

Civil Aircraft and Aircraft Engines: 2001

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Summary

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Current
Industrial
Reports

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These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2001, the value of complete civil aircraft shipments increased by 8.2 percent to \$41.8 billion, from the 2000 level of \$38.6 billion. Shipments of complete civil aircraft engines increased by 3.4 percent to \$7.3 billion, from the 2000 level of \$7.0 billion.

The backlog of orders for aircraft, missiles, space vehicles, and engines, as of December 31, 2001, was \$220 billion. This was a 2.1-percent increase from the 2000 backlog of \$215 billion.

Net new orders received during 2001 were \$121 billion, a 13.3-percent decrease from the \$140 billion received in 2000. Net sales, receipts, and/or billings in 2001 totaled \$117 billion, a 7.3-percent increase from the \$109 billion reported in 2000.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call James Hinckley, 301-763-4772.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Quantity and Value of Shipments of Complete Civil Aircraft: 2001 and 2000
 [Quantity in units. Value in thousands of dollars]

| Product code | Product description | No. of cos. | 2001 | | 2000 | |
|--------------|--|-------------|----------|------------|----------|--------------|
| | | | Quantity | Value | Quantity | Value |
| 33641130 | Complete civil aircraft..... | 29 | 4,541 | 41,765,995 | 5,162 | 38,585,086 |
| | Civil aircraft (fixed wing, powered)..... | 14 | 2,947 | 41,234,385 | 3,278 | 38,092,555 |
| 3364113004 | Unladen weight not exceeding 2,000 kg (4,409 lb)..... | 9 | 1,625 | 637,965 | 1,870 | 751,260 |
| 3364113007 | Unladen weight exceeding 2,000 kg (4,409 lb) but not exceeding 15,000 kg (33,069 lb) 1/..... | 6 | (D) | (D) | (D) | (D) |
| 3364113011 | Unladen weight exceeding 15,000 kg (33,069 lb) 1/..... | 2 | 1,322 | 40,596,420 | 1,408 | 37,341,295 |
| | Helicopters (rotary wing)..... | 7 | 614 | 507,226 | 759 | r/ 467,263 |
| 3364113014 | Unladen weight not exceeding 2,000 kg (4,409 lb) 2/..... | 6 | (D) | (D) | (D) | (D) |
| 3364113017 | Unladen weight exceeding 2,000 kg (4,409 lb) 2/..... | 3 | 614 | 507,226 | 759 | 467,263 |
| 3364113021 | Other civil aircraft (nonpowered) and kits..... | 9 | 980 | 24,384 | 1,125 | 25,268 |
| 33641230 | Complete civil aircraft engines..... | 9 | 13,571 | 7,281,540 | 15,626 | r/ 7,044,228 |
| 3364123001 | Spark-ignition reciprocating or rotary internal combustion 3/.... Turbojet and turbofan: | 4 | (D) | (D) | (D) | (D) |
| 3364123004 | Of a thrust not exceeding 25 (5,620 lb) kN 3/..... | 1 | (D) | (D) | (D) | (D) |
| 3364123007 | Of a thrust exceeding 25 (5,620 lb) kN 3/..... | 3 | (D) | (D) | (D) | (D) |
| | Turboshaft (turbo propeller): | | | | | |
| 3364123011 | Of a power not exceeding 1,100 kW (820 hp) 3/..... | 2 | (D) | (D) | (D) | (D) |
| 3364123014 | Of a power exceeding 1,100 kW (820 hp) 3/..... | 3 | (D) | (D) | (D) | (D) |
| 3364123017 | Other, including auxiliary power units excluding missiles and space engines 3/..... | 1 | 13,571 | 7,281,540 | 15,626 | 7,044,228 |

D Withheld to avoid disclosing data for individual companies. kN Kilonewtons. kW Kilowatts. r/Revised by 5 percent or more from previously published data.

1/Product codes 3364113007 and 3364113011 are combined to avoid disclosing data for individual companies.

2/Product codes 3364113014 and 3364113017 are combined to avoid disclosing data for individual companies.

3/Product codes 3364123001, 3364123004, 3364123007, 3364123011, 3364123014, and 3364123017 are combined to avoid disclosing data for individual companies.

