

1. Report No.		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle FAA Statistical Handbook of Aviation				5. Report Date December 31, 1976	
				6. Performing Organization Code AMS-220	
7. Author(s) Charles Moles, Violet Wimbush				8. Performing Organization Report No.	
9. Performing Organization Name and Address Federal Aviation Administration Office of Management Systems 800 Independence Avenue SW Washington, D.C. 20591				10. Work Unit No. (TRAILS)	
				11. Contract or Grant No.	
12. Sponsoring Agency Name and Address Department of Transportation Federal Aviation Administration 800 Independence Avenue SW Washington, D.C. 20591				13. Type of Report and Period Covered Annual Calendar Year 1976	
				14. Sponsoring Agency Code FAA	
15. Supplementary Notes					
16. Abstract This report covers statistical data, including the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, U.S. Registered Aircraft, Aeronautical Production and Exports, Aircraft Accidents, and a Glossary of the terms used in this publication.					
17. Key Words Air carrier, airport, air traffic, airmen, aircraft accidents, general aviation, aircraft production.				18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22151	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 179	22. Price

AD A 054801

FAA STATISTICAL HANDBOOK OF AVIATION

CALENDAR YEAR 1976



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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**FAA Statistical Handbook
of
Aviation**

CALENDAR YEAR 1976



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**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

PREFACE

The FAA Statistical Handbook of Aviation is published annually by the Federal Aviation Administration. Its prime purpose is to serve as a convenient source for historical data, and to assist in evaluating progress. This edition contains data on major civil aviation activities for the period ended December 31, 1976.

This handbook should prove a valuable source of information for the Department of Transportation, operating offices of the FAA, the Civil Aeronautics Board, and other government agencies, as well as nongovernment organizations interested in aviation.

Chapter I deals with the Federal Aviation Administration and its functions. This section also includes a comparison of the agency's appropriations from fiscal years 1975 through 1978, and the agency's personnel complement for six-month intervals from June 30, 1967 to December 31, 1976.

National Airspace System data reflecting the workload of the FAA air traffic facilities--terminal and en route--are contained in Chapter II. This chapter contains air traffic activity reported by FAA-operated airport traffic control towers, air route traffic control centers, and domestic and international flight service stations.

Selected statistics concerning the Nation's airport facilities are presented in Chapter III by state within FAA regions. In addition to the total count of these facilities, this chapter includes statistics pertaining to the physical characteristics (paved vs. unpaved runways, lighted vs. unlighted runways, length of runways, etc.), size of population areas served, funds allocated for airport development, etc.

DISTRIBUTION: ZMS-348G;FAS-1, FFS-1,2,3,5,7, FAT-0 (One copy each)

Airport activity statistics comprising Chapter IV were prepared from data published in the calendar year 1976 edition of Airport Activity Statistics of The Certificated Route Air Carriers, issued jointly by the Civil Aeronautics Board and the Federal Aviation Administration. In addition, this chapter presents individual passenger and traffic activity data for some of the Nation's international airports.

The U.S. Civil Air Carrier Fleet, as of December 31, 1976, is described in detail in Chapter V. These statistics were developed from Monthly Aircraft/Engine Utilization Reports submitted by the air carrier operators. The aircraft population discussed here is not an inventory of the aircraft owned by the air carriers, but represents the aircraft actually used by the air carrier fleet during the last quarter of calendar year 1976.

U.S. Civil Air Carrier Operating Data--revenue passenger miles flown, available seat-miles and enplanements, revenue ton-miles flown, revenue aircraft miles flown, personnel, payroll, average salary, and operating revenues and expenses of the certificated route air carriers--are presented in Chapter VI. These statistics were obtained from schedules submitted by the certificated route air carriers to the Civil Aeronautics Board.

The Airmen data shown in Chapter VII were obtained from official airmen certification records maintained by the FAA Aeronautical Center at Oklahoma City, Oklahoma.

The data presented in Chapter VIII represent a count of the total registered U.S. civil fleet, including general aviation and air carrier. The number of registered general aviation aircraft was obtained from official aircraft registration records maintained by the FAA Aeronautical Center at Oklahoma City,

Oklahoma. Through 1969 general aviation statistics--primary use, hours flown, miles flown, etc.--were estimated from information received on Aircraft Use and Inspection Reports (FAA Form 2350). Beginning with 1970 the above data are estimated from the Registration Eligibility, Identification, and Activity Report (AC Form 8050-73).

