163.20	241.50	171.60	115.90	3.98	6.54	6.21	5.93	76
76MAY	157.10	197.00	162.60	214.80	219.20	162.30	242.00	159.30	154.60	175.50	154.70	241.50	171.60	115.20	3.91	6.57	6.37	5.93	76
76JUN	157.20	209.10	162.60	214.80	213.20	164.50	242.00	175.90	154.60	160.40	166.70	241.50	171.60	115.40	3.94	6.54	6.42	5.94	76
76JUL	158.20	209.10	162.60	214.80	219.50	176.80	242.00	175.90	154.60	161.70	168.40	241.50	171.60	115.40	3.97	6.67	6.61	5.99	77
76AUG	161.00	209.10	172.40	218.40	220.60	176.40	255.90	175.90	154.60	161.70	171.40	241.50	171.60	115.50	3.99	6.54	6.62	5.99	77
76SEP	163.50	209.10	176.50	218.80	220.60	176.80	255.90	190.30	154.60	197.50	172.40	241.50	171.60	115.60	4.01	6.63	6.66	6.03	77
76OCT	164.50	209.10	176.50	218.40	220.60	183.90	255.90	190.30	154.60	197.50	174.70	241.50	171.60	115.60	4.04	6.75	6.71	6.03	77
76NOV	164.80	209.10	176.50	218.40	228.60	183.90	255.90	190.30	154.60	197.50	169.90	241.50	171.60	115.60	4.06	6.77	6.75	6.12	77
76DEC	164.60	220.90	176.30	218.40	229.70	183.90	255.90	190.30	154.60	197.50	181.60	241.50	171.60	115.80	4.15	6.81	6.86	6.18	77
77JAN	164.50	222.60	185.00	218.80	231.80	189.80	255.90	190.30	154.60	197.50	159.00	241.50	171.60	117.90	4.21	6.90	6.93	6.14	77
77FEB	164.80	222.60	186.60	220.40	231.80	207.10	267.00	190.30	154.60	197.50	160.40	241.50	171.60	118.20	4.19	6.92	6.87	6.20	77
77MAR	164.30	222.60	185.60	220.40	231.90	221.40	267.00	190.30	154.60	197.50	157.40	262.60	171.60	118.20	4.20	6.95	6.86	6.23	77
77APR	165.90	222.60	185.60	233.80	231.80	221.40	267.00	196.00	161.50	208.70	175.30	262.60	171.60	118.80	4.22	6.98	6.84	6.29	77
77MAY	166.40	222.60	200.10	235.70	231.80	221.40	267.00	199.80	155.30	208.70	175.30	262.60	169.80	118.80	4.26	7.04	6.65	6.35	77
77JUN	167.40	222.60	203.40	235.70	231.80	221.40	267.00	203.70	157.60	209.30	172.90	262.60	169.80	118.90	4.32	7.06	6.95	6.39	77
77JUL	168.90	237.40	205.60	235.70	234.20	221.80	275.40	190.60	167.30	213.30	173.10	262.60	169.80	118.70	4.35	7.09	7.01	6.43	77
77AUG	169.10	237.40	207.50	239.40	234.20	221.80	275.40	190.60	167.80	220.20	176.20	262.60	170.10	118.50	4.38	7.14	7.02	6.45	77
77SEP	169.50	237.40	202.70	239.40	240.10	221.40	275.40	204.60	167.60	220.20	163.10	262.60	168.90	120.50	4.44	7.17	7.15	6.57	77
77OCT	170.20	237.40	202.70	241.20	242.10	221.80	275.40	205.80	167.60	220.20	158.60	262.60	163.10	121.10	4.56	7.16	7.27	6.56	78
77NOV	170.20	237.40	200.50	241.20	245.40	223.80	275.40	211.30	167.80	220.20	160.60	262.60	168.70	121.70	4.61	7.29	7.33	6.65	78
77DEC	170.20	237.40	201.30	241.20	245.90	233.70	275.40	211.80	167.60	220.20	161.20	262.60	168.70	121.50	4.69	7.28	7.53	6.63	78
78JAN	170.20	237.40	194.90	241.50	245.90	235.70	275.40	211.80	167.60	223.30	164.80	262.60	168.70	124.40	4.74	7.36	7.46	6.62	74
78FEB	170.20	250.50	194.90	241.50	245.90	235.70	275.40	217.00	167.60	225.20	166.20	262.60	169.50	124.70	4.71	7.44	7.66	6.63	78
78MAR	171.40	250.50	192.90	241.90	257.70	235.70	275.40	228.50	170.40	229.30	167.00	262.60	170.10	125.30	4.76	7.44	7.55	6.67	76
78APR	172.80	254.10	190.50	260.00	257.70	235.70	275.40	228.50	173.10	230.60	168.50	262.60	170.10	125.30	4.77	7.50	7.54	6.74	78
78MAY	173.70	254.50	192.70	260.00	265.70	228.50	270.40	228.50	170.40	230.60	169.10	262.60	172.20	125.80	4.77	7.52	7.60	6.75	78
78JUN	174.40	254.50	194.00	260.00	263.90	221.40	280.90	228.50	173.10	230.60	171.30	262.60	173.80	126.50	4.77	7.54	7.69	6.80	78
78JUL	174.70	254.50	196.60	260.00	263.90	221.40	280.90	235.20	175.10	232.00	169.70	262.60	173.90	127.10	4.81	7.61	7.77	6.81	78
78AUG	175.40	262.90	201.10	260.50	273.30	233.90	280.90	245.20	178.90	232.00	172.50	262.60	175.70	127.10	4.93	7.73	7.82	6.89	78
78SEP	175.60	262.90	201.10	263.90	275.00	235.70	280.90	245.20	175.90	232.00	174.10	262.60	175.60	127.30	4.91	7.77	7.96	6.94	78

APPENDIX F

HISTORICAL INFLATION INDICES :

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HISTORICAL INFLATION
PRE-1958 INDICES

AGGREGATE AIR VEHICLE
EXCLUDING AVIONICS

INDEX	FACTOR
CY67=	FY78=
100.0	1.0000
---	---
49.1	4.2836
54.2	3.8769
55.9	3.7642
59.9	3.5706
64.9	3.2418
67.0	3.1402
69.8	3.0143
71.6	2.9339
75.6	2.7832
80.4	2.6153
85.7	2.5434

AIRFRAME PRODUCTION

INDEX	FACTOR
CY67=	FY78=
100.0	1.0000
---	---
55.2	3.9125
61.8	3.4954
63.1	3.4216
66.4	3.2531
73.3	2.9449
74.9	2.8633
77.0	2.7743
79.3	2.7217
84.0	2.5699
90.2	2.3036
92.5	2.3344

ENGINE PRODUCTION

INDEX	FACTOR
CY67=	FY78=
100.0	1.0000
---	---
47.3	4.4072
52.1	4.0051
53.8	3.8790
56.8	3.6767
62.4	3.3414
64.7	3.2251
67.5	3.0934
69.4	3.0058
73.1	2.8532
77.6	2.6849
79.4	2.6125

CY 47 48 49 50 51 52 53 54 55 56 57

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HISTORICAL INFLATION/
CALENDAR YEAR INDICES

CY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=
58	85.4	2.5312	94.2	2.2927	61.5	2.1940	65.0	2.4725	84.7	2.4457
59	63.3	2.5095	92.6	2.5506	63.2	2.1510	65.4	2.4633	85.1	2.4328
60	85.3	2.4468	95.5	2.2602	85.4	2.0949	87.6	2.4015	87.3	2.3716
61	88.0	2.4270	93.8	2.2572	87.4	2.0453	86.1	2.3860	88.1	2.3523
62	87.1	2.3943	95.9	2.2520	86.1	2.0296	89.1	2.3605	89.0	2.3277
63	89.0	2.3701	94.4	2.2869	89.0	2.0101	89.5	2.3506	89.4	2.3167
64	89.2	2.3525	92.5	2.3367	91.1	1.9526	89.9	2.3393	90.3	2.3012
65	92.3	2.2601	92.7	2.3285	92.6	1.9319	92.4	2.2753	92.4	2.2409
66	96.5	2.1629	75.5	2.2608	95.5	1.8745	96.3	2.1845	96.2	2.1536
67	100.0	2.0357	100.0	2.1590	100.0	1.7387	100.0	2.1027	100.0	2.0713
68	103.5	2.0182	104.6	2.0540	104.1	1.7175	104.0	2.0222	104.0	1.9917
69	110.4	1.8904	111.1	1.9425	106.1	1.6943	110.0	1.9021	110.3	1.8778
70	116.9	1.7856	121.8	1.7724	113.2	1.6802	118.0	1.7826	117.5	1.7631
71	120.9	1.7267	127.6	1.6922	117.4	1.5230	121.9	1.7187	121.9	1.6998
72	128.3	1.6186	130.7	1.6514	121.0	1.4765	129.3	1.6260	128.5	1.6121
73	137.7	1.5144	139.3	1.5862	125.4	1.4265	137.2	1.5327	136.0	1.5229
74	158.0	1.3951	157.2	1.5736	134.7	1.3316	154.7	1.3593	152.7	1.3568
75	172.0	1.2182	175.1	1.2120	146.2	1.2233	173.4	1.2129	170.0	1.2138
76	184.6	1.1305	183.7	1.1364	152.7	1.1714	185.7	1.1323	182.4	1.1355
77	197.8	1.0547	207.4	1.0339	164.4	1.0560	200.0	1.0513	196.5	1.0544

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HISTORICAL INFLATION
MONTHLY INDICES