Table 2. Quantity and Value of Shipments of Complete Civil Aircraft by Month: 2001 and 2000
 [Quantity in number of units. Value in thousands of dollars]

| Year and month | Civil aircraft, unladen weight greater than 15,000 kg 1/ | | Helicopters (rotary wing) | | Other civil aircraft (nonpowered) | |
|----------------|--|--------------|------------------------------|-----------|--------------------------------------|----------|
| | Quantity | Value | Quantity | Value | Quantity | Value |
| 2001 | | | | | | |
| January..... | 192 | r/ 2,380,665 | r/ 57 | r/ 34,815 | r/ 79 | 1,926 |
| February..... | 225 | r/ 3,527,082 | r/ 64 | r/ 35,907 | r/ 80 | r/ 1,991 |
| March..... | 294 | 3,955,263 | r/ 68 | r/ 36,482 | r/ 82 | r/ 1,964 |
| April..... | 217 | 3,000,393 | r/ 49 | 32,327 | r/ 84 | r/ 2,060 |
| May..... | 266 | 3,817,892 | r/ 45 | 31,678 | r/ 84 | r/ 2,079 |
| June..... | 297 | 4,105,252 | r/ 57 | r/ 65,180 | r/ 84 | r/ 2,241 |
| July..... | r/ 183 | 3,013,833 | r/ 59 | r/ 43,588 | r/ 82 | r/ 2,093 |
| August..... | r/ 225 | 3,142,077 | r/ 41 | r/ 32,602 | r/ 84 | r/ 2,156 |
| September..... | 253 | 3,252,730 | r/ 36 | r/ 35,150 | r/ 80 | r/ 1,970 |
| October..... | r/ 217 | 3,172,547 | r/ 52 | r/ 39,953 | r/ 80 | r/ 1,963 |
| November..... | 234 | 3,901,369 | r/ 33 | r/ 29,734 | r/ 81 | r/ 1,972 |
| December..... | 344 | 3,965,282 | 53 | 89,810 | r/ 80 | 1,969 |
| 2000 | | | | | | |
| January..... | 214 | 2,435,992 | 61 | r/ 34,955 | 94 | 2,033 |
| February..... | 251 | 2,331,332 | 90 | r/ 39,597 | 93 | 2,026 |
| March..... | 279 | 1,951,434 | 79 | r/ 36,568 | 97 | 2,119 |
| April..... | 268 | 3,774,412 | 51 | r/ 39,293 | 93 | 2,023 |
| May..... | 287 | 4,352,560 | 83 | r/ 37,758 | 93 | 2,103 |
| June..... | 335 | 3,696,197 | 57 | r/ 39,464 | 93 | 2,047 |
| July..... | 254 | 2,534,915 | 53 | r/ 38,032 | 93 | 2,111 |
| August..... | 256 | 3,211,714 | r/ 53 | r/ 38,801 | 91 | 2,031 |
| September..... | 313 | 3,490,549 | 60 | r/ 40,018 | 100 | 2,423 |
| October..... | 215 | 2,797,435 | 63 | r/ 41,051 | 92 | 2,058 |
| November..... | 249 | 3,254,806 | 63 | r/ 43,682 | 91 | 2,068 |
| December..... | 357 | 4,261,209 | r/ 46 | r/ 38,044 | 95 | 2,226 |

r/Revised by 5 percent or more from previously published data.

1/"Unladen weight not exceeding 2,000 kg (4,409 lb)" and "Unladen weight exceeding 2,000 kg (4,409 lb) but not exceeding 15,000 kg (33,069 lb)" are combined with "Unladen weight greater than 15,000 kg" to avoid disclosing data for individual companies.

**Table 3. Quantity and Value of Shipments of Complete Civil Aircraft
Engines: 2001 and 2000**
[Quantity in number of units. Value in thousands of dollars]

