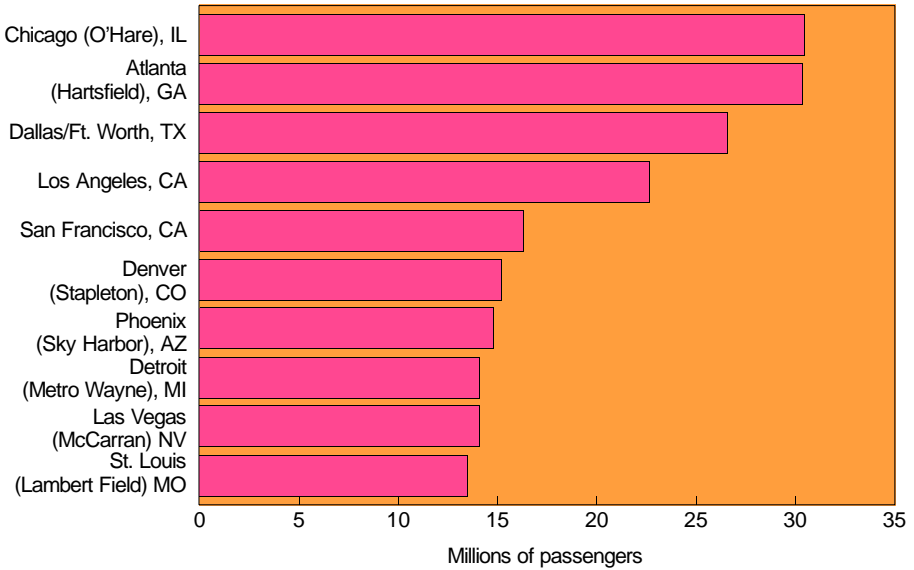
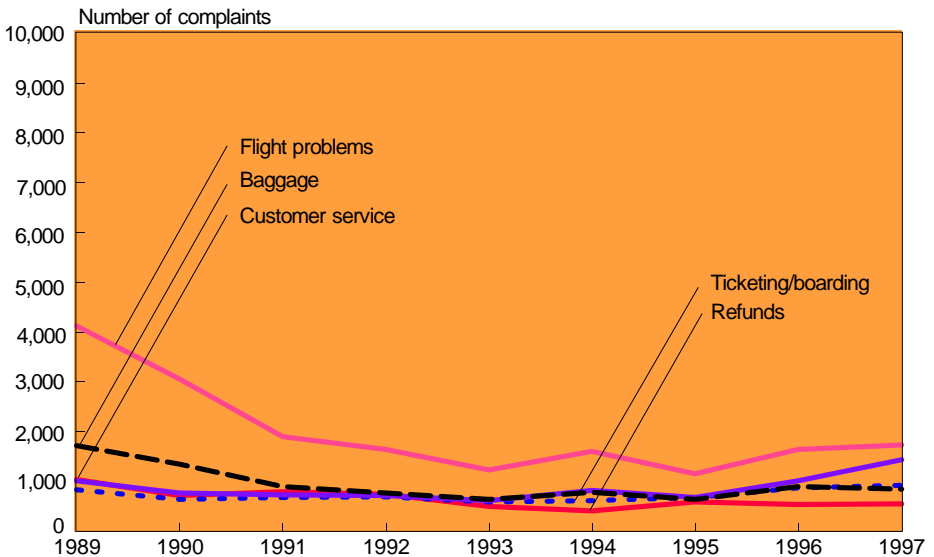


Figure 22.1
**Passengers Enplaned—
 Top 10 Airports: 1996**



Source: Chart prepared by U.S. Bureau of the Census. For data, see Table 1072.

Figure 22.2
**Consumer Complaints Against
 U.S. Airlines: 1989 to 1997**



Source: Chart prepared by U.S. Bureau of the Census. For data, see Table 1078.

Transportation— Air and Water

This section presents data on civil air transportation and on water transportation, including inland waterways, oceanborne commerce, the merchant marine, cargo and vessel tonnages, and shipbuilding. Comparative data on various types of transportation carriers are presented in Section 21.

Principal sources of these data are the annual *National Transportation Statistics*, issued by the U.S. Bureau of Transportation Statistics; the annual *Air Transport and Air Transport Facts and Figures*, issued by the Air Transport Industry Association, Washington, DC, and the annual *Waterborne Commerce of the United States*, issued by the Corps of Engineers of the Department of the Army. In addition, the Bureau of the Census in its commodity transportation survey (part of the census of transportation, taken every 5 years, for years ending in “2” and “7”) provides data on the type, weight, and value of commodities shipped by manufacturing establishments in the United States, by means of transportation, origin, and destination.

Additional sources of data on water transportation include *Merchant Fleets of the World*, issued periodically by the U.S. Maritime Administration; *The Bulletin*, issued monthly by the American Bureau of Shipping, New York, NY; and *World Fleet Statistics* and the *Register Book*, published by Lloyd’s Register of Shipping, London, England.

Civil aviation—Federal promotion and regulation of civil aviation have been carried out by the FAA and the Civil Aeronautics Board (CAB). The CAB promoted and regulated the civil air transportation industry within the United States and between the United States and foreign countries. The Board granted licenses to provide air transportation service, approved or disapproved proposed rates and fares, and approved or disapproved proposed agreements and corporate

In Brief

SCHEDULED AIR CARRIERS

Revenue passengers enplaned:

1985 382 million

1996 581 million

Net profit:

1985 +\$863 million

1996 +\$2,824 million

relationships involving air carriers. In December 1984, the CAB ceased to exist as an agency. Some of its functions were transferred to the Department of Transportation (DOT), as outlined below. The responsibility for investigation of aviation accidents resides with the National Transportation Safety Board.

The Office of the Secretary, DOT aviation activities include the following: negotiation of international air transportation rights, selection of U.S. air carriers to serve capacity controlled international markets, oversight of international rates and fares, maintenance of essential air service to small communities, and consumer affairs. DOT’s Bureau of Transportation Statistics (BTS) handles aviation information functions formerly assigned to CAB. Prior to BTS, the Research and Special Programs Administration handled these functions.

The principal activities of the FAA include the promotion of air safety, controlling the use of navigable airspace, prescribing regulations dealing with the competency of airmen, airworthiness of aircraft, and air traffic control, operation of air route traffic control centers, airport traffic control towers, and flight service stations, the design, construction, maintenance, and inspection of navigation, traffic control, and communications equipment, and the development of general aviation.

The CAB published monthly and quarterly financial and traffic statistical data for the certificated route air carriers. BTS continues these publications, including both certificated and noncertificated (commuter) air carriers. The FAA publishes data annually on the use of airway facilities; data related to the location of airmen, aircraft, and airports; the volume of activity in the field of nonair carrier (general aviation) flying; and aircraft production and registration.

General aviation comprises all civil flying (including such commercial operations as small demand air taxis, agriculture application, powerline patrol, etc.) but excludes certificated route air carriers, supplemental operators, large-aircraft commercial operators, and commuter airlines.

Air carriers and service—The CAB previously issued “certificates of public convenience and necessity” under Section 401 of the Federal Aviation Act of 1958 for scheduled and nonscheduled (charter) passenger services and cargo services. It also issued certificates under Section 418 of the Act to cargo air carriers for domestic all-cargo service only. The DOT Office of the Secretary now issues the certificates under a “fit, willing, and able” test of air carrier operations. Carriers operating only 60 seat or less aircraft are given exemption authority to carry passengers, cargo, and mail in scheduled and nonscheduled service under Part 298 of the DOT (formerly CAB) regulations. Exemption authority carriers who offer scheduled passenger service to an essential air service point must meet the “fit, willing, and able” test.

Vessel shipments, entrances, and clearances—Shipments by dry cargo vessels comprise shipments on all types

of watercraft, except tanker vessels; shipments by tanker vessels comprise all types of cargo, liquid and dry, carried by tanker vessels.

A vessel is reported as entered only at the first port which it enters in the United States, whether or not cargo is unloaded at that port. A vessel is reported as cleared only at the last port at which clearance is made to a foreign port, whether or not it takes on cargo. Army and Navy vessels entering or clearing without commercial cargo are not included in the figures.

Units of measurement—Cargo (or freight) tonnage and shipping weight both represent the gross weight of the cargo including the weight of containers, wrappings, crates, etc. However, shipping weight excludes lift and cargo vans and similar substantial outer containers. Other tonnage figures generally refer to stowing capacity of vessels, 100 cubic feet being called 1 ton. Gross tonnage comprises the space within the frames and the ceiling of the hull, together with those closed-in spaces above deck available for cargo, stores, passengers, or crew, with certain minor exceptions. Net or registered tonnage is the gross tonnage less the spaces occupied by the propelling machinery, fuel, crew quarters, master’s cabin, and navigation spaces. Substantially, it represents space available for cargo and passengers. The net tonnage capacity of a ship may bear little relation to weight of cargo. Deadweight tonnage is the weight in long tons required to depress a vessel from light water line (that is, with only the machinery and equipment on board) to load line. It is, therefore, the weight of the cargo, fuel, etc., which a vessel is designed to carry with safety.

No. 1069. Air and Water Transportation Industries—Summary: 1992

[For establishments with payroll]

| INDUSTRY | 1987 SIC ¹ Code | Establish- ments | Revenue (mil. dol.) | Annual payroll (mil. dol.) | Paid employees ² (1,000) |
|---|-------------------------------|---------------------|------------------------|----------------------------------|---|
| Air transportation³ | 45 | (NA) | 82,670 | 24,530 | 707 |
| Air transportation, including air courier services | 451,2 | (NA) | 76,503 | 22,734 | 627 |
| Scheduled and air courier services | 451 | (NA) | 73,070 | 22,026 | 604 |
| Scheduled ³ | 4512 | (NA) | 62,057 | 19,090 | 505 |
| Air courier services | 4513 | 2,639 | 11,013 | 2,935 | 99 |
| Nonscheduled | 452 | 1,791 | 3,433 | 708 | 23 |
| Airport terminal services | 458 | 3,252 | 6,168 | 1,796 | 80 |
| Water transportation | 44 | 8,147 | 29,207 | 5,170 | 171 |
| Water transportation of freight | 441,2,3,4 | 836 | 14,704 | 1,523 | 37 |
| Deep sea foreign and domestic freight | 441, 2 | 615 | 11,948 | 1,148 | 27 |
| Deep sea foreign freight | 4412 | 334 | 8,490 | 629 | 13 |
| Deep sea domestic freight | 4424 | 281 | 3,458 | 519 | 13 |
| Other water transportation of freight | 443,4 | 221 | 2,756 | 375 | 10 |
| Great Lakes-St. Lawrence Seaway freight | 4432 | 26 | 559 | 81 | 1 |
| Water transportation of freight, n.e.c. ⁴ | 4449 | 195 | 2,197 | 293 | 9 |
| Water transportation of passengers | 448 | 1,033 | 4,133 | 508 | 23 |
| Ferries | 4482 | 118 | 155 | 51 | 2 |
| Water transportation of passengers, except by ferry | 4481,9 | 915 | 3,978 | 457 | 22 |
| Deep sea transportation, except by ferry | 4481 | 72 | 3,268 | 275 | 13 |
| Water transportation of passengers, n.e.c. ⁴ | 4489 | 843 | 710 | 182 | 9 |
| Services incidental to water transportation | 449 | 6,278 | 10,370 | 3,140 | 111 |
| Marinas | 4493 | 3,348 | 1,651 | 346 | 18 |
| Other services incidental to water transportation | 4491,2,9 | 2,930 | 8,719 | 2,794 | 93 |
| Marine cargo handling | 4491 | 871 | 5,066 | 1,841 | 59 |
| Towing and tugboat services | 4492 | 941 | 2,682 | 689 | 25 |
| Water transportation services, n.e.c. ⁴ | 4499 | 1,118 | 971 | 263 | 9 |

NA Not available. ¹ 1987 Standard Industrial Classification code; see text, Section 13, Labor Force. ² For the pay period including March 12. ³ Revenue for scheduled air transportation includes revenues for large certificated passenger carriers that was reported to the Office of Airline Statistics, U.S. Dept. of Transportation, as published in *Air Carrier Financial Statistics Quarterly*. ⁴ N.e.c. means not elsewhere classified.

Source: U.S. Bureau of the Census, *Census of Transportation, Communications, and Utilities: 1992*, UC92-A-1.