CY	FY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
		INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E
JUL	67	99.3	2.1115	99.3	2.1711	103.5	1.7794	93.3	2.1170	99.4	2.0829
AUG	67	100.3	2.0793	100.0	2.1594	100.2	1.7851	100.3	2.0972	100.3	2.0660
SEP	67	100.7	2.0730	101.1	2.1507	100.1	1.7653	100.4	2.0902	100.6	2.0599
OCT	67	101.1	2.0631	102.1	2.1141	100.7	1.7764	101.4	2.0745	101.3	2.0449
NOV	67	102.1	2.0446	102.3	2.1110	100.9	1.7729	102.1	2.0594	102.0	2.0310
DEC	67	102.8	2.0300	103.2	2.0923	102.0	1.7533	102.9	2.0439	102.6	2.0150
JAN	68	102.5	2.0361	103.5	2.0863	102.5	1.7444	102.7	2.0473	102.7	2.0171
FEB	68	102.5	2.0351	103.9	2.0782	103.3	1.7311	102.6	2.0447	102.9	2.0132
MAR	68	102.6	2.0340	103.8	2.0901	103.2	1.7327	102.9	2.0443	102.9	2.0130
APR	68	101.9	2.0475	103.0	2.0968	102.7	1.7415	102.1	2.0585	102.2	2.0266
MAY	68	102.4	2.0383	104.1	2.0795	103.6	1.7257	102.8	2.0464	102.4	2.0141
JUN	68	102.4	2.0303	104.4	2.0673	104.1	1.7141	103.1	2.0386	103.2	2.0063
JUL	68	102.4	2.0302	104.5	2.0666	104.1	1.7146	103.2	2.0364	103.2	2.0052
AUG	68	103.9	2.0093	105.2	2.0528	104.7	1.7090	104.1	2.0190	104.2	1.9879
SEP	68	104.6	1.9919	105.3	2.0502	105.0	1.7042	104.9	2.0049	104.9	1.9748
OCT	68	106.5	1.9575	105.6	2.0452	105.2	1.6995	106.4	1.9769	106.3	1.9495
NOV	68	107.0	1.9301	105.3	2.0397	105.9	1.6896	106.7	1.9704	106.6	1.9425
DEC	68	107.3	1.9441	107.1	2.0155	106.2	1.6849	107.5	1.9599	107.2	1.9327
JAN	69	107.5	1.9417	107.1	1.9976	106.1	1.6859	107.6	1.9541	107.5	1.9277
FEB	69	108.9	1.9136	105.2	1.9956	107.4	1.6657	108.8	1.9333	108.6	1.9066
MAR	69	108.9	1.9131	105.1	1.9972	107.2	1.6693	109.7	1.9340	108.6	1.9179
APR	69	109.2	1.9101	106.9	1.9909	106.9	1.6729	109.1	1.9279	108.9	1.9029
MAY	69	109.2	1.9100	107.3	1.9808	107.3	1.6593	109.2	1.9257	109.1	1.8994
JUN	69	109.4	1.9042	108.1	1.9578	108.1	1.6548	109.6	1.9193	109.4	1.8932
JUL	69	109.4	1.9036	108.6	1.9527	108.4	1.6504	109.6	1.9186	109.5	1.8921
AUG	69	111.1	1.8750	108.3	1.9476	103.7	1.6453	110.0	1.8935	110.4	1.8892
SEP	69	110.4	1.8902	109.5	1.9468	109.5	1.6342	110.5	1.9024	110.4	1.8762
OCT	69	112.3	1.8590	115.5	1.8692	109.2	1.6376	113.0	1.8606	112.6	1.8389
NOV	69	113.4	1.8343	115.4	1.8715	109.6	1.6313	114.1	1.8426	113.7	1.8223
DEC	69	114.5	1.8209	119.4	1.8081	110.4	1.6203	115.7	1.8179	115.1	1.7990
JAN	70	114.9	1.8153	120.4	1.7937	111.0	1.6117	116.2	1.8103	115.6	1.7913
FEB	70	115.0	1.8147	120.9	1.7924	110.9	1.6130	116.2	1.8098	115.7	1.7909
MAR	70	115.1	1.8135	120.7	1.7890	111.5	1.6045	116.3	1.8079	115.4	1.7883
APR	70	115.4	1.8095	120.7	1.7893	111.9	1.5945	116.5	1.8041	116.1	1.7843
MAY	70	115.7	1.8032	121.1	1.7827	112.6	1.5896	116.9	1.7985	116.5	1.7783
JUN	70	115.9	1.8010	121.5	1.7765	113.6	1.5752	117.1	1.7954	116.8	1.7739
JUL	70	116.1	1.7972	121.6	1.7724	114.1	1.5671	117.4	1.7915	117.0	1.7696
AUG	70	116.0	1.7938	122.2	1.7667	114.4	1.5640	118.9	1.7883	118.5	1.7486
SEP	70	116.8	1.7955	122.5	1.7627	114.8	1.5579	119.6	1.7854	119.2	1.7466
OCT	70	119.0	1.7341	122.9	1.7551	115.1	1.5539	119.8	1.7846	119.4	1.7452
NOV	70	120.3	1.7346	123.0	1.7456	115.6	1.5443	121.0	1.7832	120.5	1.7488
DEC	70	120.3	1.7346	123.9	1.7285	116.7	1.5327	121.3	1.7832	120.9	1.7438
JAN	71	119.9	1.7406	124.7	1.7307	117.3	1.5252	121.0	1.7863	120.6	1.7476
FEB	71	119.6	1.7447	125.1	1.7257	117.1	1.5270	120.8	1.7404	120.5	1.7196
MAR	71	119.8	1.7422	125.6	1.7169	117.6	1.5215	121.1	1.7364	120.7	1.7155
APR	71	120.0	1.7389	125.8	1.7164	117.7	1.5202	121.4	1.7337	120.9	1.7130
MAY	71	121.2	1.7219	126.4	1.7080	117.8	1.5180	122.3	1.7287	121.9	1.6993
JUN	71	120.7	1.7290	126.5	1.6803	118.2	1.5131	122.4	1.7177	122.0	1.6979

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JUL 71	120.6	1.7305	129.7	1.5759	118.0	1.5164	124.4	1.7180	122.0	1.6985
AUG 71	121.2	1.7222	128.9	1.6751	118.0	1.5160	122.9	1.7112	122.4	1.6924
SEP 71	121.6	1.7158	128.6	1.6747	118.2	1.5159	123.2	1.7067	122.7	1.6882
OCT 71	122.1	1.7095	129.2	1.6717	117.0	1.5290	123.6	1.7006	123.0	1.6843
NOV 71	122.7	1.7005	129.5	1.6609	117.2	1.5260	124.2	1.6928	123.5	1.6770
DEC 71	123.2	1.6934	130.4	1.6554	118.4	1.5113	124.8	1.6847	124.2	1.6682
JAN 72	123.5	1.7018	130.1	1.6591	118.4	1.5093	124.8	1.6919	123.7	1.6739
FEB 72	125.6	1.6813	131.0	1.6482	119.2	1.4893	126.5	1.6585	126.0	1.6434
MAR 72	126.6	1.6455	131.5	1.6412	120.1	1.4893	127.7	1.6445	127.1	1.6299
APR 72	128.4	1.6204	131.7	1.6389	119.7	1.4930	129.4	1.6246	128.5	1.6124
MAY 72	128.5	1.6224	132.5	1.6289	120.6	1.4834	129.5	1.6239	128.6	1.6107
JUN 72	128.5	1.6227	132.5	1.6287	121.1	1.4782	129.5	1.6235	127.9	1.6113
JUL 72	127.1	1.6422	129.5	1.6795	121.5	1.4777	127.4	1.6506	126.8	1.6355
AUG 72	129.6	1.6100	129.4	1.6731	121.4	1.4736	129.5	1.6252	128.5	1.6109
SEP 72	130.2	1.6032	129.0	1.6731	122.1	1.4647	129.9	1.6185	129.1	1.6041
OCT 72	131.0	1.5725	129.3	1.6698	122.1	1.4651	130.6	1.6099	129.8	1.5962
NOV 72	133.5	1.5625	129.7	1.6540	121.3	1.4645	132.7	1.5676	131.5	1.5739
DEC 72	134.9	1.5471	131.6	1.6412	123.0	1.4543	134.1	1.5676	133.0	1.5571
JAN 73	134.1	1.5366	130.9	1.6403	123.1	1.4532	133.8	1.5768	132.3	1.5653
FEB 73	134.9	1.5469	130.9	1.6294	122.4	1.4566	134.0	1.5692	132.9	1.5588
MAR 73	135.3	1.5420	132.6	1.6288	123.4	1.4493	134.7	1.5610	133.5	1.5507
APR 73	135.3	1.5425	132.7	1.6257	124.1	1.4414	134.7	1.5609	133.7	1.5496
MAY 73	135.3	1.5314	134.2	1.6257	124.2	1.4399	135.2	1.5493	134.7	1.5383
JUN 73	136.4	1.5293	135.2	1.5963	124.5	1.4362	135.2	1.5441	135.0	1.5341
JUL 73	136.2	1.5315	136.3	1.5844	125.2	1.4291	136.2	1.5434	135.1	1.5328
AUG 73	138.5	1.5061	136.5	1.5616	126.0	1.4141	138.1	1.5227	136.9	1.5132
SEP 73	139.1	1.4994	136.9	1.5712	126.6	1.4126	138.5	1.5168	137.4	1.5072
OCT 73	141.1	1.4792	137.3	1.5719	127.3	1.4054	140.2	1.4994	138.9	1.4908
NOV 73	141.7	1.4722	138.0	1.5550	127.9	1.3986	140.9	1.4924	139.6	1.4834
DEC 73	143.5	1.4543	140.9	1.5324	129.0	1.3864	142.9	1.4714	141.5	1.4637
JAN 74	144.5	1.4435	140.4	1.5376	128.9	1.3875	142.8	1.4640	142.2	1.4571
FEB 74	145.9	1.4302	141.4	1.5270	129.5	1.3809	144.9	1.4512	143.4	1.4443
MAR 74	147.2	1.4174	143.0	1.4939	130.4	1.3720	146.5	1.4354	144.9	1.4297
APR 74	148.0	1.4102	144.6	1.4932	131.0	1.3653	147.2	1.4283	145.6	1.4227
MAY 74	151.3	1.3792	154.1	1.4903	132.3	1.3520	151.9	1.3841	150.0	1.3813
JUN 74	152.3	1.3705	155.4	1.3772	134.3	1.3319	153.3	1.3720	151.4	1.3684
JUL 74	154.4	1.3511	156.0	1.3490	135.4	1.3209	155.7	1.3507	153.7	1.3480
AUG 74	157.3	1.3261	165.1	1.2994	135.4	1.3209	159.3	1.3200	154.9	1.3201
SEP 74	158.4	1.3174	167.0	1.2928	137.5	1.3030	161.5	1.3117	158.0	1.3110
OCT 74	161.3	1.2938	169.6	1.2806	137.6	1.3001	162.9	1.2908	160.4	1.2915
NOV 74	162.7	1.2825	169.5	1.2750	139.0	1.2791	164.2	1.2803	161.7	1.2807
DEC 74	163.5	1.2763	171.9	1.2570	141.9	1.2601	165.3	1.2719	163.0	1.2708
JAN 75	165.6	1.2652	177.3	1.2176	143.2	1.2490	168.2	1.2502	165.7	1.2501
FEB 75	166.0	1.2572	175.0	1.2254	144.0	1.2422	168.2	1.2500	165.8	1.2494
MAR 75	167.3	1.2473	176.7	1.2219	144.5	1.2342	169.4	1.2414	166.9	1.2411
APR 75	168.4	1.2355	177.0	1.2194	145.2	1.2315	170.7	1.2319	168.1	1.2318
MAY 75	170.4	1.2243	176.4	1.2192	145.5	1.2284	172.2	1.2210	169.6	1.2217
JUN 75	171.9	1.2135	177.5	1.2163	146.4	1.2184	173.2	1.2142	170.5	1.2146
JUL 75	172.6	1.2037	177.4	1.2167	147.9	1.2090	173.7	1.2105	171.1	1.2104
AUG 75	174.2	1.1976	175.1	1.2121	146.5	1.2175	175.1	1.2009	172.3	1.2023
SEP 75	175.1	1.1916	179.1	1.2052	147.6	1.2115	176.0	1.1947	173.2	1.1961
OCT 75	176.3	1.1833	173.5	1.2030	147.4	1.2134	177.0	1.1881	174.0	1.1902
NOV 75	177.4	1.1735	179.1	1.2025	147.5	1.2124	176.1	1.1807	175.0	1.1833
DEC 75	178.7	1.1640	181.6	1.1839	148.7	1.2026	179.3	1.1727	176.2	1.1752
JAN 76	179.1	1.1651	185.0	1.1654	145.6	1.1952	180.4	1.1655	177.3	1.1680
FEB 76	180.7	1.1548	185.3	1.1634	149.5	1.1969	181.7	1.1572	178.5	1.1605
MAR 76	181.6	1.1477	195.9	1.1615	149.7	1.1947	182.7	1.1504	179.4	1.1545
APR 76	181.2	1.1317	194.0	1.1615	149.8	1.1942	181.5	1.1566	178.8	1.1528
MAY 76	182.9	1.1411	188.2	1.1534	150.7	1.1870	183.6	1.1453	180.3	1.1488
JUN 76	183.0	1.1404	186.9	1.1534	151.7	1.1792	183.6	1.1438	180.6	1.1467

