If not shown, please enter your 11-digit Census File Number from the address label on page 1

Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997

## INSTRUCTIONS

1. General - The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in item 18B. Please review the entire list and report separately each item consumed. Leave blank if you do not consume the item. If you use materials, parts, and supplies which are not listed, describe and report them in the "Cost of all other materials . . . "line at the end of this section. If you consumed less than $\$ 25,000$ of a listed material, include the value with "Cost of all other materials . . . ," Census material code 9700998.

Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.
If quantities are requested, please use the unit of measure specified.

If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.
2. Valuation of Materials Consumed - The value of the materials, etc., consumed should be based on the delivered cost; i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials.

Materials received from other plants within your company should be reported at their full economic value (the value assigned by the shipping plant, plus the cost of freight and other handling charges).

If purchases or transfers do not differ significantly from the amounts actually put into production, you may report the cost of purchases or transfers. However, if consumption differs significantly from the amounts purchased or transferred, these amounts should be adjusted for changes in the materials and supplies inventories by adding the beginning inventory to the amount purchased or transferred and subtracting ending inventory.
3. Contract Work - Include as materials consumed those you purchased for use by others making products for you under contract. Amounts paid to the companies doing the contract work should be reported in item 10, line e, and should include freight in and out. On the other hand, materials owned by others but used at this establishment in making products for others under contract or on commission should be excluded.
4. Resales - Cost for products bought and sold or transferred from other establishments of your company and sold without further manufacture, processing, or assembly should be reported in item 10, line b, not in item 17 below. The value of these products shipped by this establishment should be reported in item 18B under Census product code 9998900 6, "Resales."
5. Produced and Consumed - Forgings, foundries, and screw machine products - Report the quantities produced and used in manufacturing other products made in this establishment in item 19. Note that the materials used to produce these items should be reported in item 17.

| $\begin{aligned} & \dot{0} \\ & \text { z } \\ & \stackrel{0}{3} \end{aligned}$ | Materials, parts, and supplies(A) |  | Census material code | Consumption of purchased materials and of materials received from other establishments of your company |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cost, including delivery cost (freight-in) <br> (E) |
|  |  |  | 571 (B) | $\begin{array}{\|c\|} \hline 574 \\ \hline \end{array}$ <br> Millions | Thou-  <br> sands Dollars |
| 1 | Aircraft engines |  |  | 3724002 | \$ | ৷ |
| 2 | Aircraft engine parts (except instruments) |  | 3724408 |  | । |
| 3 | STRUCTURAL COMPONENTS (Airframe), EXCLUDING INSTRUMENTS | Fuselage | 3728615 |  | 1 1 |
|  |  | Empennage (tail) | 3728623 |  | I |
| 5 |  | Wings | 3728631 |  | I |
| 6 |  | Landing gear | 3728649 |  | । |
| 7 |  | Other (including engine mounts), excluding engines, accessories, electronics, and other parts that may be replaced from time to time | 3728656 |  | I |
| 8 | Aircraft propellers and parts thereof |  | 3728516 |  | $1 \begin{array}{ll}1 \\ 1 & 1 \\ 1\end{array}$ |
| 9 | Aircraft seats |  | 2531408 |  | 1 |
| 10 | AVIONICS | Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) | 3663036 |  | । |
| 11 |  | Navigational systems and equipment (NAVAIDS), including autopilots, proximity warning/collision avoidance equipment, airborne integrated data systems, etc. | 3812609 |  | I |
| 12 |  | Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical), including air defense and control equipment, mapping, monitoring, and evaluation equipment, etc. | 3800901 |  | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 13 |  | Flight, navigational, airframe, and engine indicators, instruments and clusters, including sensors, transmitters, and displays | 3800919 |  | $1 \quad 1$ |
| 14 | Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic-type components |  | 3670049 |  | 1 |
| 15 | MATRIX COMPOSITES | Resin | 1900703 |  | I |
| 16 |  | Other, including ceramic, carbon, metal, etc. | 1900711 |  | I |
| 17 | Complete mechanical, hydraulic, and pneumatic subassemblies |  | 3728706 |  | । |

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Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 - Continued


If not shown, please enter your 11-digit Census File Number from the address label on page 1

Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 - Continued

|  | Materials, parts, and supplies <br> (A) | Census material code <br> (B) | Consumption of purchased materials and of materials received from other establishments of your company |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cost, including delivery cost (freight-in) <br> (E) |  |
|  |  |  | $\begin{array}{\|r\|r\|} \hline 574 & \\ \hline \text { Millions } \\ \hline \end{array}$ | $\begin{aligned} & \text { I Thou- i } \\ & \text { I sands \| Dollars } \end{aligned}$ |
| 45 | Cost of all other materials and components, parts, containers, and supplies consumed | 9700998 | \$ |  |
|  | Describe the principal materials, etc., included in this value. |  |  |  |
| 46 | TOTAL <br> Sum of lines 1-45 should equal item 10, line a |  | \$ | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |

Item 18A - Not applicable to this report
Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997

## INSTRUCTIONS

1. General - The manufactured products and services listed below are generally made in your industry. If you make products that are not listed, describe and report them in the "All other products made in this establishment" section at the end of item 18B. PLEASE DO NOT COMBINE PRODUCT LINES.

If quantities are requested, please use the unit of measure specified.
If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.
2. Valuation of Products - These instructions recognize that the assignment of product shipment values by the aerospace industries differs from that followed by most manufacturing industries. In accounting for contracts, the assignment of product shipment values should be determined by a choice between the two generally accepted methods: the percentage of completion method and the completed contract method. Most contracts within the aerospace industries are variations of "fixed price" or "cost plus." These instructions are designed to ensure that products are reported consistently in item 12 (inventories) and item 18B (products).

- Fixed price contracts - Work performed under a fixed price contract can be reported using the completed contract method or percentage of completion method. Under the completed contract method, the contract should be reported as a shipment when delivery of the product occurs. The cumulative value of the products being manufactured should be included in inventories gross of progress payments until delivered. (These inventories should not be reduced by the amount of any progress payment.)

Under the percentage of completion method, the value of shipments is based upon an estimate of the value of work done during the period as a percentage of the total value of the contract. The estimate can be made by any criteria established by management and in compliance with AICPA Statement of Position 81-1. Any work done during the year which has not been reported as a shipment should be reported in work-in-process inventories.

- Cost plus contracts - The value of work done on a cost plus contract should reflect cost incurred during the year as well as a portion of the profits during the year as well as a portion of the profits on (a) the estimated work completed during the year as a percentage of the total contract price or (b) net billings for work done during the year. This value should be reported for the value of products shipped. Any work done during the year which has not been reported as a shipment should be reported in work-in-process inventories.

Nonaerospace products - The value of nonaerospace products shipped and services performed should be based on the net selling value, f.o.b. plant, after discounts and allowances, and exclusive of freight charges and excise taxes.
Include products made elsewhere for this establishment on a contract basis from materials supplied by this establishment (the cost of these materials should be included in items 10, line a and 17).
When transferring products to other establishments within your company, the shipping plant should assign the full economic value to the transferred products; i.e., include all direct costs of production and a reasonable proportion of all other costs and profits.
3. Contract Work - Report PRODUCTS MADE BY OTHERS FOR YOU FROM YOUR MATERIALS on the specific lines as if they were made in this establishment. On the other hand, do not report on the specific product lines PRODUCTS THAT YOU MADE FROM MATERIALS OWNED BY OTHERS. Report only the amount that you received for "commission or contract receipts" under Census product code 93000008.
4. Products Bought and Sold Without Further Manufacture (Resales) - Line 100 - Report the selling value, f.o.b. plant, of products which were resold as originally purchased and not used in further manufacturing, processing, or assembling of products made in this establishment. Include aircraft engines, subassemblies or parts that were purchased from aircraft parts producers (or received from other establishments of your company) and resold by you as spare or replacement parts even though you may have repackaged them or performed certain other minor operations, such as covering them with a protective coating, etc. (The cost of such resold goods should be reported in item 10, line b.)
5. Detailed Data Reported Elsewhere - Items denoted by an asterisk (*) require totals for groups of products covered in the more frequent Current Industrial Reports (CIR). If you report on the CIR forms, the sum of the detailed CIR products should equal the total reported on this census form.
NOTE: Only CIR totals are requested; do not duplicate detail reported on the CIR.
6. Definitions of Research and Development -

Research and development includes research in the sciences and in engineering, and design and development of prototypes and processes. It does not include quality control, routine product testing, market research, sales promotion, sales service, research in the social sciences or psychology, or other the social sciences or psychology, or nontechnoent includes technical activity concerned with nonroutine problems which are encountered in translating research findings or other general scientific knowledge into products or processes. Do not include routine technical services to customers or other items excluded from the definition of research and development.

