

Civil Aircraft and Aircraft Engines: 2002

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Summary

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Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

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 2002, the value of complete civil aircraft shipments decreased by 17.6 percent to \$34.4 billion, from the 2001 level of \$41.7 billion. Shipments of complete civil aircraft engines decreased by 16.4 percent to \$6.1 billion, from the 2001 level of \$7.3 billion.

The backlog of orders for aircraft, missiles, space vehicles, and engines, as of December 31, 2002, was \$222.8 billion. This was a 1.2-percent increase from the 2001 backlog of \$220.1 billion.

Net new orders received during 2002 were \$114.6 billion, a 6.3-percent decrease from the \$122.2 billion received in 2001. Net sales, receipts, and/or billings in 2002 totaled \$111.3 billion, a 4.9-percent decrease from the \$117.1 billion reported in 2001.

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 301-763-4673.

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

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



Table 1. Quantity and Value of Shipments of Complete Civil Aircraft: 2002 and 2001
[Quantity in units. Value in thousands of dollars]

Product code	Product description	No of cos.	2002		2001	
			Quantity	Value	Quantity	Value
33641130	Complete civil aircraft.....	25	3,764	34,375,308	4,418	41,703,687
	Civil aircraft (fixed wing, powered).....	11	2,279	34,164,129	2,947	41,474,385
3364113004	Unladen weight not exceeding 2,000 kg (4,409 lb).....	7	1,172	458,237	1,625	637,965
3364113007	Unladen weight exceeding 2,000 kg (4,409,lb) but not exceeding 15,000 kg (33,069 lb) 1/.....	5	(D)	(D)	(D)	(D)
3364113011	Unladen weight exceeding 15,000 kg (33,069 lb) 1/.....	2	1,107	33,705,892	1,322	40,836,420
	Helicopters (rotary wing).....	6	428	185,841	491	204,918
3364113014	Unladen weight not exceeding 2,000 kg (4,409 lb) 2/.....	5	(D)	(D)	(D)	(D)
3364113017	Unladen weight exceeding 2,000 kg (4,409 lb) 2/.....	2	428	185,841	491	204,918
3364113021	Other civil aircraft (nonpowered) and kits.....	9	1,057	25,338	980	24,384
33641230	Complete civil aircraft engines.....	8	11,609	6,084,301	13,571	7,281,540
3364123001	Spark-ignition reciprocating or rotary internal combustion 3/.....	4	(D)	(D)	(D)	(D)
	Turbojet and turbofan:					
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/.....	1	(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	11,609	6,084,301	13,571	7,281,540

D Withheld to avoid disclosing data for individual companies. kN Kilonewtons. kW Kilowatts.

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: 2002 and 2001
[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
2002						
January.....	r/ 145	2,485,577	r/ 30	r/ 14,272	87	2,028
February.....	r/ 171	2,871,871	r/ 34	r/ 15,349	r/ 86	2,005
March.....	r/ 232	4,278,809	r/ 33	r/ 14,036	r/ 90	2,109
April.....	r/ 189	3,368,022	r/ 35	r/ 15,505	r/ 90	2,045
May.....	r/ 182	2,816,772	r/ 28	r/ 13,964	r/ 89	2,143
June.....	r/ 238	3,144,711	r/ 43	r/ 17,150	r/ 89	2,124
July.....	r/ 146	2,680,086	40	r/ 16,815	r/ 89	2,131
August.....	r/ 168	2,112,136	r/ 34	r/ 14,743	r/ 91	2,141
September.....	r/ 199	2,590,064	r/ 34	r/ 14,181	86 r/	2,241
October.....	r/ 154	2,488,890	r/ 30	r/ 13,773	88 r/	2,320
November.....	r/ 187	2,442,004	r/ 40	r/ 17,589	85	2,006
December.....	r/ 268	2,885,187	r/ 47	r/ 18,464	87	2,045
2001						
January.....	192	2,400,665	r/ 51	r/ 19,868	79	1,926
February.....	225	3,547,082	r/ 58	r/ 20,960	80	1,991
March.....	294	3,975,263	r/ 62	r/ 21,535	82	1,964
April.....	217	3,020,393	r/ 43	r/ 17,380	84	2,060
May.....	266	3,837,892	r/ 39	r/ 16,731	84	2,079
June.....	297	4,125,252	r/ 38	r/ 17,229	84	2,241
July.....	183	3,033,833	r/ 48	r/ 20,037	82	2,093
August.....	225	3,162,077	r/ 33	r/ 15,586	84	2,156
September.....	253	3,272,730	r/ 27	r/ 12,741	80	1,970
October.....	217	3,192,547	r/ 41	r/ 16,652	80	1,963
November.....	234	3,921,369	r/ 28	r/ 13,917	81	1,972
December.....	344	3,985,282	r/ 23	r/ 12,282	80	1,969