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JUL 76	71	185.7	1.1239	189.5	1.1390	152.6	1.1724	165.5	1.1273	163.1	1.1311
AUG 76	71	185.5	1.1251	192.5	1.1229	153.2	1.1677	187.0	1.1246	183.6	1.1282
SEP 76	71	186.9	1.1165	194.0	1.1127	153.9	1.1624	188.5	1.1157	185.0	1.1196
OCT 76	71	189.2	1.1031	194.7	1.1090	154.9	1.1550	190.4	1.1045	186.8	1.1086
NOV 76	71	189.7	1.0994	195.3	1.1033	155.5	1.1502	191.0	1.1010	187.4	1.1051
DEC 76	71	190.1	1.0949	195.7	1.0974	156.5	1.1245	191.9	1.0955	188.6	1.0982
JAN 77	71	192.0	1.0369	193.0	1.0472	160.4	1.1153	193.5	1.0870	190.1	1.0893
FEB 77	71	192.7	1.0829	194.0	1.0803	159.9	1.1187	194.3	1.0823	190.8	1.0854
MAR 77	71	193.8	1.0768	202.7	1.0649	160.2	1.1167	195.5	1.0741	192.2	1.0776
APR 77	71	195.5	1.0674	202.7	1.0651	161.0	1.1115	197.1	1.0669	193.5	1.0700
MAY 77	71	196.9	1.0590	205.4	1.0462	162.1	1.1033	198.0	1.0568	195.3	1.0606
JUN 77	71	197.7	1.0552	204.5	1.0553	163.1	1.0912	200.1	1.0506	196.5	1.0540
JUL 77	71	198.2	1.0526	210.1	1.0472	164.7	1.0858	200.3	1.0479	197.2	1.0502
AUG 77	71	199.5	1.0472	210.2	1.0409	165.6	1.0799	201.7	1.0425	198.1	1.0456
SEP 77	71	200.3	1.0387	211.3	1.0316	167.9	1.0651	203.2	1.0398	199.7	1.0374
OCT 77	71	200.7	1.0396	212.7	1.0151	172.2	1.0386	205.4	1.0339	200.3	1.0343
NOV 77	71	202.7	1.0296	213.0	1.0136	175.6	1.0322	205.0	1.0259	201.8	1.0255
DEC 77	71	203.5	1.0255	215.3	1.0328	175.6	1.0116	206.1	1.0202	203.1	1.0201
JAN 78	71	205.1	1.0175	212.8	1.0144	177.5	1.0052	206.8	1.0168	204.9	1.0158
FEB 78	71	207.2	1.0071	215.8	1.0012	178.5	1.0014	209.1	1.0057	206.0	1.0053
MAR 78	71	208.1	1.0027	214.0	1.0086	179.0	0.9994	209.4	1.0041	206.4	1.0037
APR 78	71	209.7	0.9950	215.3	1.0032	179.1	0.9947	210.6	0.9982	207.5	0.9983
MAY 78	71	210.5	0.9924	215.1	1.0038	179.3	0.9973	211.3	0.9950	208.1	0.9952
JUN 78	71	211.0	0.9909	216.7	0.9962	179.5	0.9960	212.3	0.9905	209.0	0.9910
JUL 78	71	212.7	0.9869	215.4	0.9864	180.3	0.9931	213.0	0.9826	210.7	0.9832
AUG 78	71	215.0	0.9659	220.7	0.9764	184.4	0.9732	217.1	0.9687	213.8	0.9680
SEP 78	71	217.0	0.9614	222.4	0.9767	186.4	0.9577	218.2	0.9636	215.1	0.9631

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HISTORICAL TRENDS
QUARTERLY INDICES