Aeronautical Production and Exports are summarized in Chapter IX. This information was obtained from reports submitted to the U.S. Bureau of the Census by the manufacturers of civil aircraft, and the General Aviation Manufacturers Association's shipment reports.

Aircraft Accidents, both air carrier and general aviation, appear in Chapter X. Up to 1965, air carrier accident data were furnished by the Civil Aeronautics Board (CAB). Comparable data for 1965 to 1976, inclusive, were made available by the National Transportation Safety Board (NTSB). General aviation accident data from 1959 to 1965 were obtained from the CAB. The following two years data were collected by the NTSB. However, during 1957 and 1958, the CAB and the Civil Aeronautics Administration shared the responsibility for the investigation and analysis of general aviation accidents.

The FAA Statistical Handbook of Aviation is prepared by the Information Operations Branch, Information and Statistics Division, Office of Management Systems, with the cooperation of other FAA and DOT offices. Appreciation is expressed to the Civil Aeronautics Board, U.S. Bureau of the Census, U.S. Department of Labor, Interstate Commerce Commission, Immigration and Naturalization Service, and many municipalities and private organizations for their assistance.

Suggestions and comments on the scope and content of this handbook are requested, and will be given careful consideration in planning future editions.

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FAA REGIONAL BOUNDARIES

Including Locations of Regional Headquarters & Centers



XX

I. THE FEDERAL AVIATION ADMINISTRATION

The Department of Transportation Act of 1966 established a new executive department known as the Department of Transportation. The general welfare, economic growth, stability and security of the Nation pointed to the need for the development of national transportation policies and programs effectively utilizing the Nation's transportation resources. The Act provided for inclusion of the Federal Aviation Agency in the Department as the Federal Aviation Administration.

Directed by an Administrator, who is appointed by the President, by and with the advice and consent of the Senate, the FAA's primary function is fostering the development and safety of American aviation. More specifically, the FAA is responsible for: developing the major policies necessary to guide the long-range growth of civil aviation; modernizing the air traffic control system; establishing in a single authority the essential management functions necessary to support the common needs of civil and military operations; providing for the most effective and efficient use of the airspace over the United States; and for the rulemaking responsibilities relative to these functions.

The FAA constructs, operates, and maintains the National Airspace System and the facilities which are a part of the system: it allocates and regulates the use of the airspace; it ensures adequate separation between aircraft operating in controlled airspace; and, through research and development programs, it provides new systems and equipment for improving utilization of the Nation's airspace.

The Federal-Aid Airport Program (FAAP) authorized the FAA to make grants of Federal funds to sponsors for airport development and for advanced planning and engineering. Under FAAP, approximately \$1.2 billion was granted by FAA to airport sponsors for airport development purposes from 1947 through 1970. FAAP was superseded by the Airport Development Aid Program (ADAP), established by the Airport and Airway Development Act of 1970. The FAA maintains and operates Washington National and Dulles International airports. Dulles International is the first airport in the world specifically designed for the use of commercial jet transports.

The FAA prescribes and administers rules and regulations concerning airmen competency, aircraft airworthiness, and air traffic control. It promotes safety through certification of airmen, aircraft, and flight and aircraft maintenance schools. It reviews the design, structure, and performance of new aircraft to insure the safety of the flying public.

Services provided by FAA toward the development of aviation and air commerce include:

Dissemination of news and information on civil aviation, generally.

Publication of flight information data for pilots.

Technical aviation assistance to other governments, operation of overseas civil aviation missions, and the aviation training of foreign nationals.

Development of medical standards for airmen through aviation medical research.

Research and development in the field of aeronautics and electronics.

Other activities required to encourage and foster the world-wide development of civil aviation and air commerce.

Policies governing these programs are developed in the Washington headquarters of FAA. These policies are executed by field employees under the supervision of regional offices strategically located throughout the United States as well as at the National Aviation Facilities Experimental Center (NAFEC) in Atlantic City, New Jersey, and the Aeronautical Center in Oklahoma City, Oklahoma.