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

1/"Unladen weight under 2,000 kg" and "Unladen weight between 2,000 and 15,000 kg" 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: 2002 and 2001
[Quantity in number of units. Value in thousands of dollars]

Year and month	Complete civil aircraft engines 1/	
	Quantity	Value
2002		
January.....	779	485,529
February.....	984	568,964
March.....	1,125	715,744
April.....	944 r/	345,318
May.....	970 r/	481,663
June.....	1,134	624,388
July.....	875 r/	362,378
August.....	867 r/	408,206
September.....	1,047	631,896
October.....	993	559,026
November.....	910 r/	352,434
December.....	981	548,755
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

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

1/"Spark-ignition reciprocating or rotary internal combustion," "Turbojet and turbopan" 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: 2002
[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).....	1,172	458,237	348	95,040	738	68,306
3364113011	Unladen weight exceeding 15,000 kg (33,069 lb) 4/.....	1,107	33,705,892	479	23,420,352	540	10,910,720
3364113017	Helicopters (rotary wing) 5/.....	428	185,841	309	169,687	169	333,204
33641230	Complete civil aircraft engines 6/.....	11,609	6,084,301	11,441	5,179,804	4,505	3,711,485

1/For comparison of North American Industry Classification System (NAICS)-based 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 3364113011 to avoid disclosing data for individual companies.

5/Product code 3364113014 is included with 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: 1994 to 2002
[Millions of dollars]

Year	Net new orders during year 1/	Net sales during year	Backlog, end of year
2002.....	114,567	111,317	222,773
2001.....	122,206	117,088	220,148
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

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 United States Government and Other Customers: 1998 to 2002
[Millions of dollars]

Year 1/ Total	Net new orders 1/ (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	United States Government 2/	Other customers		United States Government 2/	Other customers		United States Government 2/	Other customers	
2002.....	114,567	66,639	47,928	111,317	51,800	59,517	222,773	89,947	132,826
2001.....	122,206	57,322	64,884	117,088	45,226	71,862	220,148	75,016	145,132
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

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

2/Represents 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: 1998 to 2002
[Millions of dollars]

Year 1/ Total	Net new orders 1/ (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	Military	Nonmilitary		Military	Nonmilitary		Military	Nonmilitary	
2002.....	114,567	68,547	46,020	111,317	54,403	56,914	222,773	105,339	117,434
2001.....	122,206	63,619	58,587	117,088	47,232	69,856	220,148	90,968	129,180
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

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: 2002 and 2001
[Millions of dollars]