QTR	CY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
		INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E	INDEX CY67E	FACTOR FY78E
3	57	100.1	2.6446	99.9	2.1604	100.3	1.7636	100.1	2.1014	100.1	2.0696
4	57	102.0	2.8450	102.5	2.1058	101.2	1.7675	102.1	2.0592	102.0	2.0303
1	58	102.5	2.6350	103.7	2.0815	103.0	1.7351	102.9	2.0454	102.8	2.0144
2	58	102.4	2.6567	103.8	2.0795	103.5	1.7242	102.7	2.0478	102.8	2.0156
3	58	103.8	2.6100	105.0	2.0565	104.5	1.7106	104.1	2.0207	104.1	1.9895
4	58	107.0	1.9908	106.2	2.0324	105.6	1.6913	106.8	1.9691	106.7	1.9415
1	59	108.4	1.8244	108.1	1.9968	106.9	1.6736	108.4	1.9404	108.2	1.9141
2	59	109.3	1.8094	109.2	1.9764	107.8	1.6623	109.3	1.9243	109.1	1.8985
3	59	110.7	1.8223	110.8	1.9491	108.8	1.6436	110.4	1.9050	110.2	1.8791
4	59	113.5	1.8376	116.8	1.8491	109.7	1.6299	114.3	1.8402	113.8	1.8199
1	60	115.0	1.8145	120.4	1.7920	111.1	1.6097	116.2	1.8094	115.7	1.7902
2	60	115.7	1.8043	121.1	1.7829	112.7	1.5877	116.9	1.7993	116.4	1.7789
3	60	117.6	1.7734	122.1	1.7676	114.4	1.5630	118.6	1.7724	118.2	1.7521
4	60	119.9	1.7410	125.8	1.7437	115.4	1.5436	120.7	1.7416	120.2	1.7226
1	71	119.8	1.7425	128.2	1.7244	117.3	1.5245	121.0	1.7383	120.6	1.7175
2	71	120.6	1.7299	130.9	1.7015	117.5	1.5171	122.0	1.7233	121.6	1.7033
3	71	121.1	1.7225	130.6	1.6763	116.0	1.5154	122.8	1.7120	122.3	1.6930
4	71	127.7	1.7012	132.7	1.6646	117.0	1.5221	124.2	1.6927	123.0	1.6765
1	72	125.0	1.6892	130.9	1.7495	119.4	1.4973	125.3	1.6647	125.6	1.6488
2	72	126.7	1.6213	130.9	1.6506	120.5	1.4845	129.1	1.6283	128.3	1.6140
3	72	138.4	1.6183	138.7	1.6771	121.6	1.4704	132.5	1.6313	128.2	1.6161
4	72	133.1	1.5673	130.2	1.6386	122.3	1.4626	136.9	1.5871	131.5	1.5756
1	73	134.8	1.5495	131.5	1.6423	123.1	1.4530	134.0	1.5669	132.9	1.5582
2	73	138.0	1.5343	134.1	1.6104	124.3	1.4392	135.8	1.5511	134.4	1.5407
3	73	138.0	1.5124	135.6	1.5811	125.9	1.4202	137.7	1.5275	136.5	1.5176
4	73	142.1	1.4605	135.7	1.5563	128.1	1.3967	141.3	1.4876	140.0	1.4793
1	74	145.9	1.4505	141.4	1.5213	129.0	1.3802	143.0	1.4501	143.5	1.4436
2	74	150.5	1.4554	151.8	1.4420	132.3	1.3496	150.8	1.3944	145.0	1.3904
3	74	156.7	1.3314	164.4	1.3133	136.0	1.3149	158.4	1.3272	156.2	1.3262
4	74	162.5	1.2842	169.9	1.2704	139.8	1.2786	164.1	1.2811	161.7	1.2810
1	75	166.3	1.2549	175.7	1.2220	145.8	1.2261	168.6	1.2472	166.1	1.2469
2	75	170.4	1.2244	177.6	1.2154	145.8	1.2261	172.0	1.2223	169.4	1.2227
3	75	174.0	1.1993	178.2	1.2113	147.5	1.2128	174.9	1.2020	172.2	1.2029
4	75	177.6	1.1753	180.1	1.1991	147.9	1.2095	178.1	1.1804	175.1	1.1829
1	76	180.5	1.1559	183.4	1.1646	149.6	1.1955	181.3	1.1578	178.4	1.1610
2	76	182.3	1.1444	185.7	1.1629	150.7	1.1865	183.1	1.1485	179.8	1.1517
3	76	186.0	1.1218	191.9	1.1248	152.2	1.1675	187.3	1.1225	183.9	1.1262
4	76	189.3	1.0992	195.6	1.1039	156.3	1.1444	191.1	1.1003	187.6	1.1040
1	77	192.5	1.0426	200.4	1.0774	160.2	1.1163	194.5	1.0611	191.1	1.0841
2	77	196.7	1.0609	205.9	1.0497	162.3	1.1019	195.7	1.0580	195.1	1.0617
3	77	199.4	1.0462	210.5	1.0255	166.1	1.0769	201.5	1.0414	198.3	1.0444
4	77	202.7	1.0315	213.7	1.0105	173.7	1.0298	204.9	1.0267	201.7	1.0269
1	78	206.8	1.0091	214.2	1.0080	178.5	1.0020	208.4	1.0068	205.4	1.0082
2	78	210.3	0.9921	215.3	1.0030	179.3	0.9977	211.4	0.9946	208.2	0.9948
3	78	215.3	0.9694	220.5	0.9791	184.0	0.9722	216.4	0.9716	213.2	0.9716

HISTORICAL INFLATION
FISCAL YEAR INDICES

FY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
	INDEX CY67=	FACTOR FY74=	INDEX CY67=	FACTOR FY74=	INDEX CY67=	FACTOR FY74=	INDEX CY67=	FACTOR FY74=	INDEX CY67=	FACTOR FY74=
69	101.7	1.0000	102.5	2.1083	102.0	1.7535	101.9	2.0322	101.0	1.0000
70	107.1	1.3480	107.1	2.0153	106.2	1.6942	107.1	1.9629	107.0	1.9353
71	115.9	1.5365	117.5	1.8410	110.5	1.6174	114.4	1.8276	114.0	1.8162
72	124.4	1.7467	124.5	1.7340	116.4	1.5368	125.8	1.7457	120.2	1.7237
73	133.2	1.8779	130.0	1.6302	118.9	1.5089	125.8	1.6736	124.5	1.6577
74	144.1	1.8665	131.1	1.6466	122.8	1.4562	132.7	1.5841	131.8	1.5721
75	164.0	1.4479	142.3	1.5177	129.0	1.5852	143.7	1.4533	142.2	1.4563
76	178.6	1.2725	172.1	1.2541	141.4	1.2650	155.8	1.2683	163.4	1.2680
77	186.0	1.1683	162.3	1.1841	148.9	1.2011	178.4	1.1718	176.4	1.1743
78	194.7	1.1218	191.9	1.1246	153.2	1.1675	187.5	1.1225	183.9	1.1252
79	208.7	1.0717	205.1	1.0631	161.2	1.1045	195.6	1.0697	193.0	1.0731
80		1.0000	215.9	1.0000	174.5	1.0000	215.5	1.0000	207.1	1.0000

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APPENDIX G

ANNUAL DATA FOR THE HISTORICAL INFLATION PROGRAM - -
RAW MATERIAL PORTION ONLY

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				ANNUAL CALENDAR YEAR DATA													
				MATERIALS ONLY													
				MATERIAL COST DATA													
				LABOR RATE DATA													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
47	70.5	54.9	0.0	93.20	46.70	100.00	107.60	107.60	107.60	74.10	70.50	149.30	99.79	0.0	0.0	0.0	0.0
48	72.5	52.5	0.0	96.40	57.20	102.00	106.00	106.00	106.00	89.60	70.50	122.40	99.50	0.0	0.0	0.0	0.0
49	70.5	53.0	0.0	55.60	33.20	100.00	110.60	110.60	110.60	81.70	87.20	117.90	98.20	0.0	0.0	0.0	0.0
50	85.5	66.3	0.0	97.00	77.60	100.00	111.30	111.30	111.30	73.00	69.40	103.10	98.20	0.0	0.0	0.0	0.0
51	105.4	73.8	0.0	97.00	59.70	100.00	108.70	108.70	108.70	73.90	91.60	101.00	96.70	0.0	0.0	0.0	0.0
52	95.5	75.9	0.0	97.00	79.60	105.00	102.50	102.50	102.50	74.40	81.60	97.50	95.70	0.0	0.0	0.0	0.0
53	89.1	76.3	0.0	97.10	97.00	100.00	101.40	101.40	101.40	78.50	90.60	97.30	95.10	0.0	0.0	0.0	0.0
54	90.4	76.9	0.0	98.10	98.10	100.00	99.40	99.40	99.40	88.10	90.00	98.60	95.10	0.0	0.0	0.0	0.0
55	102.4	82.1	0.0	97.90	107.20	100.00	98.50	98.50	98.50	84.20	100.00	97.70	97.70	0.0	0.0	0.0	0.0
56	103.8	89.2	0.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
57	103.4	81.0	0.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
58	103.50	82.10	125.70	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
59	102.90	84.70	121.50	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
60	103.10	84.70	120.20	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
61	99.20	84.70	118.60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
62	96.30	84.70	115.40	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
63	96.80	86.90	107.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
64	95.50	88.00	94.40	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
65	95.90	88.00	91.40	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
66	97.20	88.80	91.60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
68	103.40	104.70	103.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.0	0.0	0.0	0.0
69	105.30	109.50	112.50	113.40	108.10	106.50	109.70	109.70	109.70	119.20	112.20	98.00	100.70	0.0	0.0	0.0	0.0
70	109.30	118.40	130.90	119.50	117.10	112.10	110.60	110.60	110.60	130.60	132.10	95.50	101.00	0.0	0.0	0.0	0.0
71	109.10	123.40	135.00	125.30	122.90	99.00	102.70	105.70	105.70	93.40	121.40	102.90	102.40	0.0	0.0	0.0	0.0
72	109.30	133.60	126.40	129.00	130.50	109.60	103.50	104.10	104.10	93.60	123.20	107.00	103.40	0.0	0.0	0.0	0.0
73	112.40	135.30	122.10	132.20	136.90	117.50	109.40	105.20	105.20	93.40	125.10	141.70	104.40	0.0	0.0	0.0	0.0
74	136.20	127.60	157.10	163.90	161.30	159.10	173.20	136.40	126.00	150.70	142.70	173.20	132.50	0.0	0.0	0.0	0.0
75	150.40	139.30	165.30	196.60	191.90	154.00	229.10	192.60	146.40	167.00	142.90	219.20	169.80	0.0	0.0	0.0	0.0
76	159.20	205.00	168.00	215.30	215.20	163.50	243.00	175.30	153.50	182.50	163.50	241.50	115.40	0.0	0.0	0.0	0.0
77	167.60	230.00	197.10	244.40	235.90	219.30	270.60	200.00	163.50	211.50	165.40	259.10	119.50	0.0	0.0	0.0	0.0

APPENDIX H

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM - -
RAW MATERIAL PORTION ONLY

