

Transportation— Air and Water

This section presents data on civil air transportation, both passenger and cargo, 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 *FAA Statistical Handbook of Aviation* issued by the Federal Aviation Administration (FAA); the annual *Waterborne Commerce of the United States* issued by the Corps of Engineers of the Department of the Army; the monthly and annual issues of *U.S. Waterborne Exports and General Imports*, and the annual *Vessel Entrances and Clearances*, and the monthly *Highlights of U.S. Export and Import Trade*, issued by the Bureau of the Census. 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.

Air transportation data are also presented annually by the Air Transport Association of America, Washington, DC in *Air Transport Facts and Figures*. 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

In Brief

SCHEDULED AIR CARRIERS

Revenue passengers enplaned:

1985 382 million

1993 487 million

Net profit:

1985 +\$863 million

1993 -\$2,138 million

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 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 Research and Special Programs Administration (RSPA) handles aviation information functions formerly assigned to CAB.

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. RSPA continues these publications, including both certificated and noncertificated (commuter) air carriers. The FAA publishes data annually on the use of airport 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.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

No. 1061. 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
Air transportation	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	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. ³	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 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. ³	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. ³	4499	1,118	971	263	9

NA Not available. ¹ 1987 Standard Industrial Classification code; see text, section 13. ² For the pay period including March 12. ³ N.e.c. means not elsewhere classified.

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

No. 1062. U. S. Scheduled Airline Industry—Summary: 1985 to 1993

[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	1987	1988	1989	1990	1991	1992	1993
SCHEDULED SERVICE									
Revenue passengers enplaned	Mil.	382.0	447.7	454.6	453.7	465.6	452.3	475.1	487.2
Revenue passenger miles	Bil.	336.4	404.5	423.3	432.7	457.9	448.0	478.6	489.1
Available seat miles	Bil.	547.8	648.7	676.8	684.4	733.4	715.2	752.8	770.8
Revenue passenger load factor	Percent	61.4	62.3	62.5	63.2	62.4	62.6	63.6	63.5
Mean passenger trip length ¹	Miles	881	903	931	954	984	990	1,007	1,004
Freight and express ton miles	Mil.	6,030.5	8,260.3	9,632.2	10,275.0	10,546.3	10,225.2	11,129.7	11,914.8
Aircraft departures	1,000	5,835.5	6,581.3	6,699.6	6,622.1	6,923.6	6,782.8	7,050.6	7,230.3
FINANCES									
Total operating revenue ²	Mil. dol.	46,664	56,986	63,749	69,316	76,142	75,159	78,140	83,792
Passenger revenue	Mil. dol.	39,236	44,940	50,296	53,802	58,453	57,092	59,829	63,951
Freight and express revenue	Mil. dol.	2,681	6,398	7,478	6,893	5,432	5,509	5,916	6,321
Mail revenue	Mil. dol.	890	923	972	955	970	957	1,184	1,242
Charter revenue	Mil. dol.	1,280	1,612	1,698	2,052	2,877	3,717	2,801	3,045
Total operating expense	Mil. dol.	45,238	54,517	60,312	67,505	78,054	76,943	80,585	82,358
Operating profit	Mil. dol.	1,426	2,469	3,437	1,811	-1,912	-1,785	-2,445	1,434
Interest expense	Mil. dol.	1,588	1,695	1,846	1,944	1,978	1,177	1,743	2,024
Net profit	Mil. dol.	863	593	1,686	128	-3,921	-1,940	-4,791	-2,138
Revenue per passenger mile	Cents	11.7	11.1	11.9	12.4	12.8	12.7	12.5	13.1
Rate of return on investment	Percent	9.6	7.2	10.8	6.3	-6.0	-0.5	-9.3	-0.4
Operating profit margin	Percent	3.1	4.3	5.4	2.6	-2.5	-2.3	-3.1	1.7
Net profit margin	Percent	1.8	1.0	2.6	0.2	-5.1	-2.6	-6.1	-2.6
EMPLOYEES									
Total	1,000	355	457	481	507	546	534	540	537
Pilots, copilots, and other flight personnel	1,000	40	51	52	52	56	56	59	60
Flight attendants	1,000	63	73	76	78	83	82	86	85
Mechanics	1,000	43	51	55	57	61	59	59	58
Aircraft and traffic servicing personnel	1,000	101	199	212	225	252	237	243	243
Other	1,000	108	84	86	95	94	98	93	92

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. 1063. Airline Cost Indexes: 1980 to 1993

[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]

ITEM	INDEX (1982=100)								PERCENT DISTRIBUTION OF CASH OPERATING EXPENSES ¹			
	1980	1985	1988	1989	1990	1991	1992	1993	1980	1985	1990	1993
INDEX												
Composite	86.3	103.1	102.4	109.0	117.0	119.8	122.0	124.8	100.0	100.0	100.0	100.0
Labor	84.8	111.1	115.0	118.4	121.1	127.6	134.4	144.2	35.1	34.9	32.6	35.6
Interest ²	88.7	105.5	99.6	111.5	107.3	88.3	84.8	85.3	2.9	3.5	2.5	2.7
Fuel	91.6	81.4	54.2	61.2	78.7	68.9	64.1	59.7	29.7	22.3	17.6	12.3
Passenger food	94.3	102.0	111.9	122.8	132.6	141.4	144.1	127.8	2.9	3.2	3.6	3.4
Advertising and promotion	69.5	99.8	96.9	105.0	107.6	97.9	89.8	90.4	1.7	2.3	2.1	1.8
Landing fees	90.0	101.2	129.1	137.1	148.1	161.9	179.5	176.6	1.7	1.7	1.9	2.1
Passenger traffic commissions	77.3	117.6	148.3	163.4	176.8	193.5	192.2	196.6	4.8	7.4	9.8	10.8
All other	85.6	112.7	123.9	129.4	134.7	140.6	144.6	149.1	21.3	24.6	29.9	31.2
PERCENT CHANGE ³												
Composite	23.3	0.3	4.1	6.4	7.3	2.4	1.8	2.3	(X)	(X)	(X)	(X)
Labor	10.0	2.9	4.4	3.0	2.3	5.4	5.3	7.3	(X)	(X)	(X)	(X)
Interest ²	16.9	-3.2	2.2	11.9	-3.8	-17.7	-4.0	0.6	(X)	(X)	(X)	(X)
Fuel	55.8	-5.7	-4.6	12.9	28.6	-12.5	-7.0	-6.9	(X)	(X)	(X)	(X)
Passenger food	11.9	-4.2	6.0	9.7	8.0	6.6	1.9	-11.3	(X)	(X)	(X)	(X)
Advertising and promotion	24.3	-0.2	6.6	8.4	2.5	-9.0	-8.3	0.7	(X)	(X)	(X)	(X)
Landing fees	9.6	-0.2	6.3	6.2	8.0	9.3	10.8	-1.6	(X)	(X)	(X)	(X)
Passenger traffic commissions	40.0	0.8	15.1	10.2	8.2	9.4	-0.7	2.3	(X)	(X)	(X)	(X)
All other	9.3	3.7	3.9	4.4	4.1	4.4	2.9	3.1	(X)	(X)	(X)	(X)

X Not applicable. ¹ Total operating expenses plus interest on long term debt, less depreciation and amortization. ² Interest on debt. ³ Change from immediate prior year.