No. 1070. U. S. Scheduled Airline Industry—Summary: 1985 to 1996

[For calendar years or Dec. 31. For domestic and international operations. Covers carriers certificated under Section 401 of the Federal Aviation Act. Minus sign (-) indicates loss]

| ITEM | Unit | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------|---------|----------|----------|----------|----------|----------|----------|----------|
| SCHEDULED SERVICE | | | | | | | | | |
| Revenue passengers enplaned | Mil. | 382.0 | 465.6 | 452.3 | 475.1 | 488.5 | 528.8 | 547.8 | 581.2 |
| Revenue passenger miles | Bil. | 336.4 | 457.9 | 448.0 | 478.6 | 489.7 | 519.4 | 540.7 | 578.4 |
| Available seat miles | Bil. | 547.8 | 733.4 | 715.2 | 752.8 | 771.6 | 784.3 | 807.1 | 834.7 |
| Revenue passenger load factor | Percent | 61.4 | 62.4 | 62.6 | 63.6 | 63.5 | 66.2 | 67.0 | 69.3 |
| Mean passenger trip length ¹ | Miles | 881 | 984 | 990 | 1,007 | 1,002 | 982 | 987 | 995 |
| Freight and express ton miles | Mil. | 6,030.5 | 10,546.3 | 10,225.2 | 11,129.7 | 11,943.6 | 13,792.2 | 14,577.5 | 15,245.0 |
| Aircraft departures | 1,000 | 5,835.5 | 6,923.6 | 6,782.8 | 7,050.6 | 7,245.4 | 7,531.0 | 8,061.5 | 8,227.9 |
| FINANCES | | | | | | | | | |
| Total operating revenue ² | Mil. dol. | 46,664 | 76,142 | 75,158 | 78,140 | 84,559 | 88,313 | 94,578 | 101,919 |
| Passenger revenue | Mil. dol. | 39,236 | 58,453 | 57,092 | 59,828 | 63,945 | 65,422 | 69,594 | 75,316 |
| Freight and express revenue | Mil. dol. | 2,681 | 5,432 | 5,509 | 5,916 | 6,662 | 7,284 | 8,616 | 9,795 |
| Mail revenue | Mil. dol. | 890 | 970 | 957 | 1,184 | 1,212 | 1,183 | 1,266 | 1,280 |
| Charter revenue | Mil. dol. | 1,280 | 2,877 | 3,717 | 2,801 | 3,082 | 3,548 | 3,485 | 3,444 |
| Total operating expense | Mil. dol. | 45,238 | 78,054 | 76,943 | 80,585 | 83,121 | 85,600 | 88,718 | 95,694 |
| Operating profit | Mil. dol. | 1,426 | -1,912 | -1,785 | -2,444 | 1,438 | 2,713 | 5,860 | 6,225 |
| Interest expense | Mil. dol. | 1,588 | 1,978 | 1,777 | 1,743 | 2,027 | 2,347 | 2,424 | 1,973 |
| Net profit | Mil. dol. | 863 | -3,921 | -1,940 | -4,791 | -2,136 | -344 | 2,314 | 2,824 |
| Revenue per passenger mile | Cents. | 11.7 | 12.8 | 12.7 | 12.5 | 13.1 | 12.6 | 13.0 | 13.0 |
| Rate of return on investment | Percent | 9.6 | -6.0 | -0.5 | -9.3 | -0.4 | 5.2 | 11.9 | 11.5 |
| Operating profit margin | Percent | 3.1 | -2.5 | -2.4 | -3.1 | 1.7 | 3.1 | 6.2 | 6.1 |
| Net profit margin | Percent | 1.8 | -5.1 | -2.6 | -6.1 | -2.5 | -0.4 | 2.4 | 2.8 |
| EMPLOYEES | | | | | | | | | |
| Total | 1,000 | 355 | 546 | 534 | 540 | 537 | 540 | 547 | 564 |
| Pilots, copilots, and other flight personnel | 1,000 | 40 | 56 | 57 | 59 | 60 | 61 | 64 | 67 |
| Flight attendants | 1,000 | 63 | 83 | 82 | 86 | 85 | 87 | 87 | 89 |
| Mechanics | 1,000 | 43 | 61 | 59 | 59 | 57 | 56 | 50 | 51 |
| Aircraft and traffic servicing personnel | 1,000 | 101 | 251 | 237 | 243 | 243 | 247 | 251 | 266 |
| All other | 1,000 | 108 | 94 | 98 | 93 | 92 | 90 | 95 | 91 |

¹ For definition of mean, see Guide to Tabular Presentation. ² Includes other types of revenues, not shown separately.

Source: Air Transport Association of America, Washington, DC, *Air Transport*, annual, and *Air Transport, Facts and Figures*, annual.

No. 1071. Airline Cost Indexes: 1980 to 1996

[Covers U.S. major and national service carriers. Major carriers have operating revenues of \$1 billion or more; nationals have operating revenues from \$75 million to \$1 billion. Minus sign (-) indicates decrease]

| INDEX | INDEX (1982=100) | | | | | | | | PERCENT DISTRIBUTION OF CASH OPERATING EXPENSES ¹ | | | |
|--|---------------------|-------|-------|-------|-------|-------|-------|-------|--|-------|-------|-------|
| | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 | 1995 | 1996 | 1980 | 1990 | 1995 | 1996 |
| Composite index | 86.8 | 102.8 | 120.4 | 126.3 | 128.2 | 130.1 | 131.2 | 135.2 | 100.0 | 100.0 | 100.0 | 100.0 |
| Labor cost | 85.6 | 110.6 | 123.0 | 136.5 | 143.4 | 148.5 | 155.5 | 159.5 | 35.0 | 29.8 | 32.3 | 31.5 |
| Passenger carriers | 85.8 | 110.5 | 121.7 | 135.6 | 143.1 | 148.7 | 155.7 | 159.4 | 35.2 | 31.6 | 34.8 | 33.8 |
| Cargo carriers | 78.3 | 116.0 | 148.8 | 150.1 | 147.0 | 145.4 | 151.7 | 159.6 | 27.3 | 14.9 | 18.1 | 18.7 |
| Fuel | 89.7 | 79.6 | 77.2 | 65.0 | 59.7 | 54.4 | 55.3 | 64.6 | 30.0 | 16.3 | 10.8 | 12.2 |
| Aircraft fleet ^{2,3} | 88.1 | 123.7 | 177.0 | 202.6 | 208.0 | 217.5 | 222.8 | 229.9 | 5.2 | 7.9 | 9.5 | 9.6 |
| Interest ^{2,4} | 88.1 | 98.0 | 96.0 | 79.3 | 81.2 | 87.6 | 93.5 | 86.9 | 3.2 | 2.5 | 2.8 | 2.1 |
| Insurance | 80.4 | 155.3 | 68.2 | 109.3 | 139.4 | 110.8 | 111.6 | 111.1 | 0.3 | 0.2 | 0.7 | 0.7 |
| Maintenance material | 104.9 | 119.9 | 190.5 | 177.1 | 166.2 | 157.2 | 153.4 | 168.9 | 2.5 | 3.2 | 2.5 | 2.7 |
| Landing fee | 87.2 | 99.9 | 139.0 | 168.4 | 170.1 | 171.6 | 176.6 | 178.0 | 1.7 | 1.7 | 2.0 | 1.9 |
| Traffic commissions ² | 75.4 | 112.9 | 169.2 | 184.9 | 193.0 | 163.3 | 139.4 | 130.8 | 4.9 | 9.4 | 8.5 | 7.9 |
| Communication ² | 65.8 | 96.6 | 111.2 | 124.5 | 120.0 | 118.2 | 116.0 | 114.7 | 1.1 | 1.4 | 1.5 | 1.5 |
| Advertising and promotion ² | 67.1 | 96.2 | 97.8 | 81.1 | 72.4 | 69.7 | 63.6 | 58.2 | 1.6 | 1.9 | 1.4 | 1.2 |
| Passenger food ² | 90.6 | 98.9 | 128.4 | 140.5 | 128.5 | 120.6 | 110.9 | 104.0 | 2.9 | 3.5 | 3.3 | 3.1 |
| All other | 86.1 | 111.9 | 133.4 | 142.6 | 146.4 | 149.9 | 153.7 | 157.2 | 11.8 | 23.5 | 26.6 | 27.6 |

¹ Total operating expenses plus interest on long term debt, less depreciation and amortization. ² Passenger airlines only.

³ Includes lease, aircraft and engine rentals, depreciation and amortization. ⁴ Interest on debt.

Source: Air Transport Association of America, Washington, DC, *Air Transport*, annual; and unpublished data.

No. 1072. Top 40 Airports in 1996—Passengers Enplaned: 1986 and 1996

[In thousands, except rank. For calendar year. Airports ranked by total passengers enplaned]

| AIRPORT | 1986 | | 1996 | | AIRPORT | 1986 | | 1996 | |
|---|---------|------|---------|------|---|--------|------|-------|------|
| | Total | Rank | Total | Rank | | Total | Rank | Total | Rank |
| All airports | 400,000 | (X) | 558,184 | (X) | New York (JFK), NY | 9,125 | 11 | 9,703 | 19 |
| Top 40 airports | 304,235 | (X) | 430,899 | (X) | New York (La Guardia), NY | 10,429 | 8 | 9,594 | 20 |
| Chicago (O'Hare), IL | 24,794 | 1 | 30,526 | 1 | Salt Lake City, UT | 4,651 | 25 | 9,463 | 21 |
| Atlanta (Hartsfield Intl), GA | 21,377 | 2 | 30,372 | 2 | Pittsburgh, PA | 7,470 | 16 | 9,348 | 22 |
| Dallas/Ft. Worth, TX | 19,094 | 3 | 26,623 | 3 | Honolulu, HI | 7,352 | 17 | 9,125 | 23 |
| Los Angeles, CA | 17,696 | 4 | 22,722 | 4 | Philadelphia, PA | 5,424 | 23 | 8,572 | 24 |
| San Francisco, CA | 12,354 | 7 | 16,287 | 5 | Cincinnati, OH | 2,136 | 44 | 7,300 | 25 |
| Denver, CO | 16,087 | 5 | 15,246 | 6 | Washington (National), DC | 4,269 | 28 | 6,772 | 26 |
| Phoenix (Sky Harbor Intl), AZ | 7,720 | 15 | 14,807 | 7 | San Diego, CA | 4,558 | 26 | 6,549 | 27 |
| Detroit (Wayne County), MI | 8,206 | 13 | 14,117 | 8 | Portland, OR | 2,415 | 38 | 6,126 | 28 |
| Las Vegas (McCarran Intl), NV | 5,329 | 24 | 14,054 | 9 | Baltimore, MD | 3,848 | 31 | 5,907 | 29 |
| St. Louis (Lambert-St Louis), MO | 9,825 | 9 | 13,547 | 10 | Tampa, FL | 4,494 | 27 | 5,712 | 30 |
| Newark, NJ | 14,405 | 6 | 12,916 | 11 | Cleveland, OH | 3,093 | 34 | 5,287 | 31 |
| Minneapolis/St. Paul, MN | 7,982 | 14 | 12,616 | 12 | Ft. Lauderdale, FL | 3,577 | 33 | 4,848 | 32 |
| Miami, FL | 8,589 | 12 | 11,906 | 13 | San Jose, CA | 2,764 | 36 | 4,832 | 33 |
| Houston (Intercontinental), TX | 6,560 | 20 | 11,622 | 14 | Kansas City, MO | 3,911 | 30 | 4,820 | 34 |
| Seattle-Tacoma, WA | 6,652 | 18 | 11,489 | 15 | Washington (Dulles Intl), DC | 4,269 | 28 | 4,750 | 35 |
| Orlando, FL | 5,947 | 21 | 10,828 | 16 | Oakland, CA | 1,833 | 51 | 4,684 | 36 |
| Boston (Logan Intl), MA | 9,696 | 10 | 10,653 | 17 | San Juan (Lewis Munoz Marin Intl), PR | 2,156 | 42 | 4,550 | 37 |
| Charlotte (Douglas Municipal), NC | 5,687 | 22 | 10,008 | 18 | Chicago (Midway), IL | 1,699 | 54 | 4,412 | 38 |
| | | | | | New Orleans, LA | 3,040 | 35 | 4,180 | 39 |
| | | | | | Houston (William P. Hobby), TX | 3,722 | 32 | 4,026 | 40 |

X Not applicable.

Source: U.S. Bureau of Transportation Statistics, *National Transportation Statistics*, 1998, Internet site <<http://www.bts.gov/btsprod/nts/>> (accessed 5 August 1998)

No. 1073. Domestic Airline Markets: 1996

[For calendar year. Data are for the 30 top markets and include all commercial airports in each metro area. Data do not include connecting passengers]

| MARKET | Passengers | MARKET | Passengers |
|---|------------|--|------------|
| New York to—from Los Angeles | 3,149,020 | New York to—from San Juan | 1,673,790 |
| New York to—from Chicago | 2,996,460 | Chicago to—from Los Angeles | 1,511,120 |
| New York to—from Miami | 2,777,610 | Chicago to—from Detroit | 1,506,680 |
| Honolulu to—from Kahului, Maui | 2,750,020 | Los Angeles to—from Phoenix | 1,474,500 |
| New York to—from Boston | 2,400,920 | New York to—from West Palm Beach | 1,453,700 |
| New York to—from San Francisco | 2,282,480 | Honolulu to—from Kona, Hawaii | 1,391,420 |
| New York to—from Orlando | 2,234,940 | Los Angeles to—from Honolulu | 1,371,240 |
| Dallas/Ft. Worth to—from Houston | 2,205,080 | Honolulu to—from Hilo, Hawaii | 1,281,090 |
| Los Angeles to—from Las Vegas | 2,102,850 | Chicago to—from Minneapolis | 1,275,160 |
| New York to—from Washington | 2,087,370 | Los Angeles to—from Seattle/Tacoma | 1,259,130 |
| Los Angeles to—from San Francisco | 2,034,980 | Boston to—from Washington | 1,218,870 |
| New York to—from Atlanta | 1,978,680 | Chicago to—from Atlanta | 1,216,750 |
| Honolulu to—from Lihue, Kauai | 1,832,820 | New York to—from Dallas/Ft. Worth | 1,168,750 |
| New York to—from Ft. Lauderdale | 1,768,430 | New York to—from Tampa | 1,153,880 |
| Los Angeles to—from Oakland | 1,710,310 | San Francisco to—from San Diego | 1,139,240 |

Source: Air Transport Association of America, Washington, DC, *Air Transport* 1997.