| Year and month | Complete civil aircraft engines 1/ | |
|----------------|---------------------------------------|------------|
| | Quantity | Value |
| 2001 | | |
| January..... | 1,107 | 479,814 |
| February..... | 1,143 | 499,378 |
| March..... | 1,385 | 716,452 |
| April..... | 1,029 | 527,670 |
| May..... | 1,132 | 566,557 |
| June..... | 1,393 | 818,172 |
| July..... | 960 | 619,663 |
| August..... | 1,018 | 553,801 |
| September..... | 1,260 | 601,086 |
| October..... | 996 | 621,505 |
| November..... | 1,032 | 674,184 |
| December..... | 1,116 | 603,258 |
| 2000 | | |
| January..... | 1,163 | 562,598 |
| February..... | 1,351 | 557,676 |
| March..... | 1,566 | r/ 630,419 |
| April..... | 1,080 | r/ 538,140 |
| May..... | 1,229 | r/ 531,585 |
| June..... | 1,610 | r/ 754,569 |
| July..... | 1,139 | r/ 477,837 |
| August..... | 1,198 | r/ 529,008 |
| September..... | 1,481 | r/ 673,977 |
| October..... | 1,210 | r/ 545,741 |
| November..... | 1,103 | r/ 512,081 |
| December..... | 1,496 | r/ 730,597 |

r/Revised by 5 percent or more from previously published data.

1/"Spark-ignition reciprocating or rotary internal combustion," "Turbojet and turbofan," and "Turbo propellers" are combined to avoid disclosing data for individual companies.

Table 4. Shipments, Exports, and Imports of Complete Civil Aircraft and Aircraft Engines: 2001
 [Quantity in units. Value in thousands of dollars]

| Product code 1/ | Product description | Manufacturers' shipments | | Exports of domestic merchandise 1/ 2/ | | Imports for consumption 1/ 3/ | |
|-----------------|---|--------------------------|----------------------|---------------------------------------|---------------|-------------------------------|------------|
| | | Quantity | Value (f.o.b. plant) | Quantity | Value at port | Quantity | Value |
| 3364113004 | Civil aircraft (fixed wing, powered): Unladen weight not exceeding 2,000 kg (4,409 lb)..... | 1,625 | 637,965 | 348 | 95,040 | 330 | 19,659 |
| 3364113011 | Unladen weight exceeding 15,000 kg (33,069 lb) 4/..... | 1,322 | 40,596,420 | 479 | 23,420,352 | 606 | 12,964,544 |
| 3364113017 | Helicopters (rotary wing) 5/..... | 614 | 507,226 | 309 | 169,687 | 229 | 420,505 |
| 33641230 | Complete civil aircraft engines 6/..... | 13,571 | 7,281,540 | 11,441 | 5,179,804 | 5,665 | 4,807,981 |

1/For comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see contact at the beginning of this report.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

4/Product code 3364113007 is included with product code 3364113011 to avoid disclosing data for individual companies.

5/Product code 3364113014 is included with product code 3364113017 to avoid disclosing data for individual companies.

6/Product codes 3364123001, 3364123004, 3364123011, 3364123014, and 3364123017 are included with product code 33641230 to avoid disclosing data for individual companies.

Table 5. Value of Backlog of Orders, and Net Sales Reported by Manufacturers of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts: 1993 to 2001
[Millions of dollars]

| Year | Net new orders during year 1/ | Net sales during year | Backlog, end of year |
|-----------|-------------------------------|-----------------------|----------------------|
| 2001..... | 121,395 | 117,343 | 219,556 |
| 2000..... | 140,086 | 109,311 | 214,966 |
| 1999..... | 115,257 | 124,181 | 188,409 |
| 1998..... | 109,993 | 119,258 | 200,288 |
| 1997..... | 118,993 | 114,946 | 218,951 |
| 1996..... | 126,267 | 103,115 | 229,871 |
| 1995..... | 109,109 | 102,797 | 202,638 |
| 1994..... | 88,706 | 104,296 | 192,561 |
| 1993..... | 79,770 | 109,926 | 211,814 |

1/These totals represents new orders received during the year, less terminations during the year.

Table 6. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts by the United States Government and Other Customers: 1997 to 2001
[Millions of dollars]

| Year 1/ | Net new orders 1/ (prime contracts and subcontracts) | | | Net sales, receipts, or billings | | | Backlog, end of year | | |
|-----------|---|---------------|-----------------|-------------------------------------|---------------|-----------------|----------------------|---------------|-----------------|
| | Total | United States | | Total | United States | | Total | United States | |
| | | Government 2/ | Other customers | | Government 2/ | Other customers | | Government 2/ | Other customers |
| 2001..... | 121,395 | 57,220 | 64,175 | 117,343 | 45,484 | 71,859 | 219,556 | 73,379 | 146,177 |
| 2000..... | 140,086 | 44,523 | 95,563 | 109,311 | 40,957 | 68,354 | 214,966 | 61,581 | 153,385 |
| 1999..... | 115,257 | 48,586 | 66,671 | 124,181 | 45,128 | 79,052 | 188,409 | 63,029 | 125,380 |
| 1998..... | 109,993 | 36,555 | 73,438 | 119,258 | 39,951 | 79,307 | 200,288 | 59,496 | 140,791 |
| 1997..... | 118,993 | 48,194 | 70,799 | 114,946 | 51,374 | 63,572 | 218,951 | 67,662 | 151,290 |

1/These data represent new orders received during the year, less terminations during the year.