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

No. 1064. Top 10 Airports—Traffic Summary: 1993

[In thousands, except percent change. For calendar year. Airports ranked by revenue passengers enplaned. For scheduled carriers only; excludes charter-only carriers]

AIRPORT	Rank	AIRCRAFT DEPARTURES		REVENUE PASSENGERS ENPLANED		ENPLANED REVENUE TONS		
		Total ¹	Completed scheduled	Total	Percent change, 1980-1993	Total	Freight	U.S. mail
All airports ²	(X)	7,194	6,931	468,313	67.9	8,203	6,384	1,819
Atlanta, Hartsfield International	3	273	268	22,295	11.5	291	178	113
Chicago, O'Hare	1	384	378	29,134	51.5	465	315	150
Dallas/Ft. Worth International	2	357	349	24,656	136.3	295	191	104
Denver, Stapleton International	5	183	178	14,328	49.0	145	95	50
Detroit, Metro Wayne	8	146	142	11,027	119.4	113	68	45
Los Angeles International	4	192	187	18,457	30.4	450	375	75
Minneapolis/St. Paul	10	137	132	10,378	136.7	151	96	55
Newark International	9	141	136	10,965	160.7	279	230	49
Phoenix, Sky Harbor International	7	148	144	11,295	234.2	92	62	30
San Francisco International	6	152	151	14,003	48.9	263	198	65

X Not applicable. ¹ Includes completed scheduled and unscheduled. ² Includes other airports, not shown separately. Source: U.S. Federal Aviation Administration and Research and Special Programs Administration, *Airport Activity Statistics*, annual.

No. 1065. Domestic Airline Markets: 1993

[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	2,735,140	Chicago to—from Detroit	1,357,100
New York to—from Chicago	2,483,940	Los Angeles to—from Oakland	1,295,530
New York to—from Boston	2,473,660	Los Angeles to—from Honolulu	1,276,860
Honolulu to—from Kahului, Maui	2,427,790	Honolulu to—from Lihue, Kauai	1,269,600
New York to—from Miami	2,357,870	Honolulu to—from Kona, Hawaii	1,225,650
New York to—from Washington	2,285,290	New York to—from West Palm Beach	1,138,870
Dallas/Ft. Worth to—from Houston	2,186,940	Chicago to—from Los Angeles	1,137,200
Los Angeles to—from San Francisco	2,037,710	Honolulu to—from Hilo, Hawaii	1,134,910
New York to—from San Francisco	1,903,390	San Francisco to—from San Diego	1,045,680
New York to—from Orlando	1,879,430	Boston to—from Washington	1,037,640
New York to—from Ft. Lauderdale	1,763,910	San Francisco to—from Honolulu	1,013,640
New York to—from San Juan	1,589,570	Chicago to—from St. Louis	1,007,120
New York to—from Atlanta	1,581,160	New York to—from Dallas/Ft. Worth	970,000
Los Angeles to—from Las Vegas	1,457,300	Los Angeles to—from Seattle	926,460
Los Angeles to—from Phoenix	1,359,650	Chicago to—from Minneapolis	919,450

Source: Air Transport Association of America, Washington, DC, *Air Transport* 1994.

No. 1066. Worldwide Airline Fatalities: 1970 to 1993

[For scheduled air transport operations]

YEAR	Fatal accidents	Passenger deaths	Death rate ¹	YEAR	Fatal accidents	Passenger deaths	Death rate ¹
1970	29	700	0.29	1986 ²	22	546	0.06
1975	20	467	0.13	1987 ²	26	901	0.09
1980	22	814	0.14	1988 ²	28	729	0.07
1981	21	362	0.06	1989 ²	27	817	0.05
1982	26	764	0.13	1990 ²	25	495	0.03
1983	20	809	0.13	1991 ^{2 3}	30	653	0.04
1984	16	223	0.03	1992 ^{2 3}	29	1,097	0.06
1985	22	1,066	0.15	1993 ^{2 3}	34	936	0.05

¹ Rate per 100 million passenger miles flown. ² Includes former USSR which began reporting in 1986. ³ Preliminary. Source: International Civil Aviation Organization, Montreal, Canada, *Civil Aviation Statistics of the World*, annual.

No. 1067. Airline Passenger Screening Results: 1980 to 1993

[Calendar year data]

YEAR	Passengers screened (mil.)	WEAPONS DETECTED				PERSONS ARRESTED	
		Firearms		Other	Explosive/incendiary devices	Carrying firearms/explosives	Giving false information
		Handguns	Long guns				
1980	585	1,878	36	108	8	1,031	32
1981	599	2,124	44	87	11	1,187	49
1982	630	2,559	57	60	1	1,314	27
1983	709	2,634	67	83	4	1,282	34
1984	776	2,766	98	91	6	1,285	27
1985	993	2,823	90	74	12	1,310	42
1986	1,055	2,981	146	114	11	1,415	89
1987	1,096	3,012	99	141	14	1,581	81
1988	1,055	2,591	74	108	11	1,493	222
1989	1,113	2,397	92	390	26	1,436	83
1990	1,145	2,490	59	304	15	1,336	18
1991	1,015	1,597	47	275	94	893	28
1992	1,111	2,503	105	1,271	167	1,282	13
1993	1,150	2,707	91	1,867	251	1,354	31

¹ Though 1991, includes other firearms; beginning 1992, includes stunning guns, chemical agents, martial arts equipment, knives, bludgeons, and other designated items. Source: U.S. Federal Aviation Administration, *Annual Report to Congress on Civil Aviation Security*.

No. 1068. Aircraft Accidents and Hijackings: 1975 to 1993

[For years ending December 31]

ITEM	Unit	1975	1980	1985	1990	1991	1992	1993
Aircraft accidents: ¹ General aviation ²	Number	3,995	3,590	2,738	2,214	2,170	2,074	2,022
Fatal	Number	633	618	498	442	431	447	385
Rate per 100,000 aircraft hours flown	Rate	2.20	1.69	1.75	1.55	1.58	1.87	1.67
Fatalities	Number	1,252	1,239	955	766	781	862	715
Air carrier, all services ³	Number	(NA)	19	22	24	26	18	23
Fatal	Number	(NA)	1	7	6	4	4	1
Rate per 1,000,000 aircraft miles flown	Rate	(X)	-	0.002	0.001	0.001	0.001	-
Fatalities	Number	(NA)	1	526	39	62	33	1
Air carrier, scheduled services	Number	29	15	17	22	25	16	23
Fatal	Number	2	-	4	6	4	4	1
Rate per 1,000,000 aircraft miles flown	Rate	0.001	-	0.001	0.001	0.001	0.001	-
Fatalities	Number	122	-	197	39	62	33	1
Commuter air carriers ⁴	Number	48	38	21	15	22	23	16
Fatal	Number	12	8	7	3	8	7	4
Rate per 1,000,000 aircraft miles flown	Rate	0.07	0.04	0.02	0.01	0.02	0.02	0.01
Fatalities	Number	28	37	37	6	99	21	24
Air taxis ⁵	Number	152	171	154	106	87	76	71
Fatal	Number	24	46	35	28	27	24	19
Rate per 100,000 aircraft hours flown	Rate	0.95	1.27	1.36	1.24	1.20	1.19	0.90
Fatalities	Number	69	105	76	50	70	70	42
Hijacking incidents, worldwide	Number	19	39	26	40	24	12	31
U.S. registered aircraft	Number	6	21	4	1	1	-	-
Successful ⁶	Number	4	13	2	(NA)	(NA)	-	-
Foreign-registered aircraft	Number	13	18	22	39	23	12	31
Successful ⁶	Number	3	9	18	(NA)	(NA)	(NA)	(NA)
Bomb threats:								
U.S. airports	Number	449	268	256	448	498	188	(NA)
Explosions	Number	4	1	-	-	-	-	(NA)
U.S. worldwide and foreign aircraft in U.S.	Number	1,853	1,179	372	338	388	215	(NA)
Explosions	Number	2	1	1	-	-	-	(NA)

- Represents or rounds to zero. NA Not available. X Not applicable. ¹ Data from National Transportation Safety Board. ² See text, section 22. ³ U.S. air carriers operating under 14 CFR 121. ⁴ All scheduled service of U.S. air carriers operating under 14 CFR 135. ⁵ All unscheduled service of U.S. air carriers operating under 14 CFR 135. ⁶ Hijacker controls flight and reaches destination or objective. Source: U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual; and unpublished data. Includes data from U.S. Department of Transportation, Research and Special Programs Administration.