Table 1-1. FAA Appropriations: Fiscal Years 1975 through 1978

Appropriation	1975	1976	1976	1977	1978
Total	<u>\$2,078,259,750</u>	<u>\$1,928,064,000</u> r/	<u>\$888,615,000</u>	<u>\$2,599,150,000</u>	<u>\$2,679,536,000</u>
Operations	1,419,500,000	1,567,250,000 r/ 2/	410,600,000	1,487,800,000	1,527,700,000 5/
Operations (Airport and Airway Trust Fund)	-----	-----	-----	250,000,000	275,000,000
Facilities and Equipment (Airport and Trust Fund)	227,278,000	245,537,000	-----	200,000,000	200,000,000 6/
Grants-in-Aid for Airports (Airport and Airway Trust Fund)	339,950,000	2,800,000 r/	452,500,000	545,000,000 3/	555,000,000
Research, Engineering and Development (Airport and Airway Trust Fund)	57,900,000	67,500,000	17,900,000	74,350,000	80,800,000
Operation and Maintenance					
Metropolitan Washington Airports.	<u>16,310,000</u> 1/	<u>18,602,000</u> r/	<u>4,690,000</u>	<u>21,500,000</u>	<u>21,273,000</u>
Washington National Airport . . .	8,124,100	9,286,900 r/	2,318,000	10,954,100	10,817,800
Dulles International Airport . . .	8,185,900	9,316,000 r/	2,372,000	10,545,900	10,455,200
Construction					
Metropolitan Washington Airports.	5,500,500	11,625,000	-----	5,000,000	5,500,000
Facilities, Engineering, and Development	11,821,250	14,750,000 r/	2,925,000	15,500,000 4/	14,263,000 7/

r/ Revised.

- 1/ Does not reflect \$850,000 additional obligational authority transferred from other accounts.
- 2/ Does not reflect \$6,000,000 additional obligational authority transferred from other accounts.
- 3/ Includes \$35,000,000 additional obligational authority made available by the Economic Stimulus Act, P.L. 95-29.
- 4/ Does not reflect \$1,900,000 additional obligational authority transferred from other accounts.
- 5/ Does not reflect \$5,600,000 additional obligational authority transferred from other accounts.
- 6/ Does not reflect \$9,000,000 additional obligational authority transferred from other accounts.
- 7/ Does not reflect \$2,350,000 additional obligational authority transferred from other accounts.

Table 1-2. FAA Employees On June 30 and December 31: 1967 through 1976 ^{1/}

Date	Total Employees	Washington Headquarters ^{2/}			Other Field
		Total	Washington Stationed	Washington Field	
June 30, 1967.	44,328	3,946	2,989	957	40,382
December 31, 1967.	44,621	3,859	2,923	936	40,762
June 30, 1968.	46,825	4,039	3,052	987	42,786
December 31, 1968.	46,272	3,775	2,831	944	42,497
June 30, 1969.	49,106	3,858	2,896	962	45,248
December 31, 1969.	48,331	3,774	2,855	919	44,557
June 30, 1970.	51,477	3,808	2,838	970	47,669
December 31, 1970.	53,125	3,917	2,944	973	49,208
June 30, 1971.	54,550	3,807	2,887	920	50,743
December 31, 1971.	54,258	3,862	2,951	911	50,396
June 30, 1972.	53,330	3,648	2,757	891	49,682
December 31, 1972.	52,528	3,598	2,687	911	48,930
June 30, 1973.	53,533	3,594	2,713	881	49,939
December 31, 1973.	53,068	3,625	2,704	921	49,443
June 30, 1974.	55,971	3,981	2,940	1,041	51,990
December 31, 1974.	55,259	3,873	2,863	1,010	51,386
June 30, 1975.	57,708	3,930	2,956	974	53,778
December 31, 1975.	56,761	3,839	2,908	931	52,922
June 30, 1976.	59,093	4,064	3,106	958	55,029
December 31, 1976.	57,820	4,027	3,052	975	53,793

^{1/} Includes all paid civilian employees (full-time, part-time, and intermittent), and military personnel assigned on a reimbursable basis.