MONTHLY DATA ONLY
MATERIALS ONLY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19		
007X	130262	130264	150141	150153	220111	220151	250101	250113	250117	102502	250463	2505XX	117AXX	ELECT	ACFT E/G	OTHER			
C/N/O	RUBBER	CR SIL	STUBS	CAST	FOR-SE	LEAD	WAGNES	ALUMIN	SC. STR.	EXTRU	CP/GRS	MONEL	TI-MIL	ELECT	3674.9	3721	3722	3723.9	FY
76JAN	152.30	197.00	162.60	214.80	193.40	135.70	242.00	157.20	147.20	149.80	149.20	241.50	171.60	114.50	0.0	0.0	0.0	0.0	76
76FEB	154.20	197.00	162.60	214.80	193.40	135.70	242.00	157.20	147.20	149.80	149.20	241.50	171.60	114.50	0.0	0.0	0.0	0.0	76
76MAR	155.50	197.00	162.60	214.80	193.40	135.70	242.00	157.20	147.20	149.80	149.20	241.50	171.60	114.70	0.0	0.0	0.0	0.0	76
76APR	156.70	197.00	162.60	214.80	193.40	135.00	242.00	163.50	147.20	149.80	149.20	241.50	171.60	114.90	0.0	0.0	0.0	0.0	76
76MAY	157.10	197.00	162.60	214.80	193.40	135.00	242.00	169.30	154.80	154.80	154.80	241.50	171.60	115.00	0.0	0.0	0.0	0.0	76
76JUN	157.20	197.00	162.60	214.80	193.40	135.00	242.00	175.90	154.80	154.80	154.80	241.50	171.60	115.40	0.0	0.0	0.0	0.0	76
76JUL	158.00	209.10	162.60	214.80	193.40	135.00	255.30	175.90	154.80	150.70	168.80	241.50	171.60	115.40	0.0	0.0	0.0	0.0	76
76AUG	161.00	209.10	172.40	214.80	228.80	176.80	255.90	175.90	154.80	156.80	171.40	241.50	171.60	115.50	0.0	0.0	0.0	0.0	76
76SEP	163.60	209.10	176.30	214.80	228.80	176.80	255.90	190.30	156.80	157.50	174.40	241.50	171.60	115.80	0.0	0.0	0.0	0.0	76
76OCT	164.50	209.10	176.30	214.80	228.80	163.90	255.30	190.30	156.80	137.50	174.70	241.50	171.60	116.20	0.0	0.0	0.0	0.0	76
76NOV	164.50	209.10	176.30	214.80	228.80	163.90	255.90	190.30	156.80	137.50	174.70	241.50	171.60	116.40	0.0	0.0	0.0	0.0	76
76DEC	164.50	220.90	176.30	214.80	229.70	163.90	255.90	190.30	156.80	137.50	174.70	241.50	171.60	116.60	0.0	0.0	0.0	0.0	76
77JAN	164.50	222.60	185.00	216.40	231.80	159.30	255.90	190.30	155.90	137.50	174.70	241.50	171.60	116.60	0.0	0.0	0.0	0.0	77
77FEB	164.00	222.60	186.50	220.40	231.80	207.10	267.00	190.30	154.80	137.50	160.40	241.50	171.60	118.20	0.0	0.0	0.0	0.0	77
77MAR	164.50	222.60	187.60	229.40	231.80	221.40	267.00	190.30	154.80	137.50	167.40	241.50	171.60	118.20	0.0	0.0	0.0	0.0	77
77APR	165.20	222.60	188.60	229.40	231.80	221.40	267.00	196.00	161.50	208.70	175.30	262.60	171.60	118.20	0.0	0.0	0.0	0.0	77
77MAY	166.40	222.60	203.10	228.70	231.80	221.40	267.00	199.80	154.80	208.70	175.30	262.60	169.80	118.40	0.0	0.0	0.0	0.0	77
77JUN	167.40	222.60	203.40	229.40	231.80	221.40	267.00	203.70	167.60	209.30	172.90	262.60	169.30	118.90	0.0	0.0	0.0	0.0	77
77JUL	168.90	237.40	205.60	235.70	234.20	221.40	275.40	199.60	167.60	213.30	173.10	262.60	169.30	118.70	0.0	0.0	0.0	0.0	77
77AUG	169.10	237.40	205.60	239.40	234.20	221.40	275.40	190.60	157.40	230.20	170.20	262.60	170.10	118.80	0.0	0.0	0.0	0.0	77
77SEP	169.50	237.40	207.70	239.40	243.10	221.40	275.40	204.60	167.60	230.20	163.10	262.60	168.90	120.50	0.0	0.0	0.0	0.0	77
77OCT	170.20	237.40	207.70	241.20	243.10	221.40	275.40	206.00	167.60	230.20	163.10	262.60	169.10	121.10	0.0	0.0	0.0	0.0	78
77NOV	170.20	237.40	207.70	241.20	243.10	221.40	275.40	211.80	167.60	230.20	160.50	262.60	168.70	121.70	0.0	0.0	0.0	0.0	78
77DEC	170.20	237.40	207.70	241.20	243.10	221.40	275.40	211.80	167.60	230.20	161.20	262.60	168.70	121.50	0.0	0.0	0.0	0.0	78
78JAN	170.20	257.40	194.40	241.90	245.90	235.70	275.40	211.80	167.60	223.90	164.30	262.60	168.70	124.40	0.0	0.0	0.0	0.0	78
78FEB	170.20	250.90	194.40	241.90	245.90	235.70	275.40	217.00	167.60	223.90	164.30	262.60	168.70	124.70	0.0	0.0	0.0	0.0	78
78MAR	171.40	250.90	192.90	241.90	257.70	235.70	275.40	228.50	170.40	228.50	167.00	262.60	170.10	125.80	0.0	0.0	0.0	0.0	78
78APR	172.80	234.10	190.50	240.00	237.70	235.70	275.40	228.50	173.10	230.60	166.30	262.60	170.10	125.30	0.0	0.0	0.0	0.0	78
78MAY	173.70	254.50	192.70	240.00	263.70	228.90	230.90	228.50	170.40	230.60	169.10	262.60	172.20	125.80	0.0	0.0	0.0	0.0	78
78JUN	174.50	254.50	194.00	240.00	263.70	221.40	230.90	228.50	173.10	230.60	171.50	262.60	173.80	126.50	0.0	0.0	0.0	0.0	78
78JUL	174.70	254.50	194.40	240.00	263.70	221.40	230.90	235.20	173.10	232.00	169.70	262.60	173.90	127.10	0.0	0.0	0.0	0.0	78
78AUG	175.40	252.90	201.10	240.00	273.10	233.90	230.90	245.20	173.10	232.00	172.50	262.60	173.70	127.10	0.0	0.0	0.0	0.0	78
78SEP	175.90	252.90	201.10	235.90	273.10	235.70	240.90	245.20	172.90	232.00	174.10	262.60	175.60	127.50	0.0	0.0	0.0	0.0	78

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APPENDIX I

HISTORICAL INFLATION INDICES :

RAW MATERIAL PORTION ONLY.

HISTORICAL INFLATION
PRE-1958 INDICES

RAW MATERIAL PORTION ONLY

CY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS	
	INDEX CY57E 100.0	FACTOR FY78E 1.0000	INDEX CY57E 100.0	FACTOR FY78E 1.0000	INDEX CY57E 100.0	FACTOR FY78E 1.0000
47	17.0	2.45293	36.2	3.1363	21.3	2.5351
48	19.2	2.20950	41.2	2.7314	24.1	2.5917
49	19.3	2.4740	41.5	2.7102	27.2	2.5763
50	20.0	2.3414	43.7	2.5737	26.7	2.4292
51	23.1	2.0945	48.7	2.3111	25.6	2.1698
52	22.9	2.1010	49.7	2.3091	26.6	2.1797
53	23.4	2.0524	50.3	2.2374	29.4	2.1227
54	23.6	2.1353	50.7	2.2199	29.4	2.1054
55	25.4	1.9470	54.1	2.0703	31.1	1.9550
56	27.4	1.7500	58.8	1.9159	34.4	1.8160
57	27.9	1.7246	60.0	1.8762	35.0	1.7822

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HISTORICAL INFLATION
CALENDAR YEAR INDICES
RAW MATERIAL PORTION ONLY

CY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
	INDEX CY67=	FACTOR FY78=	INDEX CY57=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=
56	27.7	1.7334	59.6	1.5886	31.5	1.2499	34.8	1.7937	34.5	1.7440
59	25.0	1.4646	59.3	1.9980	31.5	1.2543	32.6	1.9162	32.5	1.8523
60	26.2	1.8373	57.9	1.9422	30.9	1.2715	33.2	1.8780	33.0	1.8211
61	25.4	1.8950	57.0	1.9749	30.9	1.2715	32.4	1.9259	32.5	1.8652
62	24.5	1.9696	55.2	2.0155	30.5	1.2512	31.5	1.9822	31.4	1.9152
63	23.7	2.0346	53.2	2.1155	30.1	1.3047	30.2	2.0655	30.2	1.9896
64	23.5	2.0439	49.8	2.2603	30.0	1.3129	29.4	2.1254	29.4	2.0427
65	23.6	2.0593	49.0	2.2946	30.0	1.3129	29.3	2.1344	29.3	2.0501
66	23.8	2.0196	49.8	2.2604	30.0	1.2740	29.6	2.1096	29.7	2.0235
67	24.1	1.9932	52.2	2.1504	31.5	1.2446	30.5	2.0478	30.6	1.9653
68	24.5	1.9640	54.2	2.0766	31.2	1.2587	31.1	2.0053	31.1	1.9304
69	25.5	1.8963	57.4	1.9461	31.7	1.2394	32.7	1.9101	32.6	1.8449
70	26.2	1.8343	55.3	1.7230	31.6	1.2362	34.9	1.7801	34.8	1.7373
71	26.2	1.8379	57.7	1.8624	32.3	1.2143	35.4	1.7634	35.1	1.7134
72	26.5	1.8105	55.9	1.7669	32.9	1.2075	35.3	1.7675	35.0	1.7155
73	27.3	1.7544	63.2	1.7009	32.4	1.1940	35.9	1.7380	35.6	1.6880
74	34.2	1.4039	82.8	1.3577	35.1	1.1207	44.0	1.3679	44.0	1.3666
75	39.1	1.2301	103.7	1.1731	36.4	1.0610	51.7	1.2075	50.2	1.1983
76	42.2	1.1332	100.8	1.1164	36.5	1.0742	55.2	1.1302	53.5	1.1272
77	45.6	1.0534	111.2	1.0051	37.6	1.0443	60.2	1.0364	58.0	1.0369