No. 1069. On-Time Flight Arrivals and Departures at Major U.S. Airports: 1994

[In percent. Quarterly, based on gate arrival and departure times for domestic scheduled operations in the 48 contiguous States of major U.S. airlines, per DOT reporting rule effective September 1987. 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. Excludes flight operations delayed/cancelled due to aircraft mechanical problems reported on FAA maintenance records (4-5 percent of the reporting airlines' scheduled operations). See source for data on individual airlines]

AIRPORT	ON-TIME ARRIVALS				ON-TIME DEPARTURES			
	1st. qtr.	2d. qtr.	3rd. qtr.	4th. qtr.	1st. qtr.	2d. qtr.	3rd. qtr.	4th. qtr.
Total, all airports	75.7	84.2	83.7	82.0	80.3	88.8	88.2	86.1
Total major airports	74.4	83.6	83.3	81.9	78.4	87.7	87.0	85.2
Atlanta, Hartsfield International	75.2	81.0	78.2	79.6	81.2	86.5	85.6	85.8
Boston, Logan International	59.0	76.7	75.1	82.1	66.4	84.6	83.3	87.8
Charlotte, Douglas	78.7	87.0	82.2	84.3	74.9	82.6	79.2	82.5
Chicago, O'Hare	73.8	86.3	85.9	87.9	76.8	89.9	88.9	88.4
Cincinnati International	77.7	85.1	83.7	88.9	80.0	89.4	87.5	90.0
Dallas/Ft. Worth International	77.5	82.3	84.9	77.7	81.6	87.2	88.3	78.6
Denver, Stapleton International	71.9	80.8	86.8	82.8	77.4	85.7	89.6	84.7
Detroit, Metro Wayne	80.3	87.9	86.9	88.2	78.6	87.6	86.9	88.2
Houston Intercontinental	77.1	84.1	85.9	81.4	81.7	87.8	89.5	85.5
Las Vegas, McCarran International	79.5	86.2	84.1	79.2	82.6	88.9	87.2	82.5
Los Angeles International	75.0	81.6	83.7	75.2	82.6	89.1	88.8	81.8
Miami International	73.3	83.6	78.7	81.4	82.8	90.9	87.4	88.9
Minneapolis/St. Paul International	81.4	88.7	87.0	87.4	83.3	91.5	90.2	88.8
Nashville Airport	84.2	88.6	88.8	89.2	84.2	89.8	89.4	90.0
Newark International	53.5	73.4	74.3	78.8	63.5	80.1	81.1	85.3
New York, Kennedy International	67.0	75.9	70.2	80.7	71.4	85.6	79.5	85.4
New York, LaGuardia	70.3	81.1	77.9	83.6	74.8	87.9	84.5	85.9
Orlando International	72.8	83.2	80.2	83.9	81.7	89.9	87.0	90.7
Philadelphia International	70.0	82.5	77.3	82.6	70.4	85.8	82.6	87.7
Phoenix, Sky Harbor International	80.7	87.1	87.4	77.7	82.2	87.7	87.9	80.4
Pittsburgh, Greater International	69.9	83.6	82.0	85.1	65.2	80.9	78.2	83.5
Raleigh/Durham	82.0	89.9	87.2	88.6	81.1	92.6	90.6	90.4
St. Louis, Lambert	79.0	86.3	89.9	78.7	80.5	88.9	91.8	81.9
Salt Lake City International	82.3	88.7	86.0	80.6	84.9	92.8	88.9	82.6
San Diego International, Lindbergh	78.5	86.5	87.5	78.8	84.3	91.5	92.0	85.2
San Francisco International	71.4	81.3	84.3	77.1	81.5	89.7	90.2	84.2
Seattle-Tacoma International	72.9	83.5	84.4	75.8	86.1	92.3	90.2	85.8
Tampa International	72.5	83.9	78.6	81.8	80.2	90.5	87.7	89.2
Washington National	72.4	82.4	81.6	85.8	76.4	87.4	87.6	90.5

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

No. 1070. Consumer Complaints Against U.S. Airlines: 1987 to 1994

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

COMPLAINT CATEGORY	1987	1988	1989	1990	1991	1992	1993	1994
Total	40,985	21,493	10,553	7,703	6,106	5,639	4,438	5,179
Flight problems ¹	18,019	8,831	4,111	3,034	1,877	1,624	1,211	1,586
Customer service ²	3,888	2,120	1,002	758	714	695	599	805
Baggage	7,438	3,938	1,702	1,329	883	752	627	761
Ticketing/boarding ³	2,458	1,445	821	624	659	680	577	598
Refunds	3,313	1,667	1,023	701	783	721	482	393
Oversales ⁴	2,122	1,353	607	399	301	265	257	301
Fares ⁵	937	455	341	312	388	573	398	267
Tours	90	37	22	29	23	12	16	127
Advertising	344	141	89	96	96	54	51	94
Smoking	888	546	232	74	30	25	30	20
Credit	101	35	19	5	10	10	4	2
Other	1,387	925	584	342	342	228	186	225

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. 1072. Civil Flying—Summary: 1970 to 1993

[As of Dec. 31 or for years ending Dec. 31, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series Q 604-623]

ITEM	Unit	1970	1980	1985	1990	1991	1992	1993
Airports in operation ¹	Number	11,261	15,161	16,318	17,490	17,581	17,846	18,317
Heliports	Number	790	2,336	3,120	4,085	4,199	4,323	4,569
Public	Number	4,260	4,814	5,861	5,078	5,090	5,116	5,157
Private	Number	7,001	10,347	10,457	12,412	12,491	12,730	13,160
Airports with runway lights	Number	3,554	4,738	4,941	4,822	4,811	4,831	4,842
Airports with paved runways	Number	3,805	5,833	6,721	7,694	7,822	7,936	8,186
Airport Improvement Program ²	Mil. dol.	50.5	639.0	842.1	1,244.7	1,621.6	1,765.0	1,830.0
Total civil aircraft	1,000	154.5	259.4	274.9	275.9	275.5	277.0	279.0
Active aircraft ³	1,000	134.5	214.8	215.4	218.9	204.6	191.7	183.3
Air carriers, total ⁴	1,000	2.8	3.8	4.7	6.7	6.1	7.3	7.3
General aviation aircraft ⁵	1,000	131.7	211.0	210.7	212.2	198.5	184.4	176.0
Fixed-wing aircraft: Multi-engine	1,000	18.4	31.7	33.6	32.7	30.5	27.3	24.6
Single-engine	1,000	109.5	168.4	164.4	165.1	154.2	143.5	130.7
Rotorcraft ⁶	1,000	2.2	6.0	6.4	7.4	6.3	5.8	4.5
Balloons, blimps, gliders, etc.	1,000	1.6	5.0	6.3	7.0	7.6	7.8	5.2
Airman certificates held	1,000	1,002	1,195	1,105	1,195	1,210	1,224	1,225
Pilot ⁷	1,000	733	827	710	703	692	683	665
Held by women	Percent	4.0	6.4	6.1	5.8	5.9	5.9	5.9
Airline transport	1,000	34	70	83	108	112	116	117
Commercial	1,000	187	183	152	149	148	146	143
Private	1,000	304	357	311	299	293	288	284
Student ⁸	1,000	196	200	147	128	120	115	104
Nonpilot ⁸	1,000	269	368	395	492	517	541	560
Ground technicians ⁹	1,000	241	321	341	421	444	478	485
FAA employees: Total	Number	53,125	55,340	47,245	51,269	54,119	53,871	52,680
Air traffic control specialists ¹⁰	Number	(NA)	27,190	23,580	24,339	25,741	24,983	24,630
Full performance ¹¹	Number	(NA)	16,317	11,672	12,985	13,480	14,377	14,931
Developmental ¹¹	Number	(NA)	4,387	4,304	5,042	5,080	3,759	3,040
Assistants ¹¹	Number	(X)	(X)	1,465	1,153	928	792	632
Traffic management coordinators ¹²	Number	(X)	(X)	(X)	370	448	471	482
Electronic technicians	Number	(NA)	8,871	6,856	6,458	6,641	6,572	6,262
Aviation safety inspectors	Number	(NA)	2,038	1,897	2,984	3,101	3,017	2,920
Engineers	Number	(NA)	2,436	2,457	2,745	3,073	3,208	3,198
Other	Number	(NA)	14,805	12,455	14,743	15,563	16,091	15,670
General aviation: ⁵								
Hours flown	Million	26.0	41.0	34.1	34.8	30.1	26.5	24.3
Fuel consumed: ¹³								
Gasoline	Mil. gal.	362	520	420	353	354	314	268
Jet fuel ¹⁴	Mil. gal.	415	766	691	663	577	494	454