^{2/} Washington stationed includes only those employees on the Washington headquarters rolls whose duty station is the District of Columbia. Washington field includes those employees on the Washington headquarters rolls whose duty stations are outside the District of Columbia, such as Washington National Airport, Dulles International Airport, overseas Civil Aviation Assistance Groups, inspectors stationed at equipment manufacturers' plants, etc.

II. THE NATIONAL AIRSPACE SYSTEM

Air traffic activity as discussed in this chapter represents a workload handled by FAA facilities only (towers, air route traffic control centers, and domestic and international flight service stations). Data for towers are reported on FAA Form 7230-11 (Airport Operations and Instrument Approaches Monthly Summary). This form contains landings and takeoffs (aircraft operations) reported by the towers by aviation category--air carriers, air taxi, general aviation, and military; instrument operations (IFR landings and takeoffs) and instrument approaches (IFR landings) are also included. Data for Air Route Traffic Control Centers (ARTCC's) are reported on FAA Form 7230-12 (ARTCC Operations and Instrument Approaches Monthly Summary). Data contained on this form show departures, overs, and aircraft handled, plus instrument approaches handled by the ARTCC's.

Activity of flight service stations, international flight service stations and combined station/towers is submitted on FAA Form 7230-13 (Monthly Activity Record--Flight Service Stations). More detailed data pertaining to activity of these facilities may be found in the calendar year 1976 edition of FAA Air Traffic Activity.

Table 2-1. U.S. Air Route Airway Mileage: 1967 through 1976 ^{1/}

(Contiguous 48 States)

December 31	Low Frequency ^{2/}	Very High Frequency VOR/VORTAC		
		Low Altitude		Jet Routes
		Direct	Alternate	
1967	388	133,177	30,151	95,944
1968	322	137,112	31,359	103,708
1969	155	138,295	32,356	108,171
1970	94	140,268	33,215	112,662
1971	94	142,093	33,274	114,373
1972	94	143,241	33,436	117,417
1973	94	144,578	32,999	119,672
1974	94	144,939	32,999	122,372
1975	---	148,834	32,320	123,258
1976	---	150,172	31,888	130,160

^{1/} Mileage shown in nautical miles based on National Ocean Survey figures.
^{2/} Low frequency activity decommissioned.

Table 2-2. FAA Air Route Facilities and Services: 1967 through 1976

Year Ending December 31	L/MF Radio Ranges ^{1/}	VOR VORTAC	Nondirectional Radio Beacons	Airways Centers	Airport Towers	Combined* Station/Towers	Flight Service Stations	International Flight Service Stations	Instrument Landing Systems	Precision Approach Radar ^{7/}	Airport Surveillance Radar
1967	34	950	491	28	255	58	330	12	264	44	117
1968	29	952	538	27	271	51	329	12	279	27	155
1969	28	947	589	27	281	48	332	8	288	28	124
1970	27	964	640	27	288	46	332	8	310	---	120
1971	25	980	669	27	347	44	331	8	337	---	122
1972	25	991	706	27	355	42	324	7	403	---	125
1973	16	995	739	27	403	29	315	7	467	---	142
1974	---	1,000	793	27	417	21	320	7	490	---	156
1975	---	1,011	848	26	487	21	321	7	580	---	177
1976	---	1,020 ^{2/}	920 ^{3/}	25 ^{4/}	488 ^{5/}	16	321	7	640 ^{6/}	---	175 ^{8/}

^{1/} All L/MF radio ranges decommissioned.
^{2/} Includes 65 nonfederal and 49 military.
^{3/} Includes 560 nonfederal and 64 military.
^{4/} Includes 2 CERAP's.
^{5/} Includes 28 nonfederal and 45 military.
^{6/} Includes 5 LOA's, 44 nonfederal, and 6 military.
^{7/} All FAA PAR's decommissioned.
^{8/} Includes 28 military.