No. 1074. Worldwide Airline Fatalities: 1970 to 1997

[For scheduled air transport operations]

| YEAR | Fatal accidents | Passenger deaths | Death rate ¹ | Death rate ² | YEAR | Fatal accidents | Passenger deaths | Death rate ¹ | Death rate ² |
|-----------------------------|-----------------|------------------|-------------------------|-------------------------|-------------------------------|-----------------|------------------|-------------------------|-------------------------|
| 1970 | 29 | 700 | 0.29 | 0.18 | 1991 ³ | 30 | 653 | 0.06 | 0.04 |
| 1975 | 20 | 467 | 0.13 | 0.08 | 1992 ³ | 29 | 1,097 | 0.09 | 0.06 |
| 1980 | 22 | 814 | 0.14 | 0.09 | 1993 ³ | 34 | 936 | 0.08 | 0.05 |
| 1985 | 22 | 1,066 | 0.15 | 0.09 | 1994 ³ | 28 | 941 | 0.07 | 0.05 |
| 1988 ³ | 28 | 729 | 0.07 | 0.04 | 1995 ³ | 26 | 710 | 0.04 | 0.03 |
| 1989 ³ | 27 | 817 | 0.07 | 0.05 | 1996 ³ | 23 | 1,135 | 0.08 | 0.05 |
| 1990 ³ | 25 | 495 | 0.04 | 0.03 | 1997 ^{3,4} | 26 | 916 | 0.06 | 0.04 |

¹ Rate per 100 million passenger miles flown. ² Rate per 100 million passenger kilometers flown. ³ Includes the Commonwealth of Independent States. ⁴ Preliminary.

Source: International Civil Aviation Organization, Montreal, Canada, *Civil Aviation Statistics of the World*, annual.

No. 1075. Airline Passenger Screening Results: 1980 to 1996

[Calendar year data]

| ITEM | 1980 | 1985 | 1990 | 1993 | 1994 | 1995 | 1996 |
|---|-------|-------|-------|-------|-------|-------|-------|
| Persons screened (mil.) | 585 | 993 | 1,145 | 1,150 | 1,261 | 1,263 | 1,382 |
| WEAPONS DETECTED | | | | | | | |
| Firearms, total | 2,022 | 2,987 | 2,853 | 2,798 | 2,994 | 2,390 | 2,147 |
| Handguns | 1,878 | 2,823 | 2,490 | 2,707 | 2,860 | 2,230 | 1,999 |
| Long guns | 36 | 90 | 59 | 91 | 134 | 160 | 148 |
| Other guns | 108 | 74 | 304 | (X) | (X) | (X) | (X) |
| Other dangerous articles ¹ | (X) | (X) | (X) | 3,867 | 6,051 | 4,414 | (NA) |
| Explosive/incendiary devices | 8 | 12 | 15 | 251 | 505 | 631 | (NA) |
| Persons arrested: | | | | | | | |
| Carrying firearms/explosives | 1,031 | 1,310 | 1,337 | 1,354 | 1,433 | 1,194 | 999 |
| Giving false information | 32 | 42 | 18 | 31 | 35 | 68 | 131 |
| Bomb threats received: | | | | | | | |
| Against airports | 1,179 | 477 | 448 | 304 | 250 | 346 | 284 |
| Against aircraft | 268 | 153 | 338 | 248 | 218 | 327 | 419 |

NA Not available. X Not applicable. ¹ For 1980-90 data included firearms; beginning 1993, category includes stunning devices, chemical agents, knives, and other designated items.

Source: U.S. Bureau of Transportation Statistics, *National Transportation Statistics*, 1998, Internet site <<http://www.bts.gov/btsprod/nts/>> (accessed 5 August 1998)

No. 1076. Aircraft Accidents: 1975 to 1997

[For years ending December 31]

| ITEM | Unit | 1975 | 1980 | 1985 | 1990 | 1995 | 1996 | 1997, prel. |
|--|------------------|-------|-------|-------|-------|-------|-------|-------------|
| Air carrier accidents, all services ¹ | Number | 37 | 19 | 21 | 24 | 36 | 38 | 49 |
| Fatal accidents | Number | 3 | 1 | 7 | 6 | 3 | 5 | 4 |
| Fatalities | Number | 124 | 1 | 526 | 39 | 168 | 380 | 8 |
| Rates per 100,000,000 aircraft miles flown: | | | | | | | | |
| Accidents | Rate | 1.5 | 0.65 | 0.58 | 0.49 | 0.64 | 0.65 | 0.76 |
| Fatal accidents | Rate | 0.081 | 0.034 | 0.19 | 0.12 | 0.053 | 0.086 | 0.062 |
| Fatalities | Rate | 5.0 | 0.034 | 14 | 0.79 | 3.0 | 6.5 | 0.1 |
| Commuter air carrier accidents ² | Number | 48 | 38 | 21 | 16 | 11 | 12 | 16 |
| Fatal accidents | Number | 12 | 8 | 7 | 4 | 2 | 1 | 5 |
| Fatalities | Number | 28 | 37 | 37 | 7 | 9 | 14 | 46 |
| Rates per 100,000,000 aircraft miles flown: | | | | | | | | |
| Accidents | Rate | (NA) | 20 | 7.0 | 3.6 | 1.9 | 2.4 | 6.8 |
| Fatal accidents | Rate | (NA) | 4.2 | 2.3 | 0.9 | 0.4 | 0.2 | 2.1 |
| Fatalities | Rate | (NA) | 19 | 12 | 1.6 | 1.6 | 2.8 | 20 |
| On-demand air taxi accidents ³ | Number | 152 | 171 | 154 | 106 | 75 | 89 | 82 |
| Fatal accidents | Number | 24 | 46 | 35 | 28 | 24 | 29 | 16 |
| Fatalities | Number | 69 | 105 | 76 | 50 | 52 | 63 | 40 |
| Rates per 100,000 flight hours: | | | | | | | | |
| Accidents | Rate | 6.0 | 4.7 | 6.0 | 4.7 | 3.9 | 4.6 | 4.6 |
| Fatal accidents | Rate | 0.95 | 1.3 | 1.4 | 1.2 | 1.3 | 1.4 | 1.4 |
| Fatalities | Rate | 2.7 | 2.9 | 3.0 | 2.2 | 2.7 | 3.2 | 2.0 |
| General aviation accidents ⁴ | Number | 3,995 | 3,590 | 2,739 | 2,215 | 2,055 | 1,905 | 1,854 |
| Fatal accidents | Number | 633 | 618 | 498 | 443 | 412 | 359 | 350 |
| Fatalities | Number | 1,252 | 1,239 | 956 | 765 | 734 | 631 | 646 |
| Rates per 100,000 flight hours: | | | | | | | | |
| Accidents | Rate | 13.9 | 9.9 | 9.7 | 7.8 | 8.6 | 7.9 | 7.5 |
| Fatal accidents | Rate | 2.20 | 1.70 | 1.75 | 1.55 | 1.74 | 1.51 | 1.51 |
| Fatalities | Rate | 4.35 | 3.40 | 3.38 | 2.69 | 3.11 | 2.67 | 2.67 |

NA Not available. ¹ U.S. air carriers operating under 14 CFR 121. ² All scheduled service of U.S. air carriers operating under 14 CFR 135. ³ All nonscheduled service of U.S. air carriers operating under 14 CFR 135. ⁴ U.S. civil registered aircraft not operated under 14 CFR 121 or 135.

Source: U.S. Bureau of Transportation Statistics, *National Transportation Statistics*, 1998, Internet site <<http://www.bts.gov/btsprod/nts/>> (accessed 3 August 1998)

No. 1077. On-Time Flight Arrivals and Departures at Major U.S. Airports: 1997

[In percent. Quarterly, based on gate arrival and departure times for domestic scheduled operations of U.S. major airlines. All U.S. airlines with 1 percent or more of total U.S. domestic scheduled airline passenger revenues are required to report on-time data. A flight is considered on time if it operated less than 15 minutes after the scheduled time shown in the carrier's computerized reservation system. Cancelled and diverted flights are considered late. See source for data on individual airlines]

| AIRPORT | ON-TIME ARRIVALS | | | | ON-TIME DEPARTURES | | | |
|--|------------------|----------|----------|-----------|--------------------|----------|----------|-----------|
| | 1st. qtr. | 2d. qtr. | 3d. qtr. | 4th. qtr. | 1st. qtr. | 2d. qtr. | 3d. qtr. | 4th. qtr. |
| Total, all airports | 73.9 | 79.0 | 80.3 | 77.8 | 78.9 | 83.6 | 84.5 | 82.6 |
| Total major airports | 73.5 | 78.6 | 79.9 | 77.8 | 77.3 | 82.4 | 83.2 | 81.9 |
| Atlanta, Hartsfield International | 70.3 | 67.8 | 72.0 | 70.3 | 75.4 | 74.4 | 80.3 | 79.4 |
| Baltimore/Washington International | 80.0 | 81.9 | 83.0 | 81.5 | 84.0 | 86.1 | 87.3 | 85.9 |
| Boston, Logan International | 74.8 | 74.2 | 73.9 | 73.8 | 82.4 | 83.1 | 83.0 | 83.2 |
| Charlotte Douglas | 81.3 | 80.8 | 84.0 | 84.2 | 82.4 | 81.5 | 84.7 | 85.2 |
| Chicago, O'Hare | 72.2 | 80.1 | 80.3 | 81.6 | 73.2 | 81.7 | 81.9 | 82.6 |
| Cincinnati International | 72.9 | 75.8 | 80.1 | 80.6 | 81.3 | 83.3 | 86.2 | 86.9 |
| Dallas/Ft. Worth Regional | 74.2 | 80.0 | 85.8 | 79.7 | 74.4 | 80.7 | 85.1 | 81.1 |
| Denver International | 76.6 | 82.6 | 80.3 | 78.8 | 78.1 | 85.1 | 83.7 | 80.2 |
| Detroit, Metro Wayne | 69.2 | 80.7 | 80.5 | 80.5 | 65.4 | 78.3 | 77.6 | 76.7 |
| Houston George Bush | 78.0 | 79.1 | 85.8 | 80.2 | 83.0 | 82.9 | 87.7 | 86.1 |
| Las Vegas, McCarran International | 76.8 | 81.8 | 81.3 | 78.7 | 79.3 | 85.1 | 83.5 | 81.0 |
| Los Angeles International | 70.9 | 75.6 | 77.1 | 75.0 | 74.1 | 80.2 | 81.3 | 79.4 |
| Miami International | 70.7 | 75.3 | 79.3 | 75.8 | 78.9 | 81.6 | 84.4 | 85.1 |
| Minneapolis/St. Paul International | 70.5 | 81.3 | 78.9 | 79.5 | 72.8 | 81.5 | 79.4 | 80.5 |
| Newark International | 70.0 | 71.8 | 73.8 | 73.6 | 76.1 | 78.6 | 79.2 | 80.9 |
| New York, Kennedy International | 73.0 | 76.9 | 78.2 | 74.6 | 76.7 | 82.3 | 84.3 | 84.1 |
| New York, LaGuardia | 74.4 | 79.0 | 80.7 | 79.1 | 83.2 | 86.2 | 86.6 | 85.8 |
| Orlando International | 72.3 | 77.1 | 80.8 | 77.7 | 82.2 | 85.0 | 87.6 | 86.5 |
| Philadelphia International | 74.2 | 76.9 | 77.5 | 77.9 | 79.1 | 82.0 | 82.3 | 83.0 |
| Phoenix, Sky Harbor International | 75.8 | 82.1 | 82.8 | 78.3 | 78.3 | 83.1 | 83.3 | 79.6 |
| Pittsburgh, Greater International | 80.6 | 84.3 | 83.0 | 83.4 | 84.6 | 86.1 | 84.6 | 86.6 |
| Portland International | 73.9 | 80.0 | 79.3 | 74.1 | 82.0 | 85.7 | 84.9 | 81.2 |
| St. Louis, Lambert | 73.2 | 82.9 | 85.7 | 76.2 | 74.7 | 85.4 | 87.0 | 78.3 |
| Salt Lake City International | 71.1 | 78.7 | 80.7 | 79.9 | 74.4 | 84.7 | 85.3 | 85.7 |
| San Diego International, Lindbergh | 75.5 | 82.8 | 81.5 | 77.2 | 81.3 | 88.2 | 86.1 | 83.4 |
| San Francisco International | 68.1 | 78.2 | 74.9 | 72.7 | 73.1 | 83.2 | 80.2 | 76.7 |
| Seattle-Tacoma International | 69.3 | 78.3 | 75.3 | 71.3 | 80.5 | 86.2 | 80.5 | 81.0 |
| Washington National | 77.9 | 79.8 | 80.0 | 79.9 | 85.2 | 86.0 | 86.4 | 86.8 |

Source: U.S. Department of Transportation, Office of Consumer Affairs, *Air Travel Consumer Report*, monthly.