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. 1970-1980 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. Beginning 1993, excludes commuters and includes experimental aircraft, not shown separately. Prior to 1993, experimental aircraft were included in the appropriate type. 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 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. ⁹ No medical examinations are required, therefore, data represent all certificates on record and include retired or otherwise inactive technicians. ¹⁰ Includes all air traffic control specialists (staff positions, managers, supervisors, and for 1970-1985 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 Source: 1970, U.S. Bureau of Mines; thereafter, FAA General Aviation Activity and Avionics Survey. ¹⁴ Includes kerosene-type and naphtha-type jet fuels.

Source: Except as noted, U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual; and unpublished data. Includes data from U.S. Department of Transportation, Research and Special Programs Administration.

No. 1073. Net Orders Booked for U.S. Civil Jet Transport Aircraft: 1985 to 1994

[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	1989	1990	1991	1992	1993	1994
Total number ¹	468	1,015	670	280	231	31	79
U.S. customers	242	507	259	36	82	-44	12
Foreign customers	226	508	411	244	149	-13	67
Boeing 737, total	253	397	189	75	91	-34	49
U.S. customers	146	216	38	-8	43	-29	9
Foreign customers	107	181	151	83	48	-5	40
Boeing 747, total	37	57	153	48	41	-25	-5
U.S. customers	13	4	24	-5	-	-25	-1
Foreign customers	24	53	129	53	41	-	-4
Boeing 757, total	51	190	66	80	7	20	5
U.S. customers	39	137	33	42	29	46	-1
Foreign customers	12	53	33	38	-22	-26	6
Boeing 767, total	10	138	60	58	20	43	27
U.S. customers	4	40	23	28	10	41	11
Foreign customers	6	98	37	30	10	2	16
Boeing 777, total	-	-	34	52	36	29	-
U.S. customers	-	-	34	-	-	5	-
Foreign customers	-	-	-	52	36	24	-
McDonnell Douglas MD-11, total	-	38	52	-31	1	-1	2
U.S. customers	-	17	16	-26	4	-	2
Foreign customers	-	21	36	-5	-3	-1	-
McDonnell Douglas MD-80/90, total	114	195	116	-2	35	-1	1
U.S. customers	37	93	91	5	-4	6	-8
Foreign customers	77	102	25	-7	39	-7	9
Total value	14,811	47,470	45,485	23,351	16,640	(NA)	(NA)
U.S. customers	7,869	20,304	14,828	2,144	3,200	(NA)	(NA)
Foreign customers	6,942	27,166	30,657	21,207	13,440	(NA)	(NA)

- Represents zero. NA Not available. ¹ Includes types of aircraft not shown separately.
Source: Aerospace Industries Association of America, Washington, DC, Research Center, Statistical Series 23.

No. 1074. U.S. Aircraft Shipments With Projections: 1970 to 1994

[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		
1970	11,632	7,511	311	3,158	7,292	337	495	49	3,534	3,967
1975	16,958	9,355	285	4,006	14,056	1,033	838	266	1,779	4,050
1980	14,660	18,845	383	9,793	11,877	2,486	1,353	674	1,047	5,892
1985	3,597	29,312	273	9,375	2,029	1,431	376	505	919	18,001
1986	3,261	35,622	329	11,120	1,495	1,262	330	288	1,107	22,952
1987	2,995	37,317	255	11,900	1,160	1,320	270	320	1,210	23,777
1988	3,285	33,840	380	13,000	1,270	1,420	330	400	1,305	19,020
1989	3,675	34,228	398	15,074	1,535	1,803	515	251	1,227	17,100
1990	3,486	39,206	521	22,215	1,144	2,007	603	254	1,218	14,730
1991	2,934	40,776	589	26,856	1,021	1,968	571	211	753	11,741
1992	2,507	41,832	610	30,268	941	1,840	324	142	632	9,582
1993 ²	2,282	37,108	408	26,456	964	2,144	260	122	650	8,386
1994 ³	2,146	30,589	306	20,437	960	2,150	260	82	620	7,920

¹ Excludes off-the-shelf military aircraft. ² Estimated. ³ Forecast.

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1994*; and unpublished data.

No. 1075. Employment and Earnings in Aircraft Industries: 1985 to 1994

[Annual averages of monthly figures. See headnote, table 666]

ITEM	1987 SIC ¹ code	Unit	1985	1990	1992	1993	1994
Employment: Total	(X)	1,000	794	898	758	666	588
Aircraft	3721	1,000	326	381	332	301	270
Aircraft engines and engine parts	3724	1,000	148	152	127	110	96
Aircraft equipment, n.e.c. ²	3728	1,000	143	180	153	131	114
Guided missiles, space vehicles, and parts	376	1,000	177	185	146	124	108
Average weekly earnings:							
Aircraft	3721	Dollars	(NA)	(NA)	(NA)	(NA)	(NA)
Aircraft engines and parts	3724	Dollars	542	637	689	715	753
Guided missiles, space vehicles, and parts	376	Dollars	515	612	652	696	738
Average hourly earnings:							
Aircraft ⁴	3721	Dollars	13.18	15.66	17.70	18.43	19.50
Aircraft engines and parts	3724	Dollars	12.85	14.86	16.28	16.70	17.31
Guided missiles, space vehicles, and parts	376	Dollars	12.14	14.39	15.99	16.80	17.48

NA Not available. X Not applicable. ¹ 1987 Standard Industrial Classification; see text, section 13. 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; \$18.18 in 1992; \$19.00 in 1993; and \$19.57 in 1994.

Source: U.S. Bureau of Labor Statistics, Bulletin 2445; and *Employment and Earnings*, monthly, March and June issues.

No. 1076. Aerospace—Sales, New Orders, and Backlog: 1980 to 1993

[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	1980	1985	1986	1987	1988	1989 ¹	1990 ¹	1991 ¹	1992 ¹	1993 ¹
Net sales	58.4	100.5	105.6	110.3	113.5	122.1	136.6	123.9	118.7	105.4
Percent U.S. Government	45.6	63.2	61.9	62.2	60.0	58.0	54.0	48.9	50.0	48.4
Complete aircraft and parts ²	22.6	34.2	38.0	37.0	35.7	38.4	49.9	52.9	54.0	45.8
Aircraft engines and parts	6.9	9.7	9.8	12.0	15.0	15.4	16.4	15.6	13.7	12.1
Missiles and space vehicles, parts	8.4	16.7	17.5	20.7	21.5	22.6	22.0	23.3	21.3	19.8
Other products, services	20.5	39.8	40.3	40.5	41.3	45.7	48.3	32.0	29.7	27.8
Net, new orders	70.4	111.0	110.8	121.2	147.1	173.6	146.0	122.5	100.3	73.3
Backlog, Dec. 31	90.5	143.0	148.2	158.7	191.5	252.4	250.1	245.2	236.1	205.4

¹ Data beginning 1989 are not comparable with earlier years. Data are being reported which were previously not available. The extent of this noncomparability is not known. ² Except engines sold separately.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA-37D.