Table 2-3. Air Traffic Activity At Air Route Traffic Control Centers.
By Aviation Category: Calendar Years 1972 through 1976

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>IFR Aircraft Handled</u> ^{1/}	1976	24,219,751	+3	12,597,933	+3	1,418,241	+1	6,069,901	+6	4,133,676	-3
	1975	23,617,503	+2	12,250,822	(*)	1,403,921	+17	5,708,531	+7	4,254,229	-3
	1974	23,145,079	-1	12,261,071	-4	1,197,894	+23	5,321,901	+8	4,364,213	-6
	1973	23,348,832	+6	12,823,227	+4	976,334	+19	4,920,964	+16	4,628,307	-1
	1972	22,062,529	+2	12,316,169	-3	819,702	0	4,241,374	(*)	4,685,284	-2
<u>IFR Departures</u>	1976	9,516,600	+2	4,682,226	+2	675,650	(*)	2,633,793	+6	1,524,931	-2
	1975	9,285,021	+2	4,567,499	-1	674,148	+18	2,483,035	+8	1,560,339	-3
	1974	9,094,621	(*)	4,600,782	-4	573,226	+23	2,309,138	+9	1,611,475	-7
	1973	9,096,669	+7	4,774,578	+4	466,971	+19	2,121,822	+16	1,733,298	+1
	1972	8,528,252	+3	4,592,932	-3	393,818	0	1,828,310	-1	1,713,192	+2
<u>IFR Overs</u>	1976	5,186,551	+3	3,233,481	+4	66,941	+20	802,315	+8	1,083,814	-4
	1975	5,047,461	+2	3,115,824	+2	55,625	+8	742,461	+6	1,133,551	-1
	1974	4,955,837	-4	3,059,507	-7	51,442	+21	703,625	+4	1,141,263	-2
	1973	5,155,494	+3	3,274,071	+5	42,392	+32	677,320	+16	1,161,711	+8
	1972	5,006,025	-2	3,130,305	-1	32,066	0	584,754	+6	1,258,900	-11

^{1/} The number of IFR Departures multiplied by two, plus the number of IFR Overs.
(*) Less than 0.5 percent.

Table 2-4. Air Traffic Activity At Airport Traffic Control Towers,
By Aviation Category: Calendar Years 1972 through 1976

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>Total Aircraft Operations</u>	1976	63,974,621	+7	9,574,172	+4	2,976,957	+8	48,793,365	+8	2,630,127	-2
	1975	59,962,468	+4	9,223,556	(*)	2,752,346	+7	45,297,055	+5	2,689,511	-3
	1974	57,687,516	+2	9,202,726	-7	2,582,218	+16	43,123,407	+4	2,779,165	-9
	1973	56,553,953	+6	9,922,044	+2	2,227,945	+9	41,363,042	+8	3,040,922	-9
	1972	53,255,919	-1	9,698,397	-1	2,042,068	0	38,171,922	-5	3,343,532	-5
<u>Itinerant Operations</u>	1976	40,759,763	+7	9,574,172	+4	2,976,957	+8	26,969,787	+9	1,238,847	-3
	1975	38,041,040	+3	9,223,556	(*)	2,752,346	+7	24,780,323	+4	1,284,815	-1
	1974	36,862,527	+3	9,202,726	-7	2,582,218	+16	23,775,884	+8	1,301,699	-8
	1973	35,626,170	+6	9,922,044	+2	2,227,945	+9	22,059,876	+9	1,416,305	-5
	1972	33,545,414	+1	9,698,397	-1	2,042,068	0	20,316,735	-8	1,488,214	(*)
<u>Local Operations</u>	1976	23,214,858	+6	0	0	0	0	21,823,578	+6	1,391,280	-1
	1975	21,921,428	+5	0	0	0	0	20,516,732	+6	1,404,696	-5
	1974	20,824,989	(*)	0	0	0	0	19,347,523	(*)	1,477,466	-9
	1973	20,927,783	+3	0	0	0	0	19,303,166	+8	1,624,617	-12
	1972	19,710,505	-2	0	0	0	0	17,855,187	-2	1,855,318	-8

(*) Less than 0.5 percent.