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HISTORICAL INFLATION
MONTHLY INDICES

RA. MATERIAL PORTION ONLY

		AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
CY	FY	INDEX CY67=100.0	FACTOR FY78=1.0000	INDEX CY67=100.0	FACTOR FY78=1.0000	INDEX CY67=100.0	FACTOR FY78=1.0000	INDEX CY67=100.0	FACTOR FY78=1.0000	INDEX CY67=100.0	FACTOR FY78=1.0000
JUL	67	24.0	2.0336	52.4	2.1564	31.4	1.2511	30.4	2.0586	30.4	1.9752
AUG	67	24.1	2.0604	52.4	2.1483	31.4	1.2523	30.4	2.0564	30.5	1.9725
SEP	67	24.1	1.9931	52.4	2.1460	31.3	1.2549	30.4	2.0534	30.5	1.9713
OCT	67	24.2	1.9891	53.7	2.0961	31.3	1.2561	30.7	2.0306	30.8	1.9519
NOV	67	24.3	1.9323	54.1	2.0791	31.0	1.2599	30.9	2.0200	30.9	1.9432
DEC	67	24.3	1.9794	54.1	2.0788	31.5	1.2498	30.9	2.0181	31.0	1.9401
JAN	68	24.3	1.9675	54.1	2.0781	31.1	1.2525	31.1	2.0104	31.1	1.9338
FEB	68	24.5	1.9607	54.5	2.0632	31.3	1.2561	31.2	2.0014	31.2	1.9266
MAR	68	24.5	1.9551	54.5	2.0581	31.3	1.2599	31.2	2.0005	31.2	1.9265
APR	68	24.5	1.9607	54.4	2.0664	31.3	1.2561	31.2	2.0025	31.2	1.9275
MAY	68	24.5	1.9799	54.4	2.0536	31.3	1.2549	31.0	2.0150	31.0	1.9382
JUN	68	24.5	1.9658	54.4	2.0536	31.2	1.2595	31.1	2.0049	31.0	1.9300
JUL	68	24.5	1.9525	54.4	2.0634	31.2	1.2612	31.3	1.9974	31.3	1.9239
AUG	68	24.7	1.9324	54.6	2.0595	31.3	1.2612	31.3	1.9939	31.3	1.9209
SEP	68	24.4	1.9637	54.4	2.0667	31.2	1.2612	31.1	2.0075	31.1	1.9327
OCT	68	24.5	1.9679	54.4	2.0582	31.2	1.2612	31.1	2.0070	31.1	1.9325
NOV	68	24.5	1.9652	54.1	2.0732	31.1	1.2599	31.1	2.0092	31.1	1.9340
DEC	68	24.5	1.9631	54.1	2.0734	31.2	1.2599	31.1	2.0077	31.1	1.9320
JAN	69	24.6	1.9525	55.7	2.0295	31.2	1.2625	31.5	1.9792	31.5	1.9083
FEB	69	25.1	1.9145	55.7	2.0163	31.3	1.2461	31.9	1.9547	31.9	1.8846
MAR	69	25.2	1.9063	55.8	2.0178	31.3	1.2438	32.0	1.9494	32.0	1.8795
APR	69	25.4	1.8941	56.0	2.0034	31.7	1.2411	32.2	1.9387	32.2	1.8699
MAY	69	25.5	1.8854	56.1	2.0072	31.7	1.2411	32.3	1.9323	32.2	1.8644
JUN	69	25.6	1.8830	57.2	1.9876	31.7	1.2411	32.6	1.9165	32.5	1.8506
JUL	69	25.6	1.8731	57.2	1.9874	31.7	1.2424	32.6	1.9135	32.5	1.8482
AUG	69	25.6	1.8635	57.2	1.9665	31.7	1.2411	32.7	1.9067	32.6	1.8420
SEP	69	25.6	1.8619	58.9	1.9767	31.9	1.2338	32.5	1.8918	32.5	1.8515
OCT	69	25.7	1.8741	61.2	1.8389	31.7	1.2312	33.6	1.8599	33.4	1.7998
NOV	69	25.8	1.8631	61.0	1.8445	32.0	1.2277	33.6	1.8569	33.5	1.7966
DEC	69	26.1	1.8452	63.8	1.7666	31.3	1.2312	34.5	1.8121	34.2	1.7578
JAN	70	26.2	1.8400	63.1	1.7278	31.3	1.2312	34.5	1.7934	34.5	1.7433
FEB	70	26.2	1.8401	63.1	1.7273	31.4	1.2461	34.8	1.7934	34.5	1.7433
MAR	70	26.1	1.8436	63.1	1.7280	31.5	1.2461	34.8	1.7355	34.5	1.7452
APR	70	26.1	1.8367	65.1	1.7230	31.7	1.2411	34.5	1.7920	34.5	1.7415
MAY	70	26.3	1.8250	65.1	1.7231	31.4	1.2511	35.0	1.7862	34.6	1.7376
JUN	70	26.3	1.8297	65.2	1.7264	31.5	1.2338	35.0	1.7653	34.7	1.7346
JUL	70	26.3	1.8278	65.2	1.7269	31.5	1.2338	35.0	1.7660	34.6	1.7352
AUG	70	26.3	1.8278	65.2	1.7269	31.5	1.2338	35.0	1.7660	34.6	1.7352
SEP	70	26.2	1.8347	65.4	1.7194	32.0	1.2301	34.9	1.7667	34.6	1.7354
OCT	70	26.2	1.8431	65.4	1.7195	32.0	1.2301	34.9	1.7670	34.6	1.7354
NOV	70	26.2	1.8346	65.3	1.7092	32.1	1.2253	35.0	1.7649	34.7	1.7308
DEC	70	26.2	1.8392	65.8	1.7093	32.1	1.2253	35.0	1.7649	34.7	1.7331
JAN	71	26.1	1.8442	65.9	1.7389	32.4	1.2146	34.9	1.7672	34.7	1.7337
FEB	71	26.0	1.8520	65.9	1.7080	32.5	1.2087	34.9	1.7915	34.6	1.7367
MAR	71	26.1	1.8436	65.6	1.6899	32.7	1.2040	35.1	1.7788	34.9	1.7249
APR	71	26.4	1.8249	66.6	1.6634	32.5	1.2110	35.3	1.7663	35.1	1.7149