No. 1077. Aerospace Industry Sales, by Product Group and Customer: 1985 to 1995

[In billions of dollars. Due to reporting practices and tabulating methods, figures may differ from those in table 1076]

ITEM	CURRENT DOLLARS					CONSTANT (1987) DOLLARS ³				
	1985	1990	1993	1994 ¹	1995 ²	1985	1990	1993	1994 ¹	1995 ²
Total sales	96.6	134.4	124.2	112.8	109.4	97.8	121.6	102.8	92.4	86.9
PRODUCT GROUP										
Aircraft, total	50.5	71.4	66.5	58.2	56.7	51.1	64.6	55.1	47.7	45.1
Civil ⁴	13.7	31.4	33.8	26.3	25.8	13.9	28.4	27.9	21.5	20.5
Military	36.8	40.1	32.8	32.0	30.9	37.2	36.3	27.1	26.2	24.6
Missiles	11.4	14.2	8.1	7.3	6.6	11.6	12.8	6.7	6.0	5.2
Space	18.6	26.4	28.9	28.5	27.8	18.8	23.9	23.9	23.3	22.1
Related products and services ⁵	16.1	22.4	20.7	18.8	18.2	16.3	20.3	17.1	15.4	14.5
CUSTOMER GROUP										
Aerospace, total	80.5	112.0	103.5	94.0	91.2	81.5	101.3	85.7	77.0	72.4
DOD ⁶	53.2	60.5	47.1	44.6	41.9	53.9	54.8	39.0	36.5	33.3
NASA ⁷ and other agencies	6.3	11.1	12.3	12.2	12.0	6.3	10.0	10.2	10.0	9.5
Other customers ⁸	21.0	40.4	44.1	37.2	37.2	21.3	36.5	36.5	30.5	29.6
Related products and services ⁵	16.1	22.4	20.7	18.8	18.2	16.3	20.3	17.1	15.4	14.5

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, *1994 Year-end Review and Forecast*.

No. 1078. Aerospace Industry—Net Profits After Taxes: 1980 to 1994

[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
1981	2,966	4.4	5.2	16.0	4.7	6.7	13.6
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	12,484	1.8	1.9	6.1	2.5	2.6	6.4
1992	-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, prel.	5,233	4.7	4.3	15.2	5.2	5.5	15.0

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, *1994 Year-end Review and Forecast*.

No. 1079. U.S. Exports of Aerospace Vehicles and Equipment: 1990 to 1993

ITEM	NUMBER OF UNITS				VALUE (mil. dol.)			
	1990	1991	1992	1993 ¹	1990	1991	1992	1993 ¹
Aerospace vehicles and equipment	(NA)	(NA)	(NA)	(NA)	39,083	43,796	45,030	39,426
Civilian aircraft	3,779	3,329	2,086	1,758	18,148	22,388	24,337	19,845
Under 4,536 kg. unladen weight, new	1,134	911	586	555	324	311	297	234
4,536-15,000 kg. unladen weight, new	79	69	60	58	245	279	295	324
Over 15,000 kg. unladen weight, new	306	385	387	276	16,691	20,881	22,379	18,146
Rotorcraft, new	349	318	212	175	161	168	118	120
Nonpowered aircraft, new	(NA)	(NA)	(NA)	(NA)	15	15	7	9
Used or rebuilt	1,911	1,646	841	694	712	734	1,241	1,012
Military aircraft, new and used	445	490	428	632	1,481	1,784	2,083	1,460
Aircraft engines and parts	(NA)	(NA)	(NA)	(NA)	6,883	7,049	6,699	6,278
Piston engines and parts	(NA)	(NA)	(NA)	(NA)	421	417	315	294
Complete engines, new and used	6,411	7,812	7,278	7,613	110	111	104	123
Engine parts	(NA)	(NA)	(NA)	(NA)	311	306	211	172
Turbine engines and parts	(NA)	(NA)	(NA)	(NA)	6,462	6,632	6,384	5,984
Complete engines, new and used	24,687	17,565	18,540	17,088	1,856	2,229	2,484	2,409
Engine parts	(NA)	(NA)	(NA)	(NA)	4,606	4,403	3,900	3,575
Propellers, rotors, and parts	(NA)	(NA)	(NA)	(NA)	343	317	289	308
Landing gear and parts	(NA)	(NA)	(NA)	(NA)	276	333	362	338
Aircraft parts and accessories, n.e.c. ²	(NA)	(NA)	(NA)	(NA)	8,982	9,386	8,496	8,574
Guided missiles and parts	(NA)	(NA)	(NA)	(NA)	1,306	1,204	1,428	1,231
Flight simulators	(NA)	(NA)	(NA)	(NA)	255	245	205	197
Space vehicles and parts	(NA)	(NA)	(NA)	(NA)	660	308	336	548
Avionics	(NA)	(NA)	(NA)	(NA)	747	780	795	646

NA Not available. ¹ Estimated. ² N.e.c.=Not elsewhere classified.

Source: U.S. Dept. of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1994*; and unpublished data.

No. 1080. International Transportation Transactions of the United States, by Type: 1980 to 1994

[In millions of dollars. Data are international transportation transactions recorded for balance of payment purposes (see table 1319). 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. See *Historical Statistics, Colonial Times to 1970*, series U 3 and U 10, for totals]

ITEM	1980	1985	1988	1989	1990	1991	1992	1993	1994 ¹
Total receipts	14,208	19,085	28,432	31,190	37,252	38,203	39,676	39,701	42,357
Ocean passenger fares	(Z)	60	128	132	154	156	173	237	236
Other ocean transportation	7,757	8,846	11,218	11,704	12,141	12,281	12,457	12,565	13,367
Freight	3,229	3,440	3,750	3,896	4,104	4,000	3,931	3,983	4,321
Port expenditures	4,435	5,274	7,315	7,609	7,815	8,041	8,267	8,335	8,792
Charter hire	93	132	153	199	222	240	259	247	254
Air passenger fares ²	2,591	4,351	8,848	10,525	15,144	15,698	16,799	16,313	17,388
Other air transportation	3,355	5,347	6,792	7,310	8,174	8,556	8,505	8,854	9,549
Freight	742	706	1,385	1,719	2,432	2,722	2,589	2,856	3,236
Port expenditures	2,613	4,641	5,407	5,591	5,742	5,834	5,916	5,998	6,313
Miscellaneous receipts	505	481	1,446	1,519	1,639	1,512	1,742	1,732	1,817
Total payments	15,397	22,087	27,263	28,908	33,932	33,309	34,068	35,918	38,277
Ocean passenger fares	268	154	164	193	248	279	301	341	341
Other ocean transportation	8,179	10,698	12,180	12,227	13,078	12,303	11,921	12,790	13,737
Import freight	5,809	8,114	9,372	9,391	10,290	9,593	9,269	10,028	10,645
Port expenditures	1,905	2,048	2,244	2,228	2,174	2,093	2,029	2,143	2,477
Charter hire	465	536	564	608	614	617	623	619	615
Air passenger fares ²	3,339	6,290	7,565	8,056	10,283	9,733	10,307	11,075	12,217
Other air transportation	3,366	4,719	6,981	8,080	9,881	10,513	11,032	11,177	11,395
Import freight	562	1,666	2,226	2,197	2,207	2,257	2,375	2,580	2,914
Port expenditures	2,804	3,053	4,755	5,883	7,674	8,256	8,657	8,597	8,481
Miscellaneous payments	245	226	373	352	442	481	507	535	587
Balance	-1,189	-3,002	1,169	2,282	3,320	4,894	5,608	3,783	4,080

Z Less than \$500,000. ¹ Preliminary. ² Beginning 1990, includes interairline settlements.