Table 2-5. Air Traffic Activity At FAA Facilities,
By Aviation Category: Calendar Years 1972 through 1976

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>Total Instrument Operations</u>	1976	29,347,757	+10	9,781,930	+5	2,268,518	+14	13,654,063	+17	3,643,246	-4
	1975	27,784,435	+7	9,352,645	(*)	1,993,817	+19	11,642,927	+17	3,795,016	-6
	1974	25,016,487	+4	9,373,988	-5	1,674,261	+30	9,928,979	+15	4,039,259	-4
	1973	24,001,342	+17	9,896,752	+4	1,289,311	+31	8,624,596	+44	4,190,683	+3
	1972	20,586,111	+13	9,561,559	+1	986,687	0	5,986,107	+16	4,051,758	+11
<u>Total Instrument Approaches 1/</u>	1976	1,641,997	-12	638,315	-17	172,739	-11	726,485	-5	104,458	-17
	1975	1,858,522	+2	772,817	-1	194,832	+9	765,686	+2	125,187	+3
	1974	1,828,431	-1	780,881	-9	178,480	+9	747,131	+6	121,939	-5
	1973	1,854,847	+2	855,952	-5	163,821	+13	706,845	+11	128,229	-6
	1972	1,815,486	+14	897,608	+9	145,000	0	636,484	+2	136,394	-10
<u>Total Instrument Approaches at Control Facilities</u>	1976	1,500,964	-10	608,876	-16	154,654	-7	638,565	-4	98,869	-15
	1975	1,676,825	+1	729,165	-1	166,414	+9	665,450	+2	115,796	+3
	1974	1,654,287	-3	734,165	-10	152,650	+7	655,060	+4	112,412	-6
	1973	1,705,423	+2	812,068	-5	142,245	+12	631,410	+11	119,700	-5
	1972	1,673,814	+12	852,012	+9	126,875	0	569,442	(*)	125,485	-13

1/ Includes instrument approaches at Air Route Traffic Control Centers.
(*) Less than 0.5 percent.

Table 2-6. Air Traffic Activity at Flight Service Facilities: Calendar Years 1972 through 1976

Facility	Year	Flight Services 1/		Flight Plans Originated					Airport Advisories		Pilot Briefs		
		Total	Annual Change	Total	Annual Change	1FR+DVFR	Annual Change	VFR	Annual Change	Total	Annual Change	Total	Annual Change
<u>Flight Service Stations</u>													
	1976	58,013,565	+1	8,115,791	+3	5,419,205	+3	2,696,586	+3	2,958,496	+2	16,047,038	-1
	1975	57,538,481	+1	7,895,278	+1	5,273,343	+4	2,621,935	-5	2,908,655	-6	16,141,476	+3
	1974	56,941,994	+4	7,827,924	+4	5,054,913	+6	2,773,011	(*)	3,082,847	-1	15,643,549	+5
	1973	54,566,536	+7	7,531,344	+12	4,768,553	+16	2,762,791	+4	3,127,472	+2	14,831,599	+7
	1972	50,861,573	+6	6,744,993	+9	4,093,261	+15	2,651,732	+1	3,075,711	-5	13,883,836	+7
<u>Combined Station/Towers</u>													
	1976	580,488	+2	93,047	-1	31,243	-9	61,804	+3	0	0	89,171	(*)
	1975	566,639	-3	94,117	-2	34,278	-5	59,839	-1	0	0	89,107	-2
	1974	582,363	-28	96,246	-24	36,083	-18	60,163	-27	0	0	90,876	-31
	1973	812,382	-21	126,408	-15	44,268	-24	82,140	-9	0	0	132,276	-29
	1972	1,027,536	-15	149,175	-20	58,484	-34	90,691	-8	0	0	185,708	-16
<u>International Flight Service Stations</u>													
	1976	1,883,200	+3	379,745	+4	150,912	+16	228,833	-3	1,327	+22	339,361	(*)
	1975	1,835,077	+1	366,399	+1	129,890	-3	236,509	+2	1,090	-14	339,199	-4
	1974	1,821,409	-1	364,379	-8	133,547	-21	230,832	+2	1,271	+10	351,717	(*)
	1973	1,840,532	-19	396,175	-34	169,208	-49	226,967	-18	1,156	+141	352,753	+5
	1972	2,276,172	(*)	604,406	+4	329,222	+2	275,184	+7	479	-91	335,430	-2

1/ The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted. No credit is allowed for airport advisories.

(*) Less than 0.5 percent.