2/These data represent prime contracts only. All subcontracts, including those where it is known that the prime contract was let by the U.S. Government, are reported as subcontracts from "Other customers."

Note: Detail items may not add to total because of independent rounding.

Table 7. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts by Military and Nonmilitary: 1997 to 2001
[Millions of dollars]

| Year 1/ | Net new orders 1/ (prime contracts and subcontracts) | | | Net sales, receipts, or billings | | | Backlog, end of year | | |
|-----------|---|----------|-------------|-------------------------------------|----------|-------------|----------------------|----------|-------------|
| | Total | Military | Nonmilitary | Total | Military | Nonmilitary | Total | Military | Nonmilitary |
| 2001..... | 121,395 | 63,503 | 57,892 | 117,343 | 47,230 | 70,113 | 219,556 | 90,128 | 129,428 |
| 2000..... | 140,086 | 54,525 | 85,561 | 109,311 | 43,256 | 66,055 | 214,966 | 73,741 | 141,225 |
| 1999..... | 115,257 | 49,696 | 65,561 | 124,181 | 49,690 | 74,491 | 188,409 | 68,379 | 120,029 |
| 1998..... | 109,993 | 38,679 | 71,314 | 119,258 | 45,110 | 74,148 | 200,288 | 69,962 | 130,326 |
| 1997..... | 118,993 | 47,802 | 71,192 | 114,946 | 50,648 | 64,298 | 218,951 | 78,870 | 140,082 |

1/These data represent new orders received during the year, less terminations during the year.

Note: Detail items may not add to total because of independent rounding.

Table 8. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicle, Missiles, and Selected Parts: 2001 and 2000

[Millions of dollars]