No. 1078. Consumer Complaints Against U.S. Airlines: 1989 to 1997

[Calendar year data. See source for data on individual airlines]

| COMPLAINT CATEGORY | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Total | 10,553 | 7,703 | 6,106 | 5,639 | 4,438 | 5,179 | 4,629 | 5,782 | 6,435 |
| Flight problems ¹ | 4,111 | 3,034 | 1,877 | 1,624 | 1,211 | 1,586 | 1,133 | 1,628 | 1,720 |
| Customer service ² | 1,002 | 758 | 714 | 695 | 599 | 805 | 667 | 999 | 1,420 |
| Ticketing/boarding ³ | 821 | 624 | 659 | 680 | 577 | 598 | 666 | 857 | 909 |
| Baggage | 1,702 | 1,329 | 883 | 752 | 627 | 761 | 628 | 882 | 829 |
| Refunds | 1,023 | 701 | 783 | 721 | 482 | 393 | 576 | 521 | 538 |
| Oversales ⁴ | 607 | 399 | 301 | 265 | 257 | 301 | 263 | 353 | 414 |
| Fares ⁵ | 341 | 312 | 388 | 573 | 398 | 267 | 185 | 180 | 197 |
| Advertising | 89 | 96 | 96 | 54 | 51 | 94 | 66 | 61 | 57 |
| Tours | 22 | 29 | 23 | 12 | 16 | 127 | 18 | 16 | 13 |
| Smoking | 232 | 74 | 30 | 25 | 30 | 20 | 15 | 13 | 5 |
| Credit | 19 | 5 | 10 | 10 | 4 | 2 | 4 | 3 | 1 |
| Other | 584 | 342 | 342 | 228 | 186 | 225 | 408 | 269 | 332 |

¹ Cancellations, delays, etc. from schedule. ² Unhelpful employees, inadequate meals or cabin service, treatment of delayed passengers. ³ Errors in reservations and ticketing; problems in making reservations and obtaining tickets. ⁴ All bumping problems, whether or not airline complied with DOT regulations. ⁵ Incorrect or incomplete information about fares, discount fare conditions, and availability, etc.

Source: U.S. Dept. of Transportation, Office of Consumer Affairs, *Air Travel Consumer Report*, monthly.

No. 1079. Commuter/Regional Airline Operations—Summary: 1980 to 1997

[Calendar year data. Commuter/regional airlines operate primarily aircraft of predominately 75 passengers or less and 18,000 pounds of payload capacity serving short haul and small community markets. Represents operations within all North America by U.S. Regional Carriers. Averages are means. For definition of mean, see Guide to Tabular Presentation]

| ITEM | Unit | 1980 | 1985 | 1990 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|----------|-------|-------|-------|-------|-------|--------|--------|--------|
| Passenger carriers operating | Number | 214 | 179 | 150 | 130 | 125 | 124 | 109 | 104 |
| Passengers enplaned | Millions | 14.8 | 126.0 | 42.1 | 52.7 | 57.1 | 57.2 | 61.9 | 66.3 |
| Average passengers enplaned per carrier | 1,000 | 69.2 | 152.4 | 277.5 | 405.2 | 457.0 | 461.4 | 568.3 | 637.5 |
| Revenue passenger miles (RPM) | Billions | 1.92 | 4.41 | 7.61 | 10.61 | 12.02 | 12.75 | 14.22 | 15.30 |
| Average RPM's per carrier | Millions | 8.97 | 24.64 | 50.75 | 81.59 | 96.15 | 102.80 | 130.49 | 147.09 |
| Airports served | Number | 732 | 854 | 811 | 829 | 806 | 780 | 782 | 766 |
| Average trip length | Miles | 129 | 173 | 183 | 201 | 210 | 223 | 230 | 231 |
| Passenger aircraft operated | Number | 1,339 | 1,745 | 1,917 | 2,208 | 2,172 | 2,138 | 2,127 | 2,104 |
| Average seating capacity (seats) | Number | 13.9 | 19.2 | 22.1 | 23.0 | 23.7 | 24.6 | 25.1 | 25.9 |
| Fleet flying hours ² | 1,000 | 1,740 | 2,854 | 3,447 | 4,490 | 4,565 | 4,659 | 4,568 | 4,695 |
| Average annual utilization per aircraft | Hours | 1,299 | 1,635 | 1,798 | 2,033 | 2,102 | 2,179 | 2,148 | 2,231 |

¹ Adjusted to exclude a merger in 1986. ² Prior to 1993, utilization results reflected airborne rather than block hours. Data inclusive of carriers which may have operated during only part of calendar year 1996.

Source: Regional Airline Association, Washington, DC, *Annual Report of the Regional Airline Industry* (copyright).

No. 1080. Civil Flying—Summary: 1970 to 1996

[As of Dec. 31 or for years ending Dec. 31, except as noted]

| ITEM | Unit | 1970 | 1980 | 1985 | 1990 | 1994 | 1995 | 1996 |
|---|-----------|--------|--------|--------|---------|---------|---------|---------|
| Airports in operation ¹ | Number | 11,261 | 15,161 | 16,318 | 17,490 | 18,343 | 18,224 | 18,292 |
| Heliports | Number | 790 | 2,336 | 3,120 | 4,085 | 4,617 | 4,559 | 4,596 |
| Public | Number | 4,260 | 4,814 | 5,861 | 5,078 | 5,137 | 5,132 | 5,129 |
| Private | Number | 7,001 | 10,347 | 10,457 | 12,412 | 13,206 | 13,092 | 13,163 |
| Airports with runway lights | Number | 3,554 | 4,738 | 4,941 | 4,822 | 4,830 | 4,838 | 4,847 |
| Airports with paved runways | Number | 3,805 | 5,833 | 6,721 | 7,694 | 8,230 | 8,195 | 8,218 |
| Airport Improvement Program ² | Mil. dol. | 50.5 | 639.0 | 842.1 | 1,244.7 | 1,628.0 | 1,418.1 | 1,379.9 |
| Total civil aircraft | 1,000 | 154.5 | 259.4 | 274.9 | 275.9 | 281.0 | (NA) | (NA) |
| Active aircraft ³ | 1,000 | 134.5 | 214.8 | 215.4 | 218.9 | 180.3 | 190.0 | 194.8 |
| Air carriers, total ⁴ | 1,000 | 2.8 | 3.8 | 4.7 | 6.7 | 7.4 | 7.4 | 7.5 |
| General aviation aircraft ⁵ | 1,000 | 131.7 | 211.0 | 210.7 | 212.2 | 172.9 | 182.6 | 187.3 |
| Fixed-wing aircraft: Multi-engine | 1,000 | 18.4 | 31.7 | 33.6 | 32.7 | 22.3 | 23.7 | 24.7 |
| Single-engine | 1,000 | 109.5 | 168.4 | 164.4 | 165.1 | 127.8 | 134.0 | 135.9 |
| Rotorcraft ⁶ | 1,000 | 2.2 | 6.0 | 6.4 | 7.4 | 4.7 | 5.6 | 6.4 |
| Balloons, blimps, gliders, etc | 1,000 | 1.6 | 5.0 | 6.3 | 7.0 | 5.9 | 4.5 | 4.1 |
| Airman certificates held | 1,000 | 1,002 | 1,195 | 1,105 | 1,195 | 1,225 | 1,290 | 1,157 |
| Pilot | 1,000 | 733 | 827 | 710 | 703 | 654 | 639 | 622 |
| Held by women | Percent | 4.0 | 6.4 | 6.1 | 5.8 | 5.9 | 6.0 | 5.9 |
| Airline transport | 1,000 | 34 | 70 | 83 | 108 | 117 | 124 | 127 |
| Commercial | 1,000 | 187 | 183 | 152 | 149 | 139 | 134 | 129 |
| Private | 1,000 | 304 | 357 | 311 | 299 | 284 | 261 | 254 |
| Student | 1,000 | 196 | 200 | 147 | 128 | 96 | 101 | 95 |
| Nonpilot ⁸ | 1,000 | 269 | 368 | 395 | 492 | 571 | 651 | 534 |
| Ground technicians ⁹ | 1,000 | 241 | 321 | 341 | 421 | 498 | 574 | 459 |
| FAA employees: Total | Number | 53,125 | 55,340 | 47,245 | 51,269 | 48,932 | 48,324 | 48,618 |
| Air traffic control specialists ¹⁰ | Number | (NA) | 27,190 | 23,580 | 24,339 | 23,628 | 23,208 | 22,823 |
| Full performance ¹¹ | Number | (NA) | 16,317 | 11,672 | 12,985 | 14,997 | 14,845 | 15,799 |
| Developmental ¹¹ | Number | (NA) | 4,387 | 4,304 | 5,042 | 2,548 | 2,272 | 1,999 |
| Assistants ¹¹ | Number | (X) | (X) | 1,465 | 1,153 | 507 | 355 | 335 |
| Traffic management coordinators ¹² | Number | (X) | (X) | (X) | 370 | 544 | 561 | 542 |
| Electronic technicians/ATSS ¹³ | Number | (NA) | 8,871 | 6,856 | 6,458 | 6,531 | 6,749 | 6,927 |
| Aviation safety inspectors | Number | (NA) | 2,038 | 1,897 | 2,984 | 2,813 | 2,991 | 3,265 |
| Engineers | Number | (NA) | 2,436 | 2,457 | 2,745 | 2,891 | 2,810 | 2,860 |
| Other | Number | (NA) | 14,805 | 12,455 | 14,743 | 13,069 | 12,566 | 12,743 |
| General aviation: ⁵ | | | | | | | | |
| Hours flown ¹⁴ | Million | 26.0 | 41.0 | 34.1 | 34.8 | 24.1 | 25.7 | 26.1 |
| Fuel consumed: ¹⁴ | | | | | | | | |
| Gasoline | Mil. gal. | 362 | 520 | 420 | 353 | 264 | 276 | 287 |
| Jet fuel ¹⁵ | Mil. gal. | 415 | 766 | 691 | 663 | 471 | 544 | 568 |

NA Not available. X Not applicable. ¹ Existing airports, heliports, seaplane bases, etc. recorded with FAA. Includes military airports with joint civil and military use. Includes U.S. outlying areas. Airport-type definitions: Public—publicly owned and under control of a public agency; private—owned by a private individual or corporation. May or may not be open for public use. ² Fiscal year data. Does not include System Planning Grants. Includes U.S. outlying areas. 1970-80 data are obligated federal funds for the Airport Development Aid Program. Thereafter, data are appropriated federal funds under the Airport and Airway Improvement Act of 1982. ³ Registered aircraft that flew 1 or more hours during the year. ⁴ Includes helicopters. ⁵ See text, Section 22, Air and Water Transportation. Beginning 1994, excludes commuters and includes experimental aircraft, not shown separately. Prior to 1994, experimental aircraft were included in the appropriate type. Data beginning 1994 have been revised to reflect new information on survey nonresponse. ⁶ Includes autogyros; excludes air carrier helicopters. ⁷ Includes all active pilots. An active pilot is one with a pilot certificate and a valid medical certificate. Also includes pilots who hold a recreational certificate or only a helicopter, glider, or lighter than air certificate, not shown separately. ⁸ Includes dispatchers, flight navigators and engineers, and ground technicians—mechanics, parachute riggers, and ground instructors. Data for 1996 on mechanics, repairmen, parachute riggers, ground instructors, and dispatchers are limited to those ages 70 years and less. ⁹ No medical examinations are required, therefore, data represent all certificates on record and include retired or otherwise inactive technicians. See footnote 8. ¹⁰ Includes all air traffic control specialists (staff positions, managers, supervisors, and for 1970-85 traffic management coordinators, not shown separately) and air traffic assistants. ¹¹ Serving in-flight service stations, towers, and centers. ¹² Prior to 1990, included in total air traffic control specialists. ¹³ Airway Transportation Systems Specialists. ¹⁴ Source: 1970, U.S. Bureau of Mines; thereafter, FAA General Aviation Activity and Avionics Survey. Data for 1996 are estimated using new information on survey nonresponse and so are not strictly comparable to earlier years. ¹⁵ Includes kerosene-type and naphtha-type jet fuels.