Product description	No. of cos.	Net new orders				Backlog, end of year
		Total	Prime contract	Sub- contract	Shipments (or net sales)	
2002						
Total.....	41	114,567	113,704	863	111,317	222,773
Military.....	34	68,547	68,547	(NA)	54,403	105,339
U.S. Government.....	33	62,166	62,166	(NA)	47,279	83,203
Other governments.....	21	6,381	6,381	(NA)	7,124	22,136
Nonmilitary.....	40	46,020	45,157	863	56,914	117,434
U.S. Government.....	13	4,473	4,473	(NA)	4,521	6,744
Other customers.....	38	41,547	40,684	863	52,393	110,690
Complete aircraft and parts.....	21	44,251	44,170	81	51,920	114,372
Military.....	16	21,135	21,135	(NA)	19,849	37,754
Nonmilitary.....	17	23,116	23,035	81	32,071	76,618
Aircraft engines and parts.....	14	13,612	13,582	30	14,771	18,719
Military.....	11	7,518	7,518	(NA)	5,649	5,037
Nonmilitary.....	12	6,094	6,064	30	9,122	13,682
Missile systems and parts, excluding propulsion units.....	6	9,128	9,128	-	7,679	10,998
Engines and/or propulsion units for missile systems, including parts.....	6	415	415	-	246	590
Space vehicle systems, including parts, and engines and/or propulsion units for space vehicle systems, including parts 1/.....	9	10,717	10,717	-	7,086	27,988
Other aircraft, space vehicle, and missile activities 2/.....	16	10,913	10,272	641	10,076	10,477
Military.....	15	6,150	6,150	(NA)	5,401	7,548
U.S. Government.....	15	5,589	5,589	(NA)	4,735	5,257
Other governments.....	9	561	561	(NA)	666	2,291
Nonmilitary.....	13	4,763	4,122	641	4,675	2,929
Research and development (under contract).....	22	5,129	5,113	16	5,318	20,961
Military.....	20	4,460	4,460	(NA)	4,751	20,517
Nonmilitary.....	13	669	653	16	567	444
All other products and services.....	25	20,402	20,307	95	14,221	18,668
Military.....	17	11,898	11,898	(NA)	7,567	9,972
U.S. Government.....	17	11,432	11,432	(NA)	7,177	8,941
Other governments.....	9	466	466	(NA)	390	1,031
Nonmilitary.....	21	8,504	8,409	95	6,654	8,696
U.S. Government.....	5	782	782	(NA)	1,006	783
Other customers.....	19	7,722	7,627	95	5,648	7,913
2001						
Total.....	45	122,206	120,198	2,008	117,088	220,148
Military.....	35	63,619	63,619	(NA)	47,232	90,968
U.S. Government.....	34	53,799	53,799	(NA)	40,492	68,157
Other governments.....	20	9,820	9,820	(NA)	6,740	22,811
Nonmilitary.....	43	58,587	56,579	2,008	69,856	129,180
U.S. Government.....	13	3,523	3,523	(NA)	4,734	6,859
Other customers.....	42	55,064	53,056	2,008	65,122	122,321
Complete aircraft and parts.....	23	45,669	44,844	825	58,724	122,628
Military.....	17	18,144	18,144	(NA)	18,176	36,456
Nonmilitary.....	20	27,525	26,700	825	40,548	86,172

Continued

Table 8. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicle, Missiles, and Selected Parts: 2002 and 2001
[Millions of dollars]

Product description	No. of cos.	Net new orders			Shipments (or net sales)	Backlog, end of year
		Total	Prime contract	Sub- contract		
Aircraft engines and parts.....	13	16,824	16,742	82	15,913	19,875
Military.....	10	3,618	3,618	(NA)	3,957	3,167
Nonmilitary.....	12	13,206	13,124	82	11,956	16,708
Missile systems and parts, excluding propulsion units.....	5	5,215	5,215	-	6,241	9,538
Engines and/or propulsion units for missile systems, including parts.....	6	245	245	-	239	486
Space vehicle systems, including parts, and engines and/or propulsion units for space vehicle systems, including parts 1/.....	10	7,267	7,267	-	9,032	24,425
Other aircraft, space vehicle, and missile activities 2/.....	16	9,318	8,424	894	10,217	10,082
Military.....	15	4,192	4,192	(NA)	5,098	6,790
U.S. Government.....	15	3,433	3,433	(NA)	4,141	4,412
Other governments.....	10	759	759	(NA)	957	2,378
Nonmilitary.....	13	5,126	4,232	894	5,119	3,292
Research and development (under contract).....	22	22,217	22,209	8	3,702	21,242
Military.....	21	21,467	21,467	(NA)	3,089	20,835
U.S. Government.....	21	21,178	21,178	(NA)	2,739	20,707
Other governments.....	5	289	289	(NA)	350	128
Nonmilitary.....	12	750	742	8	613	407
All other products and services.....	26	15,451	15,252	199	13,020	11,872
Military.....	18	7,019	7,019	(NA)	6,019	5,341
U.S. Government.....	17	6,194	6,194	(NA)	5,786	4,394
Other governments.....	10	825	825	(NA)	233	947
Nonmilitary.....	20	8,432	8,233	199	7,001	6,531
U.S. Government.....	4	754	754	(NA)	937	976
Other customers.....	19	7,678	7,479	199	6,064	5,555

- Represents zero. NA Not available.

1/Data for "Space vehicle systems and parts, excluding propulsion units" are included with data for "Engines and/or propulsion units for space vehicles, including parts."

2/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. The data for these respondents was 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.