| Product description | No. of cos. | Net new orders | | | Shipments (or net sales) | Backlog, end of year |
|---|-------------|----------------|-------------------|-----------------|--------------------------|----------------------|
| | | Total | Prime contract 1/ | Sub-contract 1/ | | |
| 2001 | | | | | | |
| Total..... | 48 | 121,395 | 120,123 | 1,272 | 117,343 | 219,556 |
| Military..... | (NA) | 63,503 | 63,503 | (NA) | 47,230 | 90,128 |
| U.S. Government..... | 37 | 53,688 | 53,688 | (NA) | 40,489 | 66,480 |
| Other governments..... | 22 | 9,815 | 9,815 | (NA) | 6,741 | 23,648 |
| Nonmilitary..... | (NA) | 57,892 | 56,620 | 1,272 | 70,113 | 129,428 |
| U.S. Government..... | 16 | 3,532 | 3,532 | (NA) | 4,995 | 6,899 |
| Other customers..... | 44 | 54,360 | 53,088 | 1,272 | 65,118 | 122,529 |
| Complete aircraft and parts..... | (NA) | 45,674 | 44,849 | 825 | 58,982 | 123,939 |
| Military..... | (NA) | 18,134 | 18,134 | (NA) | 18,170 | 37,679 |
| Nonmilitary..... | (NA) | 27,540 | 26,715 | 825 | 40,812 | 86,260 |
| Aircraft engines and parts..... | (NA) | 16,824 | 16,742 | 82 | 15,913 | 19,811 |
| Military..... | (NA) | 3,618 | 3,618 | (NA) | 3,957 | 3,262 |
| Nonmilitary..... | (NA) | 13,206 | 13,124 | 82 | 11,956 | 16,549 |
| Missile systems and parts, excluding propulsion units..... | (NA) | 5,211 | 5,211 | (NA) | 6,231 | 8,370 |
| Military..... | (NA) | 5,211 | 5,211 | (NA) | 6,231 | 8,370 |
| Space vehicle systems and parts, excluding propulsion units..... | (NA) | 5,112 | 5,112 | (NA) | 7,792 | 18,479 |
| Military..... | (NA) | 3,605 | 3,605 | (NA) | 4,270 | 8,277 |
| Nonmilitary..... | (NA) | 1,507 | 1,507 | (NA) | 3,522 | 10,202 |
| U.S. Government..... | 8 | 875 | 875 | (NA) | 1,405 | 2,046 |
| Other customers..... | 4 | 632 | 632 | (NA) | 2,117 | 8,156 |
| Engines and/or propulsion units for missile systems and space vehicles, including parts 2/..... | (NA) | 2,527 | 2,527 | - | 1,479 | 6,419 |
| Military..... | (NA) | 361 | 361 | (NA) | 382 | 795 |
| Nonmilitary..... | (NA) | 2,166 | 2,166 | - | 1,097 | 5,624 |
| Other aircraft, space vehicle, and missile activities 3/..... | (NA) | 8,383 | 8,225 | 158 | 10,218 | 9,205 |
| Military..... | (NA) | 4,089 | 4,089 | (NA) | 5,099 | 6,360 |
| U.S. Government..... | (NA) | 3,349 | 3,349 | (NA) | 4,142 | 3,929 |
| Other governments..... | (NA) | 740 | 740 | (NA) | 957 | 2,431 |
| Nonmilitary..... | (NA) | 4,294 | 4,136 | 158 | 5,119 | 2,845 |
| Research and development (under contract)..... | (NA) | 22,216 | 22,208 | 8 | 3,717 | 21,572 |
| Military..... | (NA) | 21,468 | 21,468 | (NA) | 3,105 | 21,035 |
| U.S. Government..... | 21 | 21,165 | 21,165 | (NA) | 2,755 | 20,893 |
| Other governments..... | 8 | 303 | 303 | (NA) | 350 | 142 |
| Nonmilitary..... | 11 | 748 | 740 | 8 | 612 | 537 |
| All other products and services..... | (NA) | 15,448 | 15,249 | 199 | 13,011 | 11,761 |
| Military..... | (NA) | 7,017 | 7,017 | (NA) | 6,016 | 4,350 |
| U.S. Government..... | 16 | 6,192 | 6,192 | (NA) | 5,783 | 3,131 |
| Other governments..... | 8 | 825 | 825 | (NA) | 233 | 1,219 |
| Nonmilitary..... | (NA) | 8,431 | 8,232 | 199 | 6,995 | 7,411 |
| U.S. Government..... | 5 | 754 | 754 | (NA) | 937 | 1,601 |
| Other customers..... | 18 | 7,677 | 7,478 | 199 | 6,058 | 5,810 |
| 2000 | | | | | | |
| Total..... | 48 | 140,086 | 139,690 | 396 | 109,311 | 214,966 |
| Military..... | (NA) | 54,525 | 54,525 | (NA) | 43,256 | 73,741 |
| U.S. Government..... | 37 | 40,044 | 40,044 | (NA) | 36,026 | 53,208 |
| Other governments..... | 22 | 14,481 | 14,481 | (NA) | 7,230 | 20,533 |
| Nonmilitary..... | (NA) | 85,561 | 85,165 | 396 | 66,055 | 141,225 |
| U.S. Government..... | 18 | 4,479 | 4,479 | (NA) | 4,931 | 8,373 |
| Other customers..... | 44 | 81,082 | 80,686 | 396 | 61,124 | 132,852 |

Continued

Table 8. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicle, Missiles, and Selected Parts: 2001 and 2000

[Millions of dollars]