Source: Except as noted, U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual, last published in 1993. Internet site <<http://api.hq.faa.gov/apohome.htm>> and unpublished data.

No. 1081. Net Orders for U.S. Civil Jet Transport Aircraft: 1985 to 1997

[Value in millions of dollars. 1985-1992 are net new firm orders; beginning 1993, net announced orders. Minus sign (-) indicates net cancellations]

| TYPE OF AIRCRAFT AND CUSTOMER | 1985 | 1990 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-----------------------------------|------------|------------|------------|-----------|-----------|------------|------------|------------|
| Total number ¹ | 468 | 670 | 231 | 31 | 79 | 421 | 595 | 512 |
| U.S. customers | 242 | 259 | 82 | 44 | 12 | 138 | 408 | 258 |
| Foreign customers | 226 | 411 | 149 | -13 | 67 | 283 | 187 | 254 |
| Boeing 737, total | 253 | 189 | 91 | -34 | 49 | 189 | 349 | 280 |
| U.S. customers | 146 | 38 | 43 | -29 | 9 | 85 | 284 | 120 |
| Foreign customers | 107 | 151 | 48 | -5 | 40 | 104 | 65 | 160 |
| Boeing 747, total | 37 | 153 | 41 | -25 | -5 | 35 | 66 | 37 |
| U.S. customers | 13 | 24 | - | -25 | -1 | 2 | 22 | 15 |
| Foreign customers | 24 | 129 | 41 | - | -4 | 33 | 44 | 22 |
| Boeing 757, total | 51 | 66 | 7 | 20 | 5 | -7 | 44 | 45 |
| U.S. customers | 39 | 33 | 29 | 46 | -1 | -6 | 35 | 25 |
| Foreign customers | 12 | 33 | -22 | -26 | 6 | -1 | 9 | 20 |
| Boeing 767, total | 10 | 60 | 20 | 43 | 27 | 26 | 10 | 96 |
| U.S. customers | 4 | 23 | 10 | 41 | 11 | 4 | 11 | 85 |
| Foreign customers | 6 | 37 | 10 | 2 | 16 | 22 | -1 | 11 |
| Boeing 777, total | - | 34 | 36 | 29 | - | 83 | 88 | 46 |
| U.S. customers | - | 34 | - | 5 | - | - | 37 | 24 |
| Foreign customers | - | - | 36 | 24 | - | 83 | 51 | 22 |
| McDonnell Douglas MD-11, total | - | 52 | 1 | -1 | 2 | -6 | 9 | 22 |
| U.S. customers | - | 16 | 4 | - | 2 | 3 | 1 | - |
| Foreign customers | - | 36 | -3 | -1 | - | -9 | 8 | 22 |
| McDonnell Douglas MD-80/90, total | 114 | 116 | 35 | -1 | 1 | 51 | 29 | -14 |
| U.S. customers | 37 | 91 | -4 | 6 | -8 | - | 18 | -11 |
| Foreign customers | 77 | 25 | 39 | -7 | 9 | 51 | 11 | -3 |
| McDonnell Douglas MD-95, total | - | - | - | - | - | 50 | - | - |
| U.S. customers | - | - | - | - | - | 50 | - | - |
| Foreign customers | - | - | - | - | - | - | - | - |

- Represents zero. ¹ Includes types of aircraft not shown separately.

Source: Aerospace Industries Association of America, Washington, DC, Research Center, Statistical Series 23.

No. 1082. U.S. Aircraft Shipments: 1971 to 1996

[Value in millions of dollars]

| YEAR | TOTAL | | CIVIL | | | | | | MILITARY | |
|------------|--------|--------|------------------|--------|-------------------------------|-------|-------------|-------|----------|--------|
| | Units | Value | Large transports | | General Aviation ¹ | | Helicopters | | Units | Value |
| | | | Units | Value | Units | Value | Units | Value | | |
| 1971 | 11,044 | 6,555 | 211 | 2,542 | 7,466 | 322 | 453 | 69 | 2,914 | 3,622 |
| 1975 | 16,945 | 8,907 | 272 | 3,591 | 14,056 | 1,033 | 838 | 266 | 1,779 | 4,017 |
| 1980 | 14,675 | 18,950 | 385 | 9,916 | 11,877 | 2,486 | 1,366 | 656 | 1,047 | 5,892 |
| 1985 | 3,605 | 27,225 | 273 | 8,404 | 2,029 | 1,431 | 384 | 506 | 919 | 16,884 |
| 1990 | 3,321 | 38,585 | 521 | 22,215 | 1,144 | 2,007 | 603 | 254 | 1,053 | 14,109 |
| 1991 | 3,092 | 44,657 | 589 | 26,856 | 1,021 | 1,968 | 571 | 211 | 911 | 15,622 |
| 1992 | 2,585 | 47,216 | 567 | 28,750 | 941 | 1,840 | 324 | 142 | 753 | 16,484 |
| 1993 | 2,585 | 41,166 | 408 | 24,133 | 964 | 2,144 | 258 | 113 | 955 | 14,776 |
| 1994 | 2,309 | 38,194 | 309 | 19,779 | 928 | 2,357 | 308 | 185 | 764 | 15,873 |
| 1995 | 2,435 | 36,219 | 256 | 17,824 | 1,077 | 2,842 | 292 | 194 | 810 | 15,359 |
| 1996, est. | 2,374 | 37,566 | 269 | 20,221 | 1,132 | 3,142 | 273 | 203 | 700 | 14,000 |

¹ Excludes off-the-shelf military aircraft.

Source: U.S. Department of Commerce, International Trade Administration, Internet site <<http://www.ita.doc.gov/industry/tai/green/acsh7196.txt>> (accessed 4 August 1998).

No. 1083. Employment and Earnings in Aircraft Industries: 1985 to 1997

[Annual averages of monthly figures. See headnote, Table 685]

| ITEM | 1987 SIC ¹ code | Unit | 1985 | 1990 | 1995 | 1996 | 1997 |
|--|----------------------------|---------|-------|-------|-------|-------|-------|
| Employment: Total | (X) | 1,000 | 794 | 898 | 549 | 548 | 591 |
| Aircraft | 3721 | 1,000 | 326 | 381 | 244 | 243 | 263 |
| Aircraft engines and engine parts | 3724 | 1,000 | 148 | 152 | 93 | 95 | 100 |
| Aircraft equipment, n.e.c. ² | 3728 | 1,000 | 143 | 180 | 114 | 120 | 137 |
| Guided missiles, space vehicles, and parts | 376 | 1,000 | 177 | 185 | 98 | 90 | 91 |
| Average weekly earnings: | (X) | | | | | | |
| Aircraft | 3721 | Dollars | (NA) | (NA) | (NA) | (NA) | (NA) |
| Aircraft engines and parts | 3724 | Dollars | 542 | 637 | 770 | 813 | 838 |
| Guided missiles, space vehicles, and parts | 376 | Dollars | 515 | 612 | 765 | 790 | 842 |
| Average hourly earnings: | (X) | | | | | | |
| Aircraft ⁴ | 3721 | Dollars | 13.18 | 15.66 | 19.97 | 20.49 | 20.76 |
| Aircraft engines and parts | 3724 | Dollars | 12.85 | 14.84 | 17.34 | 18.22 | 18.58 |
| Guided missiles, space vehicles, and parts | 376 | Dollars | 12.14 | 14.39 | 17.74 | 18.51 | 19.54 |

NA Not available. X Not applicable. ¹ 1987 Standard Industrial Classification; see text, Section 13, Labor Force. ² N.e.c. means not elsewhere classified. ³ For production workers. ⁴ Excludes lump-sum payments. Earnings which include proration of lump-sum payments were: \$13.40 in 1985; \$16.32 in 1990; \$20.02 in 1995; \$20.79 in 1996; and \$21.09 in 1997.

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly, June issues and Internet site <<http://stats.bls.gov/ceshome.htm>>

No. 1084. Aerospace—Sales, New Orders, and Backlog: 1990 to 1996

[In billions of dollars, except as indicated. Reported by establishments in which the principal business is the development and/or production of aerospace products]

| ITEM | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------|-------|-------|-------|-------|-------|-------|
| Net sales | 136.6 | 123.9 | 118.7 | 109.9 | 104.3 | 102.8 | 105.7 |
| Percent U.S. Government | 54.0 | 48.9 | 50.0 | 49.9 | 55.6 | 43.3 | 40.5 |
| Complete aircraft and parts ¹ | 49.9 | 52.9 | 54.0 | 48.9 | 43.3 | 42.5 | 45.1 |
| Aircraft engines and parts | 16.4 | 15.6 | 13.7 | 12.2 | 11.3 | 12.5 | 15.7 |
| Missiles and space vehicles, parts | 22.0 | 23.3 | 21.3 | 18.1 | 18.4 | 18.4 | 17.1 |
| Other products, services | 48.3 | 32.0 | 29.7 | 30.7 | 31.3 | 29.4 | 27.9 |
| Net, new orders | 146.0 | 122.5 | 100.3 | 79.7 | 88.7 | 109.1 | 126.3 |
| Backlog, Dec. 31 | 250.1 | 245.2 | 236.1 | 211.8 | 192.6 | 202.6 | 219.6 |

¹ Except engines sold separately.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA-37D, Internet site <<http://www.census.gov/econ/www/manumenu.htm>>

No. 1085. Aerospace Industry Sales, by Product Group and Customer: 1985 to 1998

[In billions of dollars. Due to reporting practices and tabulating methods, figures may differ from those in Table 1084]

| ITEM | CURRENT DOLLARS | | | | | CONSTANT (1987) DOLLARS ³ | | | | |
|--|-----------------|--------------|--------------|-------------------|-------------------|--------------------------------------|--------------|-------------|-------------------|-------------------|
| | 1985 | 1990 | 1995 | 1997 ¹ | 1998 ² | 1985 | 1990 | 1995 | 1997 ¹ | 1998 ² |
| Total sales | 96.6 | 134.4 | 107.8 | 129.6 | 144.5 | 97.8 | 121.6 | 85.5 | 99.5 | 108.1 |
| PRODUCT GROUP | | | | | | | | | | |
| Aircraft, total | 50.5 | 71.4 | 55.0 | 69.1 | 79.5 | 51.1 | 64.6 | 43.7 | 53.0 | 59.5 |
| Civil ⁴ | 13.7 | 31.3 | 24.0 | 38.6 | 49.1 | 13.9 | 28.3 | 19.0 | 29.7 | 36.8 |
| Military | 36.8 | 40.1 | 31.1 | 30.5 | 30.4 | 37.2 | 36.3 | 24.6 | 23.4 | 22.8 |
| Missiles | 11.4 | 14.2 | 7.4 | 8.3 | 8.0 | 11.6 | 12.8 | 5.9 | 6.4 | 6.0 |
| Space | 18.6 | 26.4 | 27.4 | 30.6 | 32.8 | 18.8 | 23.9 | 21.7 | 23.5 | 24.6 |
| Related products and services ⁵ | 16.1 | 22.4 | 18.0 | 21.6 | 24.1 | 16.3 | 20.3 | 14.2 | 16.6 | 18.0 |
| CUSTOMER GROUP | | | | | | | | | | |
| Aerospace, total | 80.5 | 112.0 | 89.8 | 108.0 | 120.4 | 81.5 | 101.3 | 71.2 | 82.9 | 90.1 |
| DOD ⁶ | 53.2 | 60.5 | 42.4 | 42.3 | 42.6 | 53.9 | 54.8 | 33.6 | 32.5 | 31.9 |
| NASA ⁷ and other agencies | 6.3 | 11.1 | 11.4 | 11.8 | 11.6 | 6.3 | 10.0 | 9.1 | 9.0 | 8.7 |
| Other customers ⁸ | 21.0 | 40.4 | 36.0 | 53.9 | 66.2 | 21.3 | 36.5 | 28.6 | 41.4 | 49.5 |
| Related products and services ⁵ | 16.1 | 22.4 | 18.0 | 21.6 | 24.1 | 16.3 | 20.3 | 14.2 | 16.6 | 18.0 |

¹ Preliminary. ² Estimate. ³ Based on AIA's aerospace composite price deflator. ⁴ All civil sales of aircraft (domestic and export sales of jet transports, commuters, business, and personal aircraft and helicopters). ⁵ Electronics, software, and ground support equipment, plus sales of non-aerospace products which are produced by aerospace-manufacturing use technology, processes, and materials derived from aerospace products. ⁶ Department of Defense. ⁷ National Aeronautics and Space Administration. ⁸ Includes civil aircraft sales (see footnote 4), commercial space sales, all exports of military aircraft and missiles and related propulsion and parts.

Source: Aerospace Industries Association of America, Inc., Washington, DC, *1995 Year-end Review and Forecast*.