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MAY 71	71	26.4	1.6213	66.8	1.6849	32.4	1.2156	35.4	1.7641	35.1	1.7136
JUN 71	71	26.4	1.8247	68.7	1.6378	32.4	1.2122	35.4	1.7449	35.4	1.6962
JUL 71	72	26.4	1.6421	66.7	1.6376	32.5	1.2110	35.5	1.7435	35.5	1.6947
AUG 71	72	26.4	1.8219	68.7	1.6376	32.5	1.2099	35.5	1.7433	35.5	1.6945
SEP 71	72	26.4	1.6239	66.6	1.6392	32.4	1.2146	35.4	1.7452	35.4	1.6967
OCT 71	72	26.4	1.8242	68.6	1.6392	32.4	1.2146	35.4	1.7453	35.4	1.6968
NOV 71	72	26.3	1.6266	66.6	1.6393	32.3	1.2169	35.7	1.7467	35.4	1.6903
DEC 71	72	26.3	1.8282	68.4	1.6457	32.3	1.2181	35.7	1.7504	35.3	1.7018
JAN 72	72	26.2	1.6342	68.4	1.6441	32.3	1.2193	35.6	1.7530	35.3	1.7042
FEB 72	72	26.5	1.8166	69.7	1.6380	32.6	1.2075	35.9	1.7407	35.5	1.6916
MAR 72	72	26.5	1.6133	68.3	1.6310	32.5	1.2075	35.0	1.7356	35.6	1.6873
APR 72	72	26.6	1.8097	69.0	1.6426	32.5	1.2099	36.0	1.7333	35.7	1.6856
MAY 72	72	26.7	1.6041	68.0	1.6426	32.5	1.2099	35.1	1.7301	35.8	1.6816
JUN 72	72	26.7	1.8056	68.4	1.7417	32.7	1.2017	35.0	1.7819	34.8	1.7274
JUL 72	73	26.6	1.6071	68.4	1.7417	32.6	1.2006	35.0	1.7828	34.8	1.7280
AUG 72	73	26.7	1.8055	68.6	1.7526	32.7	1.2040	34.9	1.7905	34.6	1.7352
SEP 72	73	26.7	1.6035	68.6	1.7526	32.6	1.2067	34.9	1.7894	34.7	1.7349
OCT 72	73	26.6	1.8092	68.6	1.7527	32.5	1.2099	34.8	1.7928	34.6	1.7380
NOV 72	73	26.6	1.6032	68.6	1.7527	32.5	1.2099	34.8	1.7921	34.6	1.7374
DEC 72	73	26.6	1.8030	68.6	1.7526	32.5	1.2047	34.8	1.7920	34.6	1.7371
JAN 73	73	26.6	1.6032	68.7	1.7526	32.6	1.2052	34.9	1.7902	34.7	1.7351
FEB 73	73	26.7	1.8041	68.7	1.7526	32.6	1.2052	34.9	1.7889	34.7	1.7340
MAR 73	73	26.9	1.7990	68.8	1.7526	32.7	1.2052	35.4	1.7652	35.1	1.7130
APR 73	73	27.0	1.7952	68.8	1.7334	32.6	1.2006	35.4	1.7629	35.2	1.7105
MAY 73	73	27.0	1.7794	66.5	1.6913	32.7	1.1960	35.3	1.7450	35.5	1.6924
JUN 73	73	27.2	1.7687	67.0	1.6913	32.7	1.1946	35.3	1.7322	35.7	1.6827
JUL 73	74	27.2	1.7593	67.0	1.6803	32.8	1.1937	36.0	1.7329	35.7	1.6832
AUG 73	74	27.2	1.7568	67.0	1.6764	32.9	1.1937	36.1	1.7305	35.8	1.6810
SEP 73	74	27.2	1.7512	67.2	1.6764	32.9	1.1937	36.3	1.7196	36.0	1.6714
OCT 73	74	27.3	1.7404	67.2	1.6732	33.0	1.1914	36.4	1.7131	36.1	1.6654
NOV 73	74	27.3	1.7323	67.2	1.6732	33.0	1.1903	36.3	1.7010	36.3	1.6545
DEC 73	74	28.4	1.6266	67.6	1.6645	33.3	1.1813	36.7	1.6836	36.7	1.6380
JAN 74	74	29.3	1.6113	68.5	1.6414	33.5	1.1757	37.6	1.6414	37.6	1.6000
FEB 74	74	29.5	1.6235	67.0	1.6296	33.5	1.1735	38.3	1.6296	37.8	1.5892
MAR 74	74	30.5	1.5777	71.5	1.5742	33.8	1.1647	39.2	1.5763	39.0	1.5407
APR 74	74	31.7	1.5161	73.1	1.5360	34.1	1.1529	40.9	1.5248	40.3	1.4933
MAY 74	74	32.8	1.4633	80.9	1.3311	34.5	1.1392	43.4	1.4870	42.6	1.4129
JUN 74	74	33.5	1.4325	82.7	1.3311	35.1	1.1216	44.5	1.4051	43.5	1.3623
JUL 74	75	35.5	1.3525	95.6	1.3141	35.3	1.1138	45.8	1.3387	45.5	1.3212
AUG 74	75	36.9	1.3044	81.2	1.2330	35.5	1.0962	48.0	1.2754	47.6	1.2817
SEP 74	75	36.9	1.3059	81.5	1.2291	35.7	1.1020	49.0	1.2729	47.7	1.2801
OCT 74	75	37.8	1.2745	92.6	1.2146	36.0	1.0924	49.8	1.2499	48.6	1.2382
NOV 74	75	37.5	1.2791	92.8	1.2101	36.2	1.0690	49.9	1.2514	48.6	1.2376
DEC 74	75	37.5	1.2434	93.8	1.2017	36.3	1.0672	50.0	1.2494	48.7	1.2356
JAN 75	75	38.6	1.2494	98.8	1.1985	36.3	1.0644	50.4	1.2425	50.4	1.1924
FEB 75	75	38.5	1.2502	98.4	1.1674	36.3	1.0672	51.4	1.2157	49.9	1.2048
MAR 75	75	38.5	1.2300	96.2	1.1632	36.7	1.0708	51.3	1.2165	49.4	1.2058
APR 75	75	39.0	1.2440	96.9	1.1504	36.4	1.0786	51.5	1.2120	50.0	1.2019
MAY 75	75	39.0	1.2335	96.9	1.1504	36.4	1.0801	51.5	1.2032	50.3	1.1943
JUN 75	75	39.0	1.2336	96.2	1.1521	36.4	1.0792	51.5	1.2125	50.0	1.2028
JUL 75	76	39.1	1.2322	93.3	1.1522	36.4	1.0780	51.6	1.2109	50.9	1.2014
AUG 75	76	39.7	1.2121	95.4	1.1792	36.3	1.0844	52.1	1.1987	50.5	1.1905
SEP 75	76	39.8	1.2107	93.4	1.1791	36.1	1.0905	52.1	1.1973	50.5	1.1902
OCT 75	76	39.8	1.2149	93.6	1.1610	36.1	1.0924	52.0	1.2011	50.4	1.1936
NOV 75	76	39.6	1.2142	94.8	1.1590	36.0	1.0962	51.7	1.2060	50.1	1.1997
DEC 75	75	39.6	1.2152	93.6	1.1496	36.0	1.0924	51.6	1.2084	50.1	1.2006
JAN 76	75	40.1	1.1955	90.7	1.1404	36.1	1.0905	53.1	1.1751	51.4	1.1892
FEB 76	76	40.3	1.1952	90.7	1.1404	36.2	1.0867	53.2	1.1725	51.5	1.1855
MAR 76	76	40.6	1.1857	98.8	1.1387	36.1	1.0836	53.5	1.1665	51.8	1.1611
APR 76	76	40.8	1.1796	98.6	1.1365	36.2	1.0867	53.7	1.1628	51.9	1.1575

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MAY 76	76	75	41.5	1.1587	98.9	1.1374	36.2	1.0657	54.3	1.1501	52.5	1.1456
JUN 76	76	76	42.1	1.1418	99.0	1.1363	36.4	1.0920	54.8	1.1396	52.9	1.1356
JUL 76	77	77	42.3	1.1375	99.4	1.1325	36.4	1.0920	55.0	1.1354	53.1	1.1317
AUG 76	77	77	42.7	1.1273	102.0	1.1032	36.4	1.0810	55.9	1.1175	53.9	1.1150
SEP 76	77	77	44.1	1.0813	103.2	1.0904	36.5	1.0782	57.2	1.0913	55.1	1.0904
OCT 76	77	77	44.1	1.0904	103.2	1.0903	36.6	1.0745	57.3	1.0903	55.2	1.0893
NOV 76	77	77	44.1	1.0921	103.2	1.0909	36.7	1.0727	57.2	1.0912	55.2	1.0900
DEC 76	77	77	44.0	1.0949	103.2	1.0901	36.7	1.0706	57.1	1.0929	55.1	1.0915
JAN 77	77	77	43.9	1.0954	105.5	1.0664	37.1	1.0590	57.6	1.0838	55.6	1.0922
FEB 77	77	77	44.0	1.0932	105.2	1.0597	37.2	1.0563	57.8	1.0795	55.8	1.0779
MAR 77	77	77	44.4	1.0845	109.1	1.0315	37.2	1.0563	58.6	1.0626	56.6	1.0622
APR 77	77	77	45.4	1.0505	103.2	1.0303	37.4	1.0510	59.6	1.0482	57.4	1.0434
MAY 77	77	77	45.5	1.0509	112.6	0.9991	37.4	1.0510	60.4	1.0341	58.1	1.0352
JUN 77	77	77	45.8	1.0507	113.5	0.9911	37.5	1.0501	60.9	1.0260	58.5	1.0275
JUL 77	77	77	45.6	1.0362	114.3	0.9847	37.5	1.0519	60.8	1.0263	58.5	1.0260
AUG 77	77	77	45.5	1.0343	114.3	0.9845	37.4	1.0510	60.9	1.0252	58.6	1.0268
SEP 77	77	77	46.2	1.0406	113.5	0.9909	38.0	1.0362	61.2	1.0201	58.9	1.0211
OCT 77	78	78	46.3	1.0336	113.6	0.9907	38.1	1.0310	61.2	1.0195	58.9	1.0202
NOV 77	78	78	46.0	1.0321	113.6	0.9956	38.3	1.0260	61.4	1.0173	59.1	1.0179
DEC 77	78	78	46.6	1.0310	113.0	0.9958	38.3	1.0276	61.4	1.0171	59.1	1.0176
JAN 78	78	78	46.9	1.0271	111.4	1.0163	38.2	1.0037	61.2	1.0203	59.0	1.0192
FEB 78	78	78	47.3	1.0174	111.5	1.0095	38.3	1.0013	61.6	1.0142	59.3	1.0133
MAR 78	78	78	48.2	0.9976	111.4	1.0099	38.3	0.9925	62.3	1.0025	60.0	1.0019
APR 78	78	78	48.5	0.9924	110.6	1.0155	38.5	0.9965	62.3	1.0015	60.1	1.0012
MAY 78	78	78	48.7	0.9891	111.7	1.0073	38.6	0.9925	62.7	0.9953	60.4	0.9961
JUN 78	78	78	48.8	0.9853	112.2	1.0030	39.5	0.9870	62.9	0.9923	60.6	0.9920
JUL 78	78	78	49.3	0.9759	112.5	0.9954	40.0	0.9824	63.4	0.9846	61.1	0.9844
AUG 78	78	78	50.1	0.9603	114.4	0.9836	40.0	0.9824	64.4	0.9695	62.0	0.9703
SEP 78	78	78	50.2	0.9521	114.4	0.9835	40.1	0.9833	64.5	0.9687	62.0	0.9655