| Product description | No. of cos. | Net new orders | | | Shipments (or net sales) | Backlog, end of year |
|---|-------------|----------------|-------------------|-----------------|--------------------------|----------------------|
| | | Total | Prime contract 1/ | Sub-contract 1/ | | |
| Complete aircraft and parts..... | (NA) | 81,775 | 81,655 | 120 | 57,188 | 137,592 |
| Military..... | (NA) | 27,440 | 27,440 | (NA) | 19,650 | 37,650 |
| Nonmilitary..... | (NA) | 54,335 | 54,215 | 120 | 37,538 | 99,942 |
| Aircraft engines and parts..... | (NA) | 15,080 | 14,965 | 115 | 12,485 | 18,899 |
| Military..... | (NA) | 3,956 | 3,956 | (NA) | 3,546 | 3,600 |
| Nonmilitary..... | (NA) | 11,124 | 11,009 | 115 | 8,939 | 15,299 |
| Missile systems and parts, excluding propulsion units..... | (NA) | 9,738 | 9,738 | (NA) | 5,567 | 9,389 |
| Military..... | (NA) | 9,738 | 9,738 | (NA) | 5,567 | 9,389 |
| U.S. Government..... | 6 | 8,873 | 8,873 | (NA) | 4,285 | 7,552 |
| Other governments..... | 3 | 865 | 865 | (NA) | 1,282 | 1,837 |
| Space vehicle systems and parts, excluding propulsion units..... | (NA) | 7,205 | 7,205 | (NA) | 8,164 | 21,395 |
| Military..... | (NA) | 2,310 | 2,310 | (NA) | 3,723 | 8,942 |
| Nonmilitary..... | (NA) | 4,895 | 4,895 | (NA) | 4,441 | 12,453 |
| U.S. Government..... | 8 | 2,646 | 2,646 | (NA) | 2,593 | 2,796 |
| Other customers..... | 4 | 2,249 | 2,249 | (NA) | 1,848 | 9,657 |
| Engines and/or propulsion units for missile systems and space vehicles, including parts 2/..... | (NA) | 1,425 | 1,414 | 11 | 1,872 | 5,499 |
| Military..... | (NA) | 493 | 493 | (NA) | 683 | 816 |
| Nonmilitary..... | (NA) | 932 | 921 | 11 | 1,189 | 4,683 |
| Other aircraft, space vehicle, and missile activities 3/..... | (NA) | 7,072 | 6,952 | 120 | 7,250 | 11,025 |
| Military..... | (NA) | 3,750 | 3,750 | (NA) | 3,171 | 7,360 |
| U.S. Government..... | (NA) | 3,078 | 3,078 | (NA) | 2,622 | 4,721 |
| Other governments..... | (NA) | 672 | 672 | (NA) | 549 | 2,639 |
| Nonmilitary..... | (NA) | 3,322 | 3,202 | 120 | 4,079 | 3,665 |
| Research and development (under contract)..... | (NA) | 3,874 | 3,873 | 1 | 3,570 | 3,084 |
| Military..... | (NA) | 3,296 | 3,296 | (NA) | 2,864 | 2,668 |
| U.S. Government..... | 21 | 3,001 | 3,001 | (NA) | 2,602 | 2,479 |
| Other governments..... | 8 | 295 | 295 | (NA) | 262 | 189 |
| Nonmilitary..... | 11 | 578 | 577 | 1 | 706 | 416 |
| All other products and services..... | (NA) | 13,917 | 13,888 | 29 | 13,215 | 8,083 |
| Military..... | (NA) | 3,542 | 3,542 | (NA) | 4,052 | 3,316 |
| U.S. Government..... | 16 | 3,043 | 3,043 | (NA) | 3,352 | 2,720 |
| Other governments..... | 8 | 499 | 499 | (NA) | 700 | 596 |
| Nonmilitary..... | (NA) | 10,375 | 10,346 | 29 | 9,163 | 4,767 |
| U.S. Government..... | 5 | 644 | 644 | (NA) | 692 | 1,785 |
| Other customers..... | 18 | 9,731 | 9,702 | 29 | 8,471 | 2,982 |

- Represents zero. NA Not available.

1/"Net new orders, subcontract" are included with "New new orders, prime contract" to avoid disclosing data for individual companies.

2/Data for "Engines and/or propulsion units for space vehicles, including parts" are included with data for "Engines and/or propulsion units or missile systems, including parts."

3/Data for "Other missile activities" are included with data for "Other aircraft and space vehicles."

Note: Net new orders represent new orders received during the year, less terminations during the year. In some cases current backlog will not equal the backlog for the previous period, plus current net new orders, minus current shipments. This is primarily due to respondents changing their accounting procedures from one year to the next. Data for these respondents were not changed to force a balance. Significant imbalances due to reporting errors were investigated and corrected. Detail items may not add to total because of independent rounding.

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are

assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on civilian aircraft and aircraft engines have been collected by the Census Bureau since 1946. Data on the development and production of aerospace products have been collected by the Census Bureau since 1948. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.