No. 1086. Aerospace Industry—Net Profits After Taxes: 1980 to 1997

[For calendar year. Minus sign (-) indicates loss]

| YEAR | AEROSPACE INDUSTRY PROFITS | | | | | ALL MANUFACTURING CORPORATIONS PROFITS AS A PERCENT OF— | | |
|----------------|----------------------------|----------------|--------|--------|-------|---|--------|--|
| | Total (mil. dol.) | As percent of— | | | Sales | Assets | Equity | |
| | | Sales | Assets | Equity | | | | |
| 1980 | 2,588 | 4.3 | 5.2 | 16.0 | 4.8 | 6.9 | 13.9 | |
| 1982 | 2,193 | 3.3 | 3.7 | 12.0 | 3.5 | 4.5 | 9.2 | |
| 1983 | 2,829 | 3.5 | 4.1 | 12.1 | 4.1 | 5.1 | 10.5 | |
| 1984 | 3,639 | 4.1 | 4.7 | 14.1 | 4.6 | 6.0 | 12.5 | |
| 1985 | 3,274 | 3.1 | 3.6 | 11.1 | 3.8 | 4.6 | 10.1 | |
| 1986 | 3,093 | 2.8 | 3.1 | 9.4 | 3.7 | 4.2 | 9.5 | |
| 1987 | 4,582 | 4.1 | 4.4 | 14.6 | 4.9 | 5.6 | 12.8 | |
| 1988 | 4,883 | 4.3 | 4.4 | 14.9 | 6.0 | 6.9 | 16.2 | |
| 1989 | 3,866 | 3.3 | 3.3 | 10.7 | 5.0 | 5.6 | 13.7 | |
| 1990 | 4,487 | 3.4 | 3.4 | 11.5 | 4.0 | 4.3 | 10.7 | |
| 1991 | ¹ 2,484 | 1.8 | 1.9 | 6.1 | 2.5 | 2.6 | 6.4 | |
| 1992 | ¹ -1,836 | -1.4 | -1.2 | -5.2 | 1.0 | 1.0 | 2.6 | |
| 1993 | 4,621 | 3.6 | 3.5 | 13.2 | 2.8 | 2.9 | 8.1 | |
| 1994 | 5,655 | 4.7 | 4.3 | 14.8 | 5.4 | 5.8 | 15.6 | |
| 1995 | 4,633 | 3.8 | 3.5 | 11.1 | 5.7 | 6.2 | 16.2 | |
| 1996 | 7,150 | 5.6 | 5.1 | 17.1 | 6.0 | 6.5 | 16.8 | |
| 1997 | 7,218 | 5.2 | 4.8 | 17.3 | 6.3 | 6.7 | 16.9 | |

¹ Reflects unusually large nonoperating expenses totalling \$3.4 billion in 1991 and \$8.7 billion in 1992 due to the initial implementation of a change in accounting for future retirement benefit costs and defense-downsizing restructuring charges. Many large aerospace corporations chose to write off against first quarter earnings amounts required to comply with FASB 106.

Source: Aerospace Industries Association of America, Washington, DC, *1997 Year-end Review and Forecast*.

No. 1087. U.S. Exports of Aerospace Vehicles and Equipment: 1990 to 1997

| ITEM | NUMBER OF UNITS | | | | VALUE (mil. dol.) | | | |
|---|-----------------|-------|-------|--------|-------------------|---------------|---------------|---------------|
| | 1990 | 1995 | 1996 | 1997 | 1990 | 1995 | 1996 | 1997 |
| Aerospace vehicles and equipment, total | (NA) | (NA) | (NA) | (NA) | 39,119 | 33,320 | 40,311 | 50,614 |
| Total aircraft | (NA) | (NA) | (NA) | (NA) | 19,631 | 13,852 | 18,984 | 25,560 |
| Civilian aircraft | (NA) | (NA) | (NA) | (NA) | 18,150 | 12,251 | 15,160 | 23,164 |
| Under 4,536 kg. unladen weight, new | 1,134 | 504 | 507 | 492 | 325 | 296 | 343 | 475 |
| 4,536-15,000 kg. unladen weight, new | 79 | 56 | 52 | 83 | 245 | 306 | 257 | 486 |
| Over 15,000 kg. unladen weight, new | 306 | 137 | 172 | 252 | 16,691 | 10,606 | 13,624 | 21,028 |
| Rotorcraft, new | 349 | 208 | 214 | 259 | 161 | 170 | 212 | 208 |
| Used or rebuilt | 1,911 | 614 | 547 | 519 | 712 | 858 | 715 | 959 |
| Nonpowered aircraft | (NA) | (NA) | (NA) | (NA) | 15 | 15 | 8 | 8 |
| Military aircraft | 445 | 520 | 428 | 416 | 1,481 | 1,601 | 3,824 | 2,397 |
| New | 387 | 462 | 316 | 360 | 1,406 | 1,539 | 3,549 | 2,297 |
| Used or rebuilt | 58 | 58 | 112 | 56 | 75 | 62 | 275 | 99 |
| Aircraft engines and parts | (NA) | (NA) | (NA) | (NA) | 6,918 | 6,192 | 6,869 | 8,618 |
| Piston engines and parts | (NA) | (NA) | (NA) | (NA) | 438 | 369 | 344 | 434 |
| Complete engines, new and used | 6,411 | 7,885 | 7,528 | 17,749 | 110 | 147 | 144 | 229 |
| Engine parts | (NA) | (NA) | (NA) | (NA) | 328 | 222 | 200 | 205 |
| Reaction/turbine engines and parts | (NA) | (NA) | (NA) | (NA) | 6,480 | 5,823 | 6,525 | 8,184 |
| Complete engines, new and used | 24,687 | 7,025 | 8,638 | 11,028 | 1,856 | 1,802 | 2,136 | 2,275 |
| Engine parts | (NA) | (NA) | (NA) | (NA) | 4,624 | 4,020 | 4,390 | 5,909 |
| Propellers, rotors, and parts | (NA) | (NA) | (NA) | (NA) | 343 | 334 | 426 | 500 |
| Landing gear and parts | (NA) | (NA) | (NA) | (NA) | 276 | 386 | 527 | 559 |
| Aircraft parts and accessories, n.e.c. ¹ | (NA) | (NA) | (NA) | (NA) | 8,982 | 9,443 | 10,662 | 12,090 |
| Avionics | (NA) | (NA) | (NA) | (NA) | 747 | 673 | 778 | 871 |
| Flight simulators and parts | (NA) | (NA) | (NA) | (NA) | 255 | 122 | 166 | 184 |
| Guided missiles and parts | (NA) | (NA) | (NA) | (NA) | 1,306 | 1,508 | 1,210 | 1,149 |
| Space vehicles and parts | (NA) | (NA) | (NA) | (NA) | 660 | 811 | 689 | 1,083 |

NA Not available. ¹ N.e.c. means not elsewhere classified.

Source: U.S. Dept. of Commerce, International Trade Administration, Internet site <<http://www.ita.doc.gov/aerospace>>

No. 1088. International Transportation Transactions of the United States: 1986 to 1997

[In millions of dollars. Data are international transportation transactions recorded for balance of payment purposes (see Table 1302). Receipts include freight on exports carried by U.S.-operated carriers and foreign carrier expenditures in U.S. ports. Payments include freight on imports carried by foreign carriers and U.S. carrier port expenditures abroad. Freight on exports carried by foreign carriers is excluded since such payments are directly or indirectly for foreign account. Similarly, freight on U.S. imports carried by U.S. carriers is a domestic rather than an international transaction. Minus sign (-) indicates excess of payments over receipts]

| ITEM | 1986 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total receipts | 21,020 | 37,339 | 38,485 | 38,147 | 38,486 | 40,751 | 44,990 | 46,487 | 47,805 |
| Ocean passenger fares | 90 | 154 | 156 | 176 | 237 | 287 | 285 | 329 | 329 |
| Other ocean transportation | 9,169 | 12,141 | 12,252 | 11,328 | 11,533 | 12,404 | 13,581 | 12,502 | 12,201 |
| Freight | 3,326 | 4,326 | 4,211 | 4,136 | 4,056 | 4,506 | 5,282 | 4,703 | 4,576 |
| Port expenditures | 5,843 | 7,815 | 8,041 | 7,192 | 7,477 | 7,898 | 8,299 | 7,799 | 7,625 |
| Air passenger fares ¹ | 5,492 | 15,144 | 15,698 | 16,442 | 16,291 | 16,710 | 18,624 | 20,084 | 20,566 |
| Other air transportation | 5,420 | 8,174 | 8,556 | 8,374 | 8,567 | 9,311 | 10,016 | 10,928 | 11,968 |
| Freight | 783 | 2,432 | 2,722 | 2,589 | 2,814 | 3,175 | 3,654 | 3,958 | 4,610 |
| Port expenditures | 4,637 | 5,742 | 5,834 | 5,785 | 5,753 | 6,136 | 6,362 | 6,970 | 7,358 |
| Miscellaneous receipts | 849 | 1,726 | 1,823 | 1,827 | 1,858 | 2,039 | 2,484 | 2,644 | 2,741 |
| Total payments | 24,272 | 35,497 | 34,987 | 34,372 | 35,933 | 39,081 | 41,698 | 43,222 | 47,187 |
| Ocean passenger fares | 208 | 248 | 279 | 301 | 341 | 353 | 353 | 453 | 453 |
| Other ocean transportation | 11,299 | 13,078 | 12,276 | 11,781 | 12,473 | 13,694 | 14,068 | 13,492 | 14,085 |
| Import freight | 9,174 | 10,904 | 10,183 | 9,752 | 10,462 | 11,369 | 11,514 | 11,259 | 11,898 |
| Port expenditures | 2,125 | 2,174 | 2,093 | 2,029 | 2,011 | 2,325 | 2,554 | 2,233 | 2,187 |
| Air passenger fares ¹ | 6,297 | 10,283 | 9,733 | 10,302 | 11,069 | 12,709 | 14,310 | 15,365 | 17,782 |
| Other air transportation | 5,127 | 9,881 | 10,513 | 10,468 | 10,497 | 10,525 | 11,061 | 11,751 | 12,575 |
| Import freight | 2,051 | 2,207 | 2,257 | 2,376 | 2,580 | 2,914 | 3,113 | 3,201 | 3,541 |
| Port expenditures | 3,076 | 7,674 | 8,256 | 8,092 | 7,917 | 7,611 | 7,948 | 8,550 | 9,034 |
| Miscellaneous payments | 1,341 | 2,007 | 2,186 | 1,520 | 1,553 | 1,800 | 1,906 | 2,161 | 2,292 |
| Balance | -3,252 | 1,842 | 3,498 | 3,775 | 2,553 | 1,670 | 3,292 | 3,265 | 618 |

¹ Beginning 1990, includes interairline settlements.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, July 1998; and unpublished data.

No. 1089. Federal Expenditures for Civil Functions of the Corps of Engineers, United States Army: 1970 to 1996

[In millions of dollars. For fiscal years ending in year shown, see text, Section 9, State and Local Government. These expenditures represent the work of the Corps of Engineers to plan, design, construct, operate, and maintain civil works projects and activities, particularly in the management and improvement of rivers, harbors, and waterways for navigation, flood control, and multiple purposes. The amounts listed below do not include the expenditure of funds contributed, advanced, or reimbursed by other government agencies or local interests. Includes Puerto Rico and outlying areas]

| FISCAL YEAR | Total program ¹ | Navigation | Flood control | Multiple purpose | FISCAL YEAR | Total program ¹ | Navigation | Flood control | Multiple purpose |
|--------------|----------------------------|------------|---------------|------------------|--------------|----------------------------|------------|---------------|------------------|
| 1970 | 1,128 | 398 | 379 | 331 | 1989 | 3,252 | 1,395 | 1,253 | 462 |
| 1980 | 3,061 | 1,225 | 1,228 | 551 | 1990 | 3,297 | 1,391 | 1,397 | 375 |
| 1983 | 2,959 | 1,290 | 1,088 | 482 | 1991 | 3,511 | 1,473 | 1,447 | 443 |
| 1984 | 3,085 | 1,383 | 1,154 | 445 | 1992 | 3,675 | 1,562 | 1,469 | 469 |
| 1985 | 2,956 | 1,234 | 1,187 | 419 | 1993 | 3,335 | 1,461 | 1,243 | 464 |
| 1986 | 3,163 | 1,345 | 1,300 | 402 | 1994 | 3,727 | 1,607 | 1,436 | 521 |
| 1987 | 2,937 | 1,135 | 1,272 | 411 | 1995 | 3,796 | 1,620 | 1,399 | 598 |
| 1988 | 3,086 | 1,271 | 1,271 | 423 | 1996 | 3,627 | 1,566 | 1,349 | 557 |

¹ Includes expenditures which are not associated with a specific purpose (e.g., headquarters staff supervision, management, and administration activities, and some research and development activities).

Source: U.S. Army Corps of Engineers, *Report of Civil Works Expenditures by State and Fiscal Year*, annual.

No. 1090. Freight Carried on Major U.S. Waterways: 1975 to 1996

[In millions of tons]

| ITEM | 1975 | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Atlantic intracoastal waterway | 3.2 | 4.0 | 3.1 | 4.2 | 3.7 | 3.8 | 3.7 | 3.5 | 4.3 |
| Great Lakes | 193.8 | 183.5 | 148.1 | 167.1 | 160.0 | 159.6 | 175.3 | 177.7 | 181.8 |
| Gulf intracoastal waterway | 97.0 | 94.5 | 102.5 | 115.5 | 112.2 | 114.9 | 117.6 | 117.9 | 118.0 |
| Mississippi River system ¹ | 453.4 | 584.2 | 527.8 | 659.6 | 674.4 | 660.4 | 693.3 | 710.1 | 701.8 |
| Mississippi River mainstem | 311.2 | 441.5 | 384.0 | 475.6 | 490.7 | 475.1 | 496.8 | 520.2 | 505.6 |
| Ohio River system ² | 171.4 | 179.3 | 203.9 | 260.0 | 261.2 | 257.2 | 270.5 | 267.6 | 270.9 |
| Columbia River | 38.1 | 49.2 | 42.4 | 51.4 | 49.6 | 51.2 | 50.9 | 57.1 | 51.2 |
| Snake River | 2.0 | 5.1 | 3.5 | 4.8 | 4.7 | 5.3 | 5.9 | 6.8 | 5.7 |

¹ Main channels and all tributaries of the Mississippi, Illinois, Missouri and Ohio Rivers. ² Main channels and all navigable tributaries and embayments of the Ohio, Tennessee, and Cumberland Rivers.

Source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, annual.

No. 1091. Waterborne Commerce, by Type of Commodity: 1990 to 1996

[In millions of short tons. Domestic trade includes all commercial movements between United States ports and on inland rivers, Great Lakes, canals, and connecting channels of the United States, Puerto Rico, and Virgin Islands]

| COMMODITY | 1990 | 1994 | 1995 | 1996 | | | |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| | | | | Total | Domestic | Foreign imports | Foreign exports |
| Total ¹ | 2,163.9 | 2,214.8 | 2,240.4 | 2,284.1 | 1,100.7 | 732.6 | 450.8 |
| Coal | 339.9 | 314.1 | 324.5 | 328.7 | 229.9 | 8.8 | 90.1 |
| Petroleum and petroleum products | 923.2 | 961.3 | 907.1 | 954.4 | 398.5 | 500.0 | 56.0 |
| Crude petroleum | 485.7 | 531.5 | 504.6 | 531.8 | 128.1 | 401.7 | 2.0 |
| Petroleum products ¹ | 437.5 | 429.9 | 402.5 | 422.7 | 270.4 | 98.3 | 54.0 |
| Gasoline | 116.9 | 119.1 | 114.4 | 119.1 | 95.3 | 19.6 | 4.3 |
| Distillate fuel oil | 77.4 | 81.4 | 76.7 | 84.5 | 62.2 | 16.2 | 6.2 |
| Residual fuel oil | 145.2 | 123.4 | 111.9 | 112.3 | 75.1 | 28.1 | 9.1 |
| Chemicals and related products | 123.8 | 146.9 | 153.7 | 152.3 | 80.2 | 24.6 | 47.5 |
| Crude material, inedible ¹ | 374.7 | 369.3 | 381.7 | 388.7 | 233.2 | 89.5 | 66.0 |
| Forest products, wood and chips | 55.7 | 47.0 | 47.2 | 45.4 | 18.9 | 3.6 | 22.9 |
| Pulp and waste paper | 11.8 | 12.3 | 14.9 | 12.6 | 0.3 | 0.9 | 11.3 |
| Soil, sand, gravel, rock, and stone | 144.2 | 147.8 | 152.5 | 159.2 | 127.2 | 23.8 | 8.2 |
| Primary manufactured goods ¹ | 76.0 | 105.0 | 106.3 | 108.9 | 37.7 | 55.3 | 15.9 |
| Papers products | 10.7 | 12.4 | 13.1 | 13.7 | 1.7 | 3.2 | 8.8 |
| Lime, cement and glass | 28.3 | 30.9 | 33.9 | 33.7 | 15.6 | 16.2 | 1.9 |
| Primary iron and steel products | 25.1 | 46.4 | 44.1 | 45.7 | 14.0 | 29.3 | 2.3 |
| Food and farm products ¹ | 267.5 | 255.8 | 303.2 | 284.9 | 98.0 | 25.1 | 161.7 |
| Fish | 3.2 | 2.7 | 3.6 | 2.0 | 0.1 | 0.9 | 1.0 |
| Grain | 157.3 | 133.1 | 167.9 | 152.4 | 55.6 | 1.2 | 95.6 |
| Corn | 96.1 | 69.4 | 105.0 | 94.0 | 39.5 | (Z) | 54.6 |
| Wheat | 44.5 | 47.4 | 48.5 | 46.6 | 12.8 | 0.2 | 33.6 |
| Oilseeds | 36.0 | 38.7 | 46.1 | 50.1 | 23.2 | 0.2 | 26.7 |
| Soybeans | 32.2 | 35.7 | 42.0 | 46.2 | 19.8 | (Z) | 26.3 |
| Vegetables products | 6.7 | 8.4 | 9.0 | 7.5 | 1.5 | 2.2 | 3.8 |
| Processed grain and animal feed | 28.2 | 29.7 | 33.0 | 28.2 | 8.5 | 0.8 | 18.9 |

Z Rounds to zero. ¹ Includes categories not shown separately.

Source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, annual.

No. 1092. Flag Merchant Vessels—Private Shipyards: 1997

[As of January. Covers ocean-going vessels of 1,000 gross tons and over engaged in foreign and domestic trade, and inactive vessels. Excludes vessels operating exclusively on Great Lakes, inland waterways, and those owned by the United States Army and Navy, and special types such as cable ships, tugs, etc.]

| VESSEL TYPE | NUMBER | | | | | | DEADWEIGHT TONS (1,000) | | | | | |
|--|------------|--------------------------|--------------------------|------------------------------|---|--------------------|-------------------------|---------------|--------------------------|------------------------------|---|--------------------|
| | Total | Tank- er ¹ | Dry bulk ² | Con- tain- er- ship | Cruise/ Pass- en- ger ³ | Other ⁴ | Total | Tank- er | Dry bulk ² | Con- tain- er- ship | Cruise/ Pass- en- ger ³ | Other ⁴ |
| Total | 495 | 173 | 15 | 83 | 15 | 209 | 17,511 | 10,378 | 575 | 2,639 | 139 | 3,780 |
| Active vessels | 291 | 137 | 11 | 79 | 4 | 60 | 13,076 | 8,701 | 499 | 2,568 | 37 | 1,271 |
| Privately owned | 282 | 136 | 11 | 79 | 1 | 55 | 12,976 | 8,684 | 499 | 2,568 | 7 | 1,218 |
| U.S. foreign trade | 89 | 13 | 8 | 49 | - | 19 | 3,392 | 802 | 416 | 1,780 | - | 394 |
| Foreign-to-foreign | 25 | 18 | 1 | 5 | - | 1 | 1,534 | 1,314 | 24 | 187 | - | 9 |
| Domestic trade | 130 | 96 | 2 | 22 | 1 | 9 | 7,058 | 6,301 | 59 | 535 | 7 | 156 |
| Coastal | 70 | 62 | 2 | 4 | - | 2 | 2,554 | 2,343 | 59 | 114 | - | 38 |
| Noncontiguous | 60 | 34 | - | 18 | 1 | 7 | 4,504 | 3,958 | - | 421 | 7 | 118 |
| Military Sea Lift Command | 38 | 9 | - | 3 | - | 26 | 992 | 267 | - | 66 | - | 659 |
| Government owned | 9 | 1 | - | - | 3 | 5 | 100 | 17 | - | - | 30 | 53 |
| Ready reserve force | 2 | - | - | - | 1 | 1 | 24 | - | - | - | 9 | 15 |
| Other custody | 3 | 1 | - | - | - | 2 | 39 | 17 | - | - | - | 22 |
| Other reserve | 4 | - | - | - | 2 | 2 | 37 | - | - | - | 21 | 16 |
| Inactive vessels | 204 | 36 | 4 | 4 | 11 | 149 | 4,435 | 1,677 | 76 | 71 | 102 | 2,509 |
| Privately owned | 20 | 9 | 4 | - | 2 | 5 | 968 | 808 | 76 | - | 20 | 64 |
| Temporarily inactive Laid-up (Not trading) ⁵ | 19 | 8 | 4 | - | 2 | 5 | 934 | 774 | 76 | - | 20 | 64 |
| Laid-up (Marad Custody) | 1 | 1 | - | - | - | - | 34 | 34 | - | - | - | - |
| Government owned: National Defense reserve fleet | 184 | 27 | - | 4 | 9 | 144 | 3,467 | 869 | - | 71 | 82 | 2,445 |
| Ready reserve fleet | 91 | 10 | - | 3 | - | 78 | 1,897 | 304 | - | 51 | - | 1,542 |
| Other reserve | 46 | 9 | - | 1 | - | 36 | 917 | 342 | - | 20 | - | 555 |
| Nonretention ⁶ | 47 | 8 | - | - | 9 | 30 | 653 | 223 | - | - | 82 | 348 |

- Represents zero. ¹ Includes liquified natural gas and intergrated tug barge vessels. ² Includes bulk/oil, ore/oil, ore/bulk/oil carriers and intergrated tug barges. ³ Includes combination passenger and cargo vessels. ⁴ Breakbulk ships, partial containerhips, refrigerated cargo ships, barge, specialized cargo, and roll-on roll-off ships. ⁵ Vessels idle 30 days or more. ⁶ Vessels not actively maintained.

Source: Maritime Administration, Office of Statistical and Economic Analysis.

No. 1093. Private Shipyards—Summary: 1980 to 1997

[For calendar year, unless noted]

| ITEM | Unit | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|-------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Employment ¹ | 1,000 . . . | 178.0 | 138.3 | 130.8 | 123.8 | 112.3 | 107.2 | 105.0 | 100.4 | 94.3 |
| Production workers | 1,000 . . . | 138.8 | 101.2 | 93.6 | 92.7 | 85.4 | 79.7 | 77.8 | 73.5 | 67.8 |
| Building activity: | | | | | | | | | | |
| Merchant vessels: ² | | | | | | | | | | |
| Under construction ³ | Number . . | 69 | 10 | - | 3 | 1 | 1 | 3 | 10 | 14 |
| Ordered | Number . . | 7 | - | 3 | 1 | - | 3 | 8 | 5 | 6 |
| Delivered | Number . . | 23 | 3 | - | 3 | - | 1 | 1 | 1 | 4 |
| Cancelled | Number . . | 4 | - | - | - | - | - | - | - | 4 |
| Under contract ^{4,5} | Number . . | 49 | 7 | 3 | 1 | 1 | 3 | 10 | 14 | 12 |
| Naval vessels: ² | | | | | | | | | | |
| Under construction ³ | Number . . | 99 | 100 | 95 | 82 | 71 | 60 | 57 | 46 | 46 |
| Ordered | Number . . | 11 | 11 | 7 | 7 | 9 | 12 | 6 | 11 | 4 |
| Delivered | Number . . | 19 | 26 | 15 | 18 | 18 | 15 | 17 | 11 | 8 |
| Under contract ^{4,5} | Number . . | 91 | 85 | 87 | 71 | 60 | 57 | 46 | 46 | 42 |
| Repairs/conversions: | | | | | | | | | | |
| Commercial ships | Mil. dol. . | 1,335 | 852 | 373 | 226 | 292 | (NA) | (NA) | (NA) | (NA) |
| Naval ships | Mil. dol. . | 1,134 | 2,311 | 1,119 | 526 | 573 | (NA) | (NA) | (NA) | (NA) |
| Unfinished work: ³ | | | | | | | | | | |
| Commercial ships | Mil. dol. . | 2,070 | 450 | - | 156.6 | 58.3 | 58.3 | 93.4 | 365.4 | 724.9 |
| Naval ships | Mil. dol. . | 7,107 | 12,091 | 24,495 | 23,854 | 21,152 | 19,679 | 20,768 | 17,734 | 20,116 |

- Represents zero. NA Not available. ¹ Annual average of monthly data. ² Vessels of 1,000 tons or larger. ³ As of Jan. 1. ⁴ As of Dec. 31. ⁵ Two ships were cancelled in 1993.

Source: 1980 and 1985, Shipbuilders Council of America, Arlington, VA., unpublished data; beginning 1990, U.S. Maritime Administration, unpublished data.

No. 1094. Employees in Government and Private Shipyards: 1960 to 1997

[In thousands. Annual average employment in establishments primarily engaged in building and repairing of ships, barges, and lighters, whether self-propelled or towed by other craft. Includes all full- and part-time employees]

| YEAR | Total | Private yards | Federal yards | YEAR | Total | Private yards | Federal yards | YEAR | Total | Private yards | Federal yards |
|------|-------|---------------|---------------|------|-------|---------------|---------------|------|-------|---------------|---------------|
| 1960 | 208 | 112 | 96 | 1988 | 197 | 124 | 73 | 1993 | 163 | 113 | 50 |
| 1970 | 216 | 134 | 83 | 1989 | 196 | 126 | 71 | 1994 | 148 | 107 | 41 |
| 1975 | 217 | 154 | 65 | 1990 | 198 | 130 | 68 | 1995 | 139 | 106 | 33 |
| 1980 | 250 | 178 | 72 | 1991 | 193 | 131 | 62 | 1996 | 127 | 103 | 24 |
| 1985 | 219 | 138 | 80 | 1992 | 183 | 125 | 58 | 1997 | 122 | 100 | 22 |

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly, June issues; and Internet cite <<http://stats.bls.gov/ceshome/htm>>

No. 1095. Employment on U.S. Flag Merchant Vessels and Basic Monthly Wage Scale for Able-Bodied Seamen: 1975 to 1996

[Employment in thousands]

| YEAR | Employment | YEAR | Employment | YEAR | East coast wage rate ² | West coast wage rate ² | YEAR | East coast wage rate ² | West coast wage rate ² |
|------|------------|------|------------|------|-----------------------------------|-----------------------------------|------|-----------------------------------|-----------------------------------|
| 1975 | 20.5 | 1991 | 11.7 | 1975 | 612 | 900 | 1991 | 1,518 | 2,329 |
| 1980 | 19.6 | 1992 | 9.2 | 1980 | 967 | 1,414 | 1992 | 1,655 | 2,438 |
| 1985 | 13.1 | 1993 | 9.3 | 1985 | 1,419 | 2,029 | 1993 | 1,721 | 2,438 |
| 1988 | 10.7 | 1994 | 9.1 | 1988 | 1,419 | 2,175 | 1994 | 1,790 | 2,536 |
| 1989 | 9.9 | 1995 | 7.9 | 1989 | 1,448 | 2,218 | 1995 | 1,918 | 2,637 |
| 1990 | 11.1 | 1996 | 7.5 | 1990 | 1,505 | 2,218 | 1996 | 2,014 | 2,769 |

¹ As of June 30, except beginning 1980, as of Sept. 30. Estimates of personnel employed on merchant ships, 1,000 gross tons and over. Excludes vessels on inland waterways, Great Lakes, and those owned by, or operated for, U.S. Army and Navy, and special types such as cable ships, tugs, etc. ² As of January. Basic monthly wage, over and above subsistence (board and room); excludes overtime and fringe pay benefits. West coast incorporates extra pay for Saturdays and Sundays at sea into base wages but east coast does not.

Source: U.S. Maritime Administration, *U.S. Merchant Marine Data Sheet*, monthly; and unpublished data.

No. 1096. Worldwide Tanker Casualties: 1975 to 1997

[Data for 1975 and 1980 covers tankers, ore/oil carriers and bulk/oil vessels of 6,000 deadweight tons and over; beginning 1985, 10,000 deadweight tons and over; excludes liquid gas carriers. Incident is counted in the year it is reported. Based on data from "Lloyd's List" published by Lloyd's of London. "Casualties" include weather damage, strandings, collisions and other contact, fires and explosions, machinery damage, and other mishaps]

| ITEM | Unit | 1975 | 1980 | 1985 | 1990 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------|--------------|------|------|------|------|------|------|------|------|------|------|
| Casualties | Number | 906 | (NA) | 340 | 541 | 396 | 314 | 270 | 280 | 241 | 264 |
| Total losses | Number | 22 | 15 | 12 | 10 | 11 | 9 | 11 | 6 | 2 | 7 |
| Deaths | Number | 90 | 132 | 53 | 119 | 86 | 26 | 88 | 8 | 15 | (NA) |
| Oil spills | Number | 45 | 32 | 9 | 31 | 17 | 24 | 29 | 18 | 24 | 22 |
| Amount | 1,000 tons | 188 | 136 | 80 | 61 | 152 | 120 | 110 | 4 | 72 | 50 |
| Amount | Mil. gallons | 58 | 42 | 25 | 19 | 47 | 37 | 33 | 1 | 22 | 15 |

NA Not available. ¹ Excludes losses due to hostilities.

Source: Tanker Advisory Center, Inc., New York, NY, "Worldwide Tanker Casualty Returns," quarterly.

No. 1097. Merchant Vessels—World and United States: 1970 to 1996

[Through 1992, as of mid-year; thereafter for year-end. For propelled sea-going merchant ships of not less than 100 gross tonnage]

| YEAR | WORLD: COMPLETED | | WORLD: OWNED | | U.S.: COMPLETED | | U.S.: REGISTERED | |
|------|------------------|-----------------------|--------------|-----------------------|-----------------|-----------------------|------------------|-----------------------|
| | Number | Gross tonnage (1,000) | Number | Gross tonnage (1,000) | Number | Gross tonnage (1,000) | Number | Gross tonnage (1,000) |
| 1970 | 2,814 | 20,980 | 52,444 | 227,490 | 156 | 375 | 2,983 | 18,463 |
| 1980 | 2,412 | 13,101 | 73,832 | 419,911 | 205 | 555 | 5,579 | 18,464 |
| 1985 | 1,964 | 18,157 | 76,395 | 416,269 | 66 | 180 | 6,447 | 19,518 |
| 1990 | 1,672 | 15,885 | 78,336 | 423,627 | 16 | 15 | 6,348 | 21,328 |
| 1992 | 1,506 | 18,633 | 79,845 | 444,305 | 27 | 54 | 5,737 | 18,228 |
| 1993 | 1,505 | 20,025 | 80,655 | 457,915 | 30 | 14 | 5,646 | 14,087 |
| 1994 | 1,789 | 19,612 | 80,676 | 475,859 | 28 | 29 | 5,270 | 13,655 |
| 1995 | 1,856 | 22,565 | 82,890 | 490,662 | 30 | 14 | 5,292 | 12,760 |
| 1996 | 1,745 | 25,881 | 84,264 | 507,873 | 29 | 24 | 5,289 | 12,024 |

Source: Through 1992, Lloyd's Register of Shipping, London, England, *Statistical Tables*, annual; and *Annual Summary of Merchant Ships Completed in the World*; thereafter, *World Fleet Statistics*, annual.

No. 1098. Merchant Vessels—Ships and Tonnage Lost Worldwide: 1980 to 1996

[For merchant vessels of 100 gross tonnage and above. Excludes ships which have been declared constructive losses but have undergone repair during the year. Loss counted in the year the casualty occurred, providing that information was available at time of relevant publication]

| TYPE OF SHIP | SHIPS LOST | | | | | GROSS TONNAGE LOST (1,000) | | | | |
|--|------------|------------|------------|------------|------------|----------------------------|--------------|--------------|--------------|------------|
| | 1980 | 1990 | 1994 | 1995 | 1996 | 1980 | 1990 | 1994 | 1995 | 1996 |
| Total | 363 | 160 | 171 | 190 | 151 | 1,791 | 1,047 | 1,532 | 1,055 | 836 |
| Tankers | 24 | 8 | 16 | 12 | 12 | 707 | 138 | 638 | 172 | 179 |
| Ore/bulk carriers ¹ | 21 | 15 | 19 | 19 | 18 | 458 | 687 | 590 | 447 | 303 |
| General cargo | 211 | 87 | 76 | 88 | 77 | 478 | 202 | 237 | 218 | 240 |
| Container ships | 2 | - | - | - | 6 | 6 | - | - | - | 94 |
| Passenger ² | 9 | - | 2 | 1 | - | 112 | - | 26 | 185 | - |
| Fishing | 96 | 50 | 58 | 70 | 38 | 30 | 20 | 41 | 33 | 20 |

- Represents zero. ¹ Includes ore/bulk/oil carriers. ² Includes passenger cargo/ships.

Source: Lloyd's Register of Shipping, London, England, *Casualty Return*, annual.

No. 1099. Merchant Fleets of the World: 1997

[Vessels of 1,000 gross tons and over. As of Jan. 1. Specified countries have 100 or more ships]

| COUNTRY OF REGISTRY | Total | Tanker | Dry Bulk ¹ | Container-ship | Roll-on/Roll-off | Cruise/passenger | Other ² |
|--------------------------------------|---------------|--------------|-----------------------|----------------|------------------|------------------|--------------------|
| World total | 26,858 | 6,384 | 5,694 | 1,936 | 946 | 427 | 11,471 |
| United States | 495 | 173 | 15 | 83 | 62 | 15 | 147 |
| Privately-owned | 302 | 145 | 15 | 78 | 30 | 3 | 30 |
| Government-owned | 193 | 28 | - | 5 | 32 | 12 | 117 |
| Foreign total | 26,363 | 6,211 | 5,679 | 1,853 | 884 | 412 | 11,324 |
| Panama | 3,998 | 893 | 1,086 | 329 | 108 | 54 | 1,528 |
| Russia | 1,655 | 271 | 129 | 27 | 15 | 10 | 1,203 |
| Liberia | 1,587 | 642 | 461 | 153 | 24 | 38 | 269 |
| China | 1,513 | 233 | 345 | 97 | 14 | 33 | 791 |
| Cyprus | 1,476 | 166 | 555 | 108 | 19 | 18 | 610 |
| Malta | 1,113 | 265 | 337 | 28 | 33 | 9 | 441 |
| Bahamas | 954 | 241 | 142 | 43 | 38 | 47 | 443 |
| Greece | 874 | 266 | 406 | 35 | 16 | 19 | 132 |
| Singapore | 753 | 331 | 126 | 114 | 15 | 1 | 166 |
| Japan | 744 | 299 | 182 | 37 | 63 | 15 | 148 |
| Saint Vincent | 683 | 99 | 121 | 17 | 25 | 1 | 420 |
| Norway (NIS) ³ | 626 | 285 | 102 | 5 | 43 | 14 | 177 |
| Philippines | 534 | 65 | 232 | 14 | 18 | 6 | 199 |
| Turkey | 516 | 74 | 177 | 4 | 16 | 7 | 238 |
| Korea (South) | 449 | 105 | 124 | 65 | 4 | - | 151 |
| Netherlands | 445 | 71 | 8 | 40 | 15 | 9 | 302 |
| Indonesia | 444 | 118 | 18 | 5 | 7 | 9 | 287 |
| Ukraine | 415 | 29 | 21 | 11 | 20 | 8 | 326 |
| Germany | 404 | 31 | 1 | 180 | 9 | 11 | 172 |
| Antigua & Barbuda | 379 | 11 | 9 | 76 | 19 | - | 264 |
| Italy | 352 | 194 | 36 | 14 | 41 | 17 | 50 |
| Denmark (DIS) ³ | 315 | 71 | 11 | 61 | 9 | - | 163 |
| India | 305 | 93 | 140 | 6 | - | 2 | 64 |
| Malaysia | 303 | 96 | 50 | 28 | 8 | - | 121 |
| Thailand | 286 | 82 | 35 | 8 | - | 1 | 160 |
| Honduras | 256 | 28 | 10 | 4 | 5 | 3 | 206 |
| Hong Kong | 223 | 15 | 124 | 39 | - | - | 45 |
| Romania | 223 | 12 | 39 | 2 | 9 | - | 161 |
| Taiwan | 202 | 19 | 55 | 87 | 1 | - | 40 |
| Sweden | 198 | 69 | 9 | - | 48 | 4 | 68 |
| Brazil | 188 | 83 | 53 | 11 | 9 | 1 | 31 |
| Belize | 177 | 13 | 13 | 2 | 2 | - | 147 |
| United Kingdom | 140 | 60 | 6 | 21 | 6 | 20 | 27 |
| Poland | 125 | 4 | 69 | - | 4 | 1 | 47 |
| Iran | 123 | 28 | 47 | 1 | 2 | - | 45 |
| Syria | 119 | - | 4 | - | 1 | - | 114 |
| Norway | 111 | 24 | 11 | - | 7 | 1 | 68 |
| Isle of man | 110 | 37 | 19 | 17 | 13 | 3 | 21 |
| U.A.R. (Egypt) | 110 | 14 | 18 | - | 8 | 1 | 69 |
| Vietnam | 108 | 9 | 5 | - | - | - | 94 |
| Marshall Islands | 106 | 31 | 34 | 19 | - | - | 22 |
| Bulgaria | 105 | 14 | 34 | 5 | 7 | 1 | 44 |
| All others | 2,616 | 720 | 275 | 140 | 183 | 48 | 1,250 |

- Represents zero. ¹ Includes bulk/oil, ore/oil, and ore/bulk/oil carriers. ² Breakbulk ships, partial containerships, refrigerated cargo ships, barge and specialized cargo ships. ³ International Shipping Registry which is an open registry under which the ship flies the flag of the specified nation but is exempt from certain taxation and other regulations.

Source: U.S. Maritime Administration, *Merchant Fleets of the World*, summary report, annual; and unpublished data.