HISTORICAL INFLATION
QUARTERLY INDICES
RAW MATERIAL PORTION ONLY

QTR	CY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
		INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=	INDEX CY67=	FACTOR FY78=
3	67	24.1	2.0000	52.4	2.1454	51.4	1.2528	30.4	2.0561	30.5	1.9733
4	67	24.3	1.9636	54.0	2.0646	51.3	1.2553	30.9	2.0229	30.9	1.9451
1	68	24.5	1.9623	54.3	2.0701	51.3	1.2561	31.2	2.0041	31.2	1.9290
2	68	24.5	1.9681	54.4	2.0691	51.3	1.2570	31.1	2.0073	31.1	1.9319
3	68	24.6	1.9575	54.5	2.0655	51.2	1.2612	31.2	1.9996	31.2	1.9258
4	68	24.5	1.9654	54.2	2.0752	51.2	1.2603	31.1	2.0080	31.1	1.9330
1	69	25.0	1.9242	55.7	2.0189	51.4	1.2507	31.6	1.9610	31.6	1.8905
2	69	25.5	1.8977	56.4	1.9946	51.7	1.2411	32.4	1.9291	32.3	1.8616
3	69	25.6	1.8765	57.1	1.9703	51.7	1.2391	32.6	1.9129	32.5	1.8472
4	69	25.9	1.8614	58.0	1.9153	52.0	1.2301	33.9	1.8427	33.7	1.7845
1	70	26.1	1.8412	65.1	1.7279	51.7	1.2411	34.8	1.7941	34.5	1.7433
2	70	26.3	1.8305	65.1	1.7277	51.7	1.2420	34.9	1.7879	34.6	1.7379
3	70	26.3	1.8301	65.2	1.7244	51.9	1.2334	35.0	1.7862	34.6	1.7353
4	70	26.2	1.8363	65.7	1.7126	52.1	1.2265	35.0	1.7847	34.7	1.7332
1	71	26.1	1.8468	65.1	1.7020	52.5	1.2041	35.0	1.7858	34.7	1.7313
2	71	26.4	1.8236	67.4	1.6591	52.4	1.2130	35.5	1.7584	35.2	1.7082
3	71	26.4	1.8227	67.4	1.6581	52.5	1.2115	35.8	1.7440	35.5	1.6953
4	71	26.4	1.8263	68.5	1.6414	52.3	1.2165	35.7	1.7475	35.4	1.6990
1	72	26.4	1.8214	67.5	1.6377	52.5	1.2114	35.8	1.7431	35.5	1.6544
2	72	26.6	1.8063	67.5	1.6677	52.7	1.2040	35.7	1.7481	35.4	1.6979
3	72	26.7	1.8054	63.9	1.7615	52.7	1.2044	34.9	1.7876	34.7	1.7327
4	72	26.6	1.8084	63.6	1.7597	52.5	1.2095	34.6	1.7923	34.6	1.7375
1	73	26.7	1.7997	64.1	1.7546	52.6	1.2046	35.0	1.7814	34.9	1.7273
2	73	27.1	1.7777	66.2	1.7304	52.3	1.1971	35.8	1.7459	35.5	1.6951
3	73	27.3	1.7626	67.1	1.6778	52.3	1.1937	35.1	1.7276	35.6	1.6785
4	73	28.0	1.7196	67.4	1.6694	53.1	1.1876	36.7	1.6991	36.4	1.6526
1	74	29.8	1.6157	69.7	1.5147	53.5	1.1713	38.7	1.6153	38.1	1.5762
2	74	32.7	1.4732	78.9	1.4256	54.6	1.1578	42.5	1.4539	42.1	1.4279
3	74	36.4	1.3211	89.4	1.2578	55.0	1.1040	43.2	1.2950	47.0	1.2605
4	74	37.5	1.2790	93.0	1.2095	56.6	1.0761	49.9	1.2502	48.6	1.2371
1	75	38.5	1.2499	97.1	1.1593	56.4	1.0675	51.5	1.2115	50.1	1.2009
2	75	38.9	1.2371	96.2	1.1496	56.3	1.0776	51.6	1.2092	50.1	1.1997
3	75	39.5	1.2183	95.4	1.1195	56.2	1.0851	51.9	1.2025	50.4	1.1940
4	75	39.6	1.2148	94.3	1.1131	56.0	1.0936	51.8	1.2060	50.2	1.1980
1	76	40.3	1.1934	98.7	1.1158	56.1	1.0846	53.3	1.1714	51.6	1.1656
2	76	41.5	1.1598	96.9	1.1374	56.3	1.0840	54.3	1.1507	52.5	1.1462
3	76	43.0	1.1145	101.5	1.1083	56.4	1.0804	56.0	1.1144	54.1	1.1121
4	76	44.1	1.0924	103.2	1.0901	56.7	1.0727	57.2	1.0915	55.1	1.0902
1	77	44.1	1.0911	106.9	1.0523	57.2	1.0572	58.1	1.0752	56.0	1.0740
2	77	45.5	1.0567	111.8	1.0066	57.4	1.0507	60.3	1.0360	58.0	1.0370
3	77	45.5	1.0503	114.0	0.9867	57.6	1.0463	61.0	1.0239	58.6	1.0253
4	77	46.5	1.0345	115.2	0.9941	58.3	1.0282	61.3	1.0180	59.0	1.0186
1	78	47.5	1.0139	111.4	1.0099	59.4	0.9991	61.7	1.0123	59.4	1.0114
2	78	48.7	0.9989	111.6	1.0065	59.6	0.9920	62.6	0.9967	60.3	0.9964
3	78	49.9	0.9653	113.9	0.9878	40.1	0.9818	64.1	0.9742	61.7	0.9747

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HISTORICAL INFLATION
FISCAL YEAR INDICES
RAW MATERIAL PORTION ONLY

FY	AIRFRAME PRODUCTION		ENGINE PRODUCTION		AVIONICS PRODUCTION		AGGREGATE AIR VEHICLE EXCLUDING AVIONICS		AGGREGATE AIR VEHICLE INCLUDING AVIONICS	
	INDEX CY57=	FACTOR FY78=	INDEX CY57=	FACTOR FY78=	INDEX CY57=	FACTOR FY78=	INDEX CY57=	FACTOR FY78=	INDEX CY57=	FACTOR FY78=
68	24.3	1.9784	53.8	2.0921	31.3	1.2553	30.9	2.0224	30.9	1.9447
69	24.7	1.9333	55.2	2.0360	31.4	1.2533	31.6	1.9739	31.6	1.9024
70	26.0	1.8522	62.3	1.8751	31.8	1.2241	34.1	1.8330	33.4	1.7772
71	26.2	1.8341	66.1	1.7018	32.2	1.2205	35.1	1.7787	34.8	1.7270
72	26.5	1.8191	68.3	1.6461	32.5	1.2109	35.8	1.7457	35.4	1.6967
73	26.8	1.7977	64.4	1.7455	32.7	1.2039	35.1	1.7766	34.9	1.7230
74	29.4	1.6349	70.8	1.5900	33.6	1.1722	38.6	1.6166	38.1	1.5775
75	37.0	1.2710	43.9	1.1974	36.4	1.0411	50.3	1.2405	48.9	1.2287
76	40.2	1.1961	46.6	1.1619	36.1	1.0430	52.6	1.1822	51.1	1.1755
77	43.0	1.1145	101.5	1.1083	36.4	1.0404	56.0	1.1144	54.1	1.1121
77	44.9	1.0723	109.0	1.0523	37.2	1.0566	59.1	1.0559	54.9	1.0560
79	42.1	1.0000	112.5	1.0000	35.5	1.0000	62.4	1.0000	60.1	1.0000

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APPENDIX J

SENSITIVITY ANALYSIS .

J1

APPENDIX J

SENSITIVITY ANALYSIS

Many considerations are important in constructing Historical Indices for tracking purposes. These certainly include:

a. The nature of the items chosen to comprise the index:

(1) How typical or representative the items are.

(2) How closely the items approximate the actual materials used, if indices for the actual items are not obtainable.

(3) The number of items used, and the detail in the analysis which produced the indices.

b. The determination of the percent contribution to cost - "Cost Drivers"

c. The weighting factors employed in the overall analysis.

An obvious problem confronting those who must determine the validity of an index for historical tracking purposes relates to aggregate labor/material weighting factors. In tracking major weapons systems, the ratio is often stated as say 40/60 - that is 40 percent material and 60 percent labor - as percent contributions to cost. Because it is difficult for analysts to determine the "correct" aggregate mix of labor and material, being external to the project, the aggregate split is obviously of interest.

The value for any index depends on three factors:

a. The number of factors employed, and the quality and depth contained in the analysis.

b. The values for each component of cost used in the construction of the index.

c. The weights, or levels of importance, given the factors, individually and collectively.

ANALYSIS: The objective of this sensitivity analysis is to shed some light on the way in which the aggregate labor/material split affects the index, which has been a controversial issue for some time. Through the use of a set of recursive linear equations, the effect on the historical inflation index for airframe resulting from varying the aggregate weighting scheme was calculated, in both raw and percentage terms. The calculations were made using a Wang system 2200 mini computer, and a sample printout follows. The results provide evidence that the key to a successful index resides in item (1), the number of factors employed, and the quality and detail in the analysis used in preparing the index. Because wages are often tied to the Producer Price Index, or other price indices, in labor agreements, it is not surprising that aggregate weighting percentages for labor and material might not be an extremely sensitive issue. However, the calculations provide strong support for the position that the identification of cost components and the depth and quality of detail in an analysis are of paramount importance, when developing an index to be used in controlling the cost of a major weapon system.

SENSITIVITY ANALYSIS
 ***** AIRBORNE *****
 TO GROSS WEIGHTING FACTORS

YEAR 1977

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GROSS MATL	GROSS LABOR	PURE MATL	PURE LABOR	NEW INDX	CURR INDX	PERCENT CHANGE
378	6229	2411	7588	1.978	1.978	0.0
300	8000	1068	8931	1.9937	1.9780	0.79
250	7500	1408	8591	1.9898	1.9780	0.60
300	7000	1777	8222	1.9856	1.9780	0.38
350	6500	2175	7824	1.9810	1.9780	0.15
400	6000	2603	7395	1.9761	1.9780	- 0.09
450	5500	3059	6940	1.9709	1.9780	- 0.35
500	5000	3545	6455	1.9653	1.9780	- 0.62
550	4500	4059	5940	1.9594	1.9780	- 0.93
600	4000	4603	5395	1.9532	1.9780	- 1.25
650	3500	5175	4824	1.9466	1.9780	- 1.58
700	3000	5777	4222	1.9397	1.9780	- 1.93
750	2500	6408	3591	1.9325	1.9780	- 2.29
800	2000	7068	2921	1.9249	1.9780	- 2.63

SIC 3721 = 7.978 SIC 3723 9 = 6.420 NEW MAT INO = 4560