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued


| If not shown, please enter your 11-digit Census File Number from the address label on page 1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued |  |  |  |  |  |  |
|  | Products and services *Item corresponds to products reported on Current Industrial Reports <br> (A) |  |  | $\substack{\text { Census } \\ \text { product } \\ \text { code }}$  <br> 581  <br> (B)  | Products shipped and other receipts |  |
| $\stackrel{\circ}{\circ}$ |  |  |  | Value, f.o.b. plant <br> (E) |
|  |  |  |  |  |  |
| $\cdots$ |  |  |  | Millions | sands 'Dollars |
| 19 | AIRCRAFT HYDRAULIC AND PNEUMATIC SUBASSEMBLIES (37284) | Aerospace-type hydraulic valves* |  |  | 37284015 | \$ |  |
| 20 |  | Aerospace-type pneumatic valves* |  |  | 37284023 |  | $1 \quad 1$ |
| 21 |  | Aerospace-type fluid power (hydraulic and pneumatic) hose assemblies and fittings* |  |  | 37284031 |  | 1 |
| 22 |  | Hydraulic fluid power pumps, motors, and hydrostatic transmission components (including the value of the driver if shipped as a complete unit)* |  | 37284056 |  | , |
| 23 |  | Parts and attachments for hydraulic fluid power pumps, motors, and hydrostatic transmissions* |  | 37284072 |  | $\begin{array}{ll}1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 24 |  | Aerospace-type fluid power (hydraulic and pneumatic) cylinders and actuators* |  | 37284098 |  | 1 |
| 25 | Aircraft Parts and Auxiliary Equipment, Excluding Hydraulic and Pneumatic Subassemblies and Engines (37285) | AIRCRAFT MECHANICAL POWER TRANSMISSION EQUIPMENT | For military aircraft (U.S. military aircraft and any other aircraft built to military specifications) | 37285137 |  | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 26 |  |  | For civilian aircraft | 37285152 |  | $1 \begin{array}{ll}1 \\ 1 & 1\end{array}$ |
| 27 |  | AIRCRAFT LANDING GEAR | For military aircraft (U.S. military aircraft and any other aircraft built to military specifications) | 37285947 |  | 1 |
| 28 |  |  | For civilian aircraft | 37285954 |  | ! |
| 29 |  | OTHER <br> AIRCRAFT SUBAS- <br> SEMBLIES AND PARTS, EXCEPT AIRCRAFT PROPELLERS, HELICOPTER ROTORS, AND PARTS THEREOF | For military aircraft (U.S. military aircraft and any other aircraft built to military specifications) | 37285988 |  | 1 1 <br> 1 1 <br> 1 1 <br> 1 1 <br> 1 1 <br> 1 1 |
| 30 |  |  | For civilian aircraft | 37285996 |  | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 31 | RECEIPTS FROM <br> RESEARCH AND <br> DEVELOP- <br> MENT ON <br> AIRCRAFT <br> PARTS <br> (Except <br> engines) <br> (37283) | For military aircraft parts (U.S. military aircraft and any other aircraft built to military specifications) |  | 37283132 |  | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 32 |  | For civilian aircraft parts |  | 37283157 |  | $\begin{array}{ll}1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1\end{array}$ |
| 33 | AIRCRAFTPROPELLERSANDHELICOPTERROTORS(37282) | Complete propellers (excluding helicopter rotors) |  | 37282100 |  | I |
| 34 |  | Propeller blades |  | 37282316 |  | 1 |
| 35 |  | Propeller parts (except propeller blades) |  | 37282514 |  | ! |
| 36 |  | Helicopter rotors and parts |  | 37282613 |  | 1 |
| 37 | GUIDED MISSILE SYSTEMS (Excluding propulsion) | Complete missiles (37611) |  | 37611001 |  | 1 |
| 38 |  | Research and development on complete missiles (37613) |  | 37613007 |  | 1 |
| 39 |  | All other services on complete missiles (37616) |  | 37616000 |  | 1 1 1 |

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued


Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued


Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued