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

No. 1081. Exports and Imports, by Method of Transport: 1980 to 1994

[Exports are free alongside ship (f.a.s.) value (see text, section 28) for all years; imports are f.a.s. value for 1980 and customs value for other years. Export data include both domestic and foreign; import data for general imports only. For details, see source]

ITEM	Unit	EXPORTS					IMPORTS				
		1980	1985	1990	1993	1994	1980	1985	1990	1993	1994
All methods ¹	Bil. dol.	220.7	213.1	393.0	464.9	512.4	240.8	345.3	495.3	580.5	663.4
Vessel	Bil. dol.	120.9	91.7	150.8	166.6	177.6	165.1	208.4	283.4	310.4	339.4
Air	Bil. dol.	46.1	52.3	110.5	135.1	150.3	28.0	51.3	90.9	119.7	143.0
Shipping weight: Vessel	Bil. kg.	363.7	317.7	372.4	349.5	334.5	443.1	361.5	496.3	531.0	586.9
Air	Bil. kg.	1.0	0.8	1.5	1.7	2	0.6	1.3	1.7	1.9	2.2

¹ Includes types other than vessel and air and revisions that are not distributed by method of transport.

Source: U.S. Bureau of the Census, *Highlights of U.S. Export and Import Trade*, through 1985, FT 990, monthly; thereafter, *U.S. Merchandise Trade: Selected Highlights*, FT-920, monthly.

No. 1082. Federal Expenditures for Civil Functions of the Corps of Engineers, United States Army: 1965 to 1993

[In millions of dollars. For fiscal years ending in year shown, see text, section 9. 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
1965	1,169	426	447	283	1986	3,163	1,345	1,300	402
1970	1,128	398	379	331	1987	2,937	1,135	1,272	411
1975	2,070	694	904	439	1988	3,086	1,271	1,271	423
1980	3,061	1,225	1,228	551	1989	3,252	1,395	1,253	462
1982	2,940	1,331	1,083	453	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

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. 1083. Freight Carried on Inland Waterways, by System: 1960 to 1989

[In billions of ton-miles. Excludes Alaska and Hawaii, except as noted. Includes waterways, canals, and connecting channels]

ITEM	1960	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
Total	220.3	318.6	406.9	351.2	359.0	399.0	381.7	392.6	410.7	438.2	448.7
Atlantic coast waterways	28.6	28.6	30.4	25.4	22.5	24.7	24.8	25.7	25.9	28.1	28.2
Gulf coast waterways	16.9	28.6	36.6	31.8	32.4	36.7	36.5	39.0	37.9	44.6	42.5
Pacific coast waterways ¹	6.0	8.4	14.9	12.8	13.2	20.5	19.9	20.8	22.8	24.5	24.0
Mississippi River system ²	69.3	138.5	228.9	218.0	223.0	234.6	224.7	239.3	251.6	257.8	268.1
Great Lakes System ³	99.5	114.5	96.0	63.2	67.9	82.5	75.8	67.9	72.5	83.1	85.8

¹ Includes Alaskan waterways. ² Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers. ³ Does not include traffic between foreign ports.

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

No. 1084. Waterborne Commerce, by Type of Commodity: 1980 to 1993

[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	1980		1985		1990		1993	
	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic
Net total	1,998.9	1,077.5	1,788.4	1,014.1	2,163.9	1,122.3	2,128.2	1,068.2
Petroleum products ¹	423.2	339.2	368.8	259.0	437.5	281.4	428.3	273.4
Gasoline	87.3	81.0	94.0	78.0	116.8	96.4	112.3	95.1
Distillate fuel oil	74.6	72.1	70.0	55.0	77.3	58.3	83.2	58.5
Residual fuel oil	188.0	141.3	130.0	83.7	145.1	90.4	123.1	81.3
Crude petroleum	480.2	174.2	357.7	194.7	485.7	176.2	505.6	147.4
Coal and lignite	256.4	164.1	273.9	179.9	333.7	222.5	292.3	209.5
Nonmetallic minerals ^{1 2}	157.1	111.6	150.7	108.5	167.5	119.0	167.3	116.7
Sand and gravel ³	65.1	60.8	66.4	62.0	62.8	57.4	65.4	56.1
Limestone	34.2	23.9	24.5	21.9	43.0	38.1	45.9	38.9
Phosphate rock	23.7	9.5	19.4	8.4	14.5	6.7	9.9	5.4
Iron and concentrates	98.4	64.9	72.7	50.0	86.1	62.8	82.2	60.7
Farm products ¹	216.8	63.4	172.8	60.0	215.5	78.7	208.1	75.3
Corn	98.6	30.8	76.3	29.0	96.1	39.6	78.8	35.3
Wheat	53.4	14.3	38.0	10.6	44.4	13.3	52.5	13.2
Soybeans	39.6	16.1	32.9	14.9	32.2	15.9	37.7	17.7
Chemicals and allied products	91.9	49.4	108.5	53.3	123.7	67.3	136.1	71.4
Food and kindred products	54.8	20.4	52.5	17.6	56.7	17.3	62.6	22.3
Lumber and wood products	52.0	22.7	47.2	18.8	57.9	22.4	49.9	20.3
Primary metal products	28.9	9.0	33.4	8.5	28.3	8.1	32.1	9.2
Waste and scrap	31.1	18.8	37.4	23.9	60.6	31.9	53.9	26.9
Other	108.1	39.8	112.8	40.0	110.7	35.7	109.8	35.1

¹ Includes categories not shown separately. ² Excludes fuels. ³ Includes crushed rock. ⁴ Excludes furniture.

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

No. 1085. Waterborne Imports and Exports, by Coastal District: 1980 to 1993

[Exports are free alongside ship (f.a.s.) value for all years; imports are f.a.s. value for 1980 and customs value for other years, see text, section 28. Includes commodities classified for security reasons as "Special Category" (exports only) and exports by Dept. of Defense (grant-aid shipments), and merchandise shipped in transit through the United States. See Appendix III]

DISTRICT	CARGO TONNAGE (mil. sh. tons)						VALUE (bil. dol.)					
	1980	1985	1990	1991	1992	1993	1980	1985	1990	1991	1992	1993
Imports:												
Atlantic	183	190	207	176	185	197	71.5	94.4	110.8	101.1	108.2	117.7
Gulf	243	141	225	217	232	267	56.4	32.8	41.0	36.4	36.3	38.7
Pacific	56	51	55	49	55	58	45.0	90.4	143.3	143.7	156.6	168.8
Great Lakes	16	17	16	13	14	16	1.9	2.8	7.6	8.4	9.2	10.3
Exports:												
Atlantic	117	93	101	107	102	83	51.0	35.2	62.4	70.1	78.2	75.4
Gulf	163	144	148	167	165	155	41.5	31.8	41.2	44.2	45.0	39.9
Pacific	78	81	100	102	101	96	25.2	25.8	53.7	56.6	60.4	59.9
Great Lakes	45	34	26	18	24	21	4.6	2.4	1.7	1.2	1.6	1.5

Source: U.S. Bureau of the Census, *U.S. Waterborne Exports and General Imports*, through 1985, FT 985, annual; thereafter TM 985, monthly.

No. 1086. Vessels Entered and Cleared in Foreign Trade, Net Registered Tonnage: 1966 to 1993

[In millions of net registered tons, except as indicated. Includes Puerto Rico and Virgin Islands. Seaports comprise all ports except Great Lakes ports. See also *Historical Statistics, Colonial Times to 1970*, series Q 507-517]

YEARLY AVERAGE OR YEAR	ALL PORTS				SEAPORTS					
	Number of ves-sels	Tonnage, all vessels			Tonnage, all vessels			Tonnage, with cargo		
		Total	U.S.	Foreign	Total	U.S.	Foreign	Total	U.S.	Foreign
Entered:										
1966-70	53,459	232	29	203	206	27	180	157	18	139
1971-75	53,760	319	30	290	292	28	264	220	24	196
1976-80	53,700	458	40	418	425	38	387	316	30	286
1981-85	50,124	452	57	395	424	55	369	277	36	241
1986-90	61,978	548	46	502	521	45	476	346	30	315
1970	53,293	254	26	226	227	24	202	171	19	152
1975	51,443	355	32	323	326	30	297	240	26	215
1980	53,645	492	52	440	460	50	410	310	34	276
1985	53,531	451	53	398	426	52	374	283	34	249
1989	64,946	587	44	543	558	42	516	367	31	335
1990	66,424	589	41	548	564	40	524	367	30	337
1991	57,254	516	39	476	494	38	455	311	28	283
1992	55,056	515	37	478	493	36	457	312	28	284
1993	54,834	515	35	480	493	33	460	329	26	303
Cleared:										
1966-70	52,415	232	30	202	206	27	179	122	23	99
1971-75	53,039	324	31	293	296	29	262	149	21	127
1976-80	52,931	453	41	412	420	38	382	203	26	177
1981-85	50,291	460	57	403	432	55	377	251	34	217
1986-90	60,249	551	47	504	524	46	478	284	31	253
1970	52,195	253	27	226	226	25	201	132	20	112
1975	51,017	363	34	329	334	31	303	168	23	144
1980	52,928	487	54	433	456	51	405	246	33	213
1985	53,095	461	45	406	435	53	382	253	36	217
1989	63,042	590	45	545	561	44	517	304	30	274
1990	63,648	592	43	550	566	41	525	304	29	275
1991	55,100	521	40	480	498	39	459	282	28	253
1992	54,127	519	38	481	496	37	460	276	28	248
1993	53,637	519	36	483	497	35	462	262	28	234

Source: U.S. Bureau of the Census, *Vessel Entrances and Clearances*, through 1989, FT 975, annual; thereafter TA 987, annual.

No. 1087. Domestic Merchant Vessels Completed by U.S. Shipyards: 1970 to 1992

[Vessels of 1,000 gross tons and over. See also *Historical Statistics, Colonial Times to 1970*, series Q 438-48]

TYPE	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988	1992
Merchant vessels	Number	13	15	10	13	5	8	5	4	4	1
Gross tons	1,000	342	452	375	376	118	172	215	153	153	32
Cargo	Number	6	3	6	6	-	4	2	3	3	1
Gross tons	1,000	120	65	105	228	-	113	66	58	58	32
Deadweight tons	1,000	134	71	114	219	-	97	53	63	63	29
Tankers	Number	7	12	4	7	5	4	3	1	1	-
Gross tons	1,000	222	387	270	148	118	59	149	95	95	-
Deadweight tons	1,000	427	742	354	277	210	92	271	209	209	-

- Represents zero.

Source: U.S. Maritime Administration, *New Ship Construction*, annual.

No. 1088. United States Flag Merchant Vessels: 1994

[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. See also Historical Statistics, Colonial Times to 1970, series Q 487-502]

VESSEL TYPE	NUMBER						DEADWEIGHT TONS (1,000)					
	Total	Passenger ¹	Cargo ²	Inter-coastal	Bulk carrier ³	Tanker ⁴	Total	Passenger ¹	Cargo ²	Inter-coastal	Bulk carrier ³	Tanker ⁴
Total	564	12	145	176	21	210	21,126	104	2,097	4,928	949	13,048
Active vessels.	359	7	30	132	20	170	16,358	56	494	3,896	886	11,026
Privately owned.	345	2	26	128	20	169	16,198	14	444	3,845	886	11,009
U.S. foreign trade.	134	-	18	68	17	31	5,479	-	282	2,355	803	2,039
Foreign-to-foreign.	28	-	1	10	1	16	1,753	-	15	299	37	1,402
Domestic trade.	134	2	-	24	2	106	7,727	14	-	520	46	7,147
Coastal.	62	-	-	1	2	59	2,235	-	-	14	46	2,175
Noncontiguous.	72	2	-	23	-	47	5,492	14	-	506	-	4,972
Military Sea Lift Command.	49	-	7	26	-	16	1,239	-	147	671	-	421
Government owned.	14	5	4	4	-	1	160	42	50	51	-	17
Ready reserve force.	3	1	2	-	-	-	37	9	28	-	-	-
Other Custody.	1	-	-	1	-	-	16	-	-	16	-	-
Other Reserve.	7	3	1	3	-	-	68	22	11	35	-	-
Non-Retention.	3	1	1	-	-	1	39	11	11	-	-	17
Inactive vessels.	205	5	115	44	1	40	4,768	48	1,603	1,032	63	2,022
Privately owned.	22	-	4	3	1	14	1,355	-	58	55	63	1,179
Temporarily inactive.	4	-	-	2	1	1	137	-	-	36	63	38
Laid-up.	16	-	4	1	-	11	1,150	-	58	19	-	1,073
Laid-up (MARAD Custody) ⁵	2	-	-	-	-	2	68	-	-	-	-	68
Government owned (MARAD Custody) ⁵	183	5	111	41	-	26	3,413	48	1,545	977	-	843
National defense reserve fleet.	147	1	82	41	-	23	2,958	10	1,213	977	-	758
Ready reserve fleet.	94	-	54	27	-	13	1,857	-	756	697	-	404
Other Reserve.	53	1	28	14	-	10	1,101	10	457	280	-	354
Nonretention ⁶	36	4	29	-	-	3	455	38	332	-	-	85

- Represents zero. ¹ Includes combination passenger and cargo vessels. ² General cargo. ³ Includes tug barges. ⁴ Includes tanker barges and liquefied natural gas vessels. ⁵ In the custody of the Maritime Administration. ⁶ Vessels not actively maintained.

Source: U.S. Maritime Administration, *Employment Report of the United States Flag Merchant Fleet Ocean-Going Vessels 1,000 Gross Tons and Over*, annual.

No. 1089. Private Shipyards—Summary: 1980 to 1993

[For calendar year, unless noted. See also *Historical Statistics, Colonial Times to 1970*, series Q 449-458 and series Q 467-472]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Employment ¹	1,000. . .	177.3	130.3	120.4	121.0	123.4	121.8	127.2	123.5	111.0
Production workers.	1,000. . .	141.8	99.0	90.8	90.9	88.6	86.4	95.5	93.3	84.3
Value of work done.	Mil. dol. .	9,269	9,358	8,531	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
On ships only.	Mil. dol. .	8,889	9,483	8,377	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Value added.	Mil. dol. .	5,338	5,740	5,227	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Building activity:										
Merchant vessels: ²										
Under construction ³	Number . .	69	10	6	-	-	-	3	3	1
Ordered.	Number . .	7	-	-	-	-	3	-	1	-
Delivered.	Number . .	23	3	4	-	-	-	-	3	-
Cancelled.	Number . .	4	-	2	-	-	-	-	-	-
Under contract ⁴	Number . .	49	7	-	-	-	3	3	1	1
Naval vessels: ²										
Under construction ³	Number . .	99	100	79	83	105	98	91	90	82
Ordered.	Number . .	11	11	20	32	16	8	13	10	12
Delivered.	Number . .	19	26	16	10	23	15	14	18	19
Under contract ^{4,5}	Number . .	91	85	83	105	98	91	90	82	73
Repairs/conversions:										
Commercial ships.	Mil. dol. .	1,335	852	806	202	279	373	380	226	292
Naval ships.	Mil. dol. .	1,134	2,311	1,930	1,238	1,091	1,119	993	526	573
Unfinished work: ³										
Commercial ships.	Mil. dol. .	2,070	450	53	-	-	-	99	32	42
Naval ships.	Mil. dol. .	7,107	12,091	8,265	10,500	16,010	15,450	14,151	12,286	(NA)

- 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 August 1993.

Source: Shipbuilders Council of America, Arlington, VA., *Annual Report*, through 1980; thereafter, unpublished data.

No. 1090. Employees in Government and Private Shipyards: 1960 to 1994

[In thousands. Annual average employment in establishments primarily engaged in building and repairing all types of ships, barges, canal boats, and lighters of 5 gross tons and over, whether propelled by sail or motor power or towed by other craft. Includes all full- and part-time employees]

YEAR	Total	Private yards	Navy yards	YEAR	Total	Private yards	Navy yards	YEAR	Total	Private yards	Navy yards
1960	208	112	96	1985	219	138	80	1990	198	130	68
1970	216	134	83	1986	206	131	75	1991	193	131	62
1975	217	154	65	1987	200	124	75	1992	183	124	59
1980	250	178	72	1988	197	124	73	1993	164	113	51
1984	229	146	83	1989	196	126	71	1994	150	107	43

Source: U.S. Bureau of Labor Statistics, Bulletin 2445; *Employment and Earnings*, monthly, March and June issues; and unpublished data.

No. 1091. Employment on U.S. Flag Merchant Vessels, 1970 to 1994, and Basic Monthly Wage Scale for Able-Bodied Seamen, 1970 to 1995

[Employment in thousands. See also *Historical Statistics, Colonial Times to 1970*, series Q 414-416]

YEAR	Employment ¹	YEAR	Employment ¹	YEAR	East coast wage rate ²	West coast wage rate ²	YEAR	East coast wage rate ²	West coast wage rate ²
1970	37.6	1989	9.9	1970	\$470	\$652	1990	\$1,505	\$2,218
1975	20.5	1990	11.1	1975	612	900	1991	1,581	2,329
1980	19.6	1991	11.7	1980	967	1,414	1992	1,655	2,438
1985	13.1	1992	9.2	1985	1,419	2,029	1993	1,721	2,438
1987	10.4	1993	9.3	1988	1,419	2,175	1994	1,790	2,536
1988	10.7	1994	9.1	1989	1,448	2,218	1995	1,853	2,536

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. 1092. Worldwide Tanker Casualties: 1975 to 1994

[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	1988	1989	1990	1991	1992	1993	1994
Casualties	Number	906	(NA)	340	456	528	541	507	396	314	270
Total losses	Number	22	15	12	3	8	10	10	11	9	11
Deaths	Number	90	132	53	63	74	119	205	86	26	88
Oil spills	Number	45	32	9	13	31	31	26	17	24	29
Amount	1,000 tons	188	136	80	178	188	61	439	152	120	110
Amount	Mil. gallons	58	42	25	55	58	19	136	47	37	33

NA Not available. ¹ Excludes losses due to hostilities.

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

No. 1093. Merchant Vessels—World and United States: 1960 to 1993

[Through 1992, as of mid-year; thereafter for year-end. For propelled sea-going merchant ships of not less than 100 gross tonnage. See also *Historical Statistics, Colonial Times to 1970*, series Q 473-480]

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)
1960	2,005	8,382	36,311	129,770	49	379	4,059	24,837
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
1989	1,593	13,236	76,100	410,481	10	4	6,375	20,588
1990	1,672	15,885	78,336	423,627	16	15	6,348	21,328
1991	1,574	16,095	80,030	436,027	17	9	6,222	20,291
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

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. 1094. Merchant Vessels—Ships and Tonnage Lost Worldwide: 1980 to 1993

[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	1985	1990	1992	1993	1980	1985	1990	1992	1993
Total ¹	387	307	188	213	219	1,804	1,651	1,126	1,223	778
Tankers	24	19	8	7	12	707	776	138	332	198
Ore/bulk carriers ²	21	22	15	13	7	458	405	687	576	160
General cargo	211	155	87	81	96	478	363	202	174	310
Container ships	2	5	-	4	1	6	41	-	40	5
Passenger ships ³	9	-	-	1	1	112	-	-	13	4
Fishing	96	66	50	77	74	30	26	20	31	39

- Represents zero. ¹ Includes types not shown separately. ² Includes ore/bulk/oil carriers. ³ Includes passenger cargo ships.

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

No. 1095. Merchant Fleets of the World: 1980 to 1993

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

YEAR AND COUNTRY OF REGISTRY, 1993	TOTAL		PASSENGER/CARGO COMB.		FREIGHTERS		BULK CARRIERS ¹		TANKERS	
	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)
1980, world total	24,867	13	468	24	14,242	14	4,798	10	5,359	12
United States	864	23	65	34	471	23	20	22	308	20
Foreign	24,003	13	403	22	13,771	13	4,778	10	5,051	11
1985, world total	25,555	14	375	25	13,937	15	5,787	11	5,456	13
United States	737	23	37	38	417	25	25	9	258	19
Foreign	24,818	14	338	23	13,520	15	5,762	11	5,198	13
1993, world total	24,331	(NA)	374	(NA)	12,685	(NA)	5,388	(NA)	5,884	(NA)
United States	564	(NA)	12	(NA)	321	(NA)	21	17	210	(NA)
Privately owned	367	20	2	44	161	18	21	17	183	22
Government owned	197	33	10	47	160	32	-	(NA)	27	36
Foreign	23,767	(NA)	362	(NA)	12,364	(NA)	5,367	(NA)	5,674	(NA)
Antigua and Barbuda	198	13	-	-	178	12	6	17	14	18
Bahamas	863	14	54	21	414	14	155	15	240	14
Brazil	212	16	1	33	59	18	66	14	86	16
Bulgaria	117	19	2	26	59	21	37	17	19	14
China: Mainland	1,311	18	28	22	788	19	307	18	188	17
Cyprus	1,373	17	13	30	635	16	565	18	160	16
Denmark (DIS) ²	306	9	-	-	208	9	12	8	86	9
Egypt	127	20	1	43	100	21	14	11	12	23
Germany	376	8	6	11	308	8	18	12	44	8
Greece	970	18	22	35	192	21	483	17	273	18
Honduras	233	27	4	31	189	27	10	25	30	25
Hong Kong	214	12	-	-	68	14	118	11	28	15
India	288	14	2	25	89	15	118	14	79	13
Indonesia	385	19	7	20	267	19	16	15	95	19
Iran	128	18	-	-	44	20	50	15	34	20
Italy	431	17	19	18	146	17	47	15	219	18
Japan	881	10	16	12	320	9	219	12	326	8
Latvia	114	19	-	-	72	20	-	-	42	17
Liberia	1,515	13	29	15	384	13	470	15	632	13
Malaysia	183	17	-	-	102	21	24	11	57	11
Malta	852	19	6	44	366	19	287	19	193	20
Netherlands	366	11	6	18	291	10	13	15	56	10
Norway (NIS) ²	665	14	14	13	199	16	156	13	296	13
Panama	3,323	15	31	28	1,794	15	745	14	753	13
Philippines	522	15	5	36	225	18	244	10	48	23
Poland	177	16	2	14	96	17	74	15	5	20
Romania	238	16	-	-	179	15	48	18	11	14
Russia	1,443	19	13	25	1,133	20	89	16	208	17
Saint Vincent	524	21	4	28	348	21	100	20	72	24
Singapore	526	14	-	-	229	16	93	11	204	14
South Korea	408	15	-	-	213	16	120	15	75	15
Spain	165	17	1	21	100	17	20	17	44	18
Sweden	152	16	4	9	79	15	9	21	60	16
Taiwan	206	12	-	-	134	14	55	9	17	8
Thailand	200	23	1	33	125	24	15	19	59	23
Turkey	380	18	4	44	195	16	124	18	57	21
Ukraine	448	19	14	24	348	20	55	16	31	14
United Kingdom	145	17	17	17	56	16	13	14	59	18
Vanuatu	122	13	-	-	58	13	53	14	11	14
All others	2,680	(NA)	36	(NA)	1574	(NA)	319	(NA)	751	(NA)

NA Not available. - Represents zero. ¹ Includes bulk/oil, ore/oil, and ore/bulk/oil carriers. ² 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.