Table 2-7. Aircraft Contacted At Flight Service Facilities.
By Aviation Category: Calendar Years 1972 through 1976

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>Flight Service Stations</u>	1976	9,687,906	+2	360,250	-9	731,794	+3	8,040,198	+4	555,664	-7
	1975	9,464,973	-5	396,352	-6	710,209	+4	7,760,348	-5	598,064	-20
	1974	9,999,048	+2	423,901	-11	683,194	+8	8,142,136	+4	749,817	-16
	1973	9,840,650	+2	478,743	-2	632,133	-6	7,832,628	(*)	897,146	+34
	1972	9,603,915	+1	488,079	-13	668,278	0	7,777,587	-6	669,971	+8
<u>IFR-DVFR</u>	1976	1,488,946	-7	282,561	-11	154,957	-10	853,656	-4	197,772	-10
	1975	1,603,653	+3	319,247	-8	171,504	+14	893,794	+6	219,108	+1
	1974	1,558,224	+5	345,136	+12	149,942	+1	846,979	+5	216,167	-3
	1973	1,485,544	+3	307,148	+1	149,184	-22	805,817	+12	223,395	-2
	1972	1,448,340	+11	305,588	-10	192,138	0	722,210	-4	228,404	+7
<u>VFR</u>	1976	8,198,960	+4	77,689	+1	576,837	+7	7,186,542	+5	357,892	-6
	1975	7,861,320	-7	77,105	-2	538,705	+1	6,866,554	-6	378,956	-29
	1974	8,440,824	+1	78,765	-54	533,252	+10	7,295,157	+4	533,650	-21
	1973	8,355,106	+2	171,595	-6	482,949	+1	7,026,811	(*)	673,751	+53
	1972	8,155,575	-1	182,491	-19	476,140	0	7,055,377	-7	441,567	+9

(*) Less than 0.5 percent.

Table 2-7. Aircraft Contacted At Flight Service Facilities,
By Aviation Category: Calendar Years 1972 through 1976 (Continued)

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>International Flight Service Stations</u>	1976	444,988	+5	101,032	+36	124,223	-1	205,964	-2	13,769	-4
	1975	423,881	+9	74,212	+1	125,152	-2	210,118	+21	14,399	+1
	1974	389,217	+14	73,761	+37	128,085	-1	173,183	+19	14,188	+2
	1973	342,676	-14	53,846	-34	128,987	-12	145,887	-3	13,956	-15
	1972	396,500	-11	82,018	-50	146,992	0	151,029	-36	16,461	-62
<u>IFR-DVFR</u>	1976	123,494	+30	99,477	+36	3,372	-4	16,552	+16	4,093	-6
	1975	95,112	+4	73,027	+1	3,524	+3	14,228	+28	4,333	-8
	1974	91,292	+38	72,055	+44	3,411	+19	11,130	+29	4,696	+7
	1973	65,969	-35	50,098	-36	2,876	-9	8,623	-32	4,372	-44
	1972	101,943	-41	78,407	-31	3,152	0	12,606	-45	7,778	-78
<u>VFR</u>	1976	321,494	-2	1,555	+31	120,851	-1	189,412	-3	9,676	-4
	1975	328,769	+10	1,185	-31	121,628	-2	195,890	+21	10,066	+6
	1974	297,925	+8	1,706	-54	124,674	-1	162,053	+18	9,492	-1
	1973	276,707	-6	3,748	+4	126,111	-12	137,264	-1	9,584	+10
	1972	294,557	+9	3,611	-93	143,840	0	138,423	-35	8,683	+23

Table 2-7. Aircraft Contacted At Flight Service Facilities,
By Aviation Category: Calendar Years 1972 through 1976 (Continued)

Workload Measure	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>Combined Station/ Towers</u>	1976	216,052	+8	5,852	+119	62,409	+30	134,751	(*)	13,040	-15
	1975	200,191	-4	2,666	+50	47,918	+39	134,245	-13	15,362	-12
	1974	208,119	-29	1,775	-60	34,597	-5	154,282	-31	17,465	-43
	1973	295,014	-18	4,397	+19	36,275	+2	223,562	-21	30,780	-10
	1972	357,770	-10	3,689	-38	35,418	0	284,465	-20	34,198	-7
<u>IFR-OVFR</u>	1976	20,820	+34	5,294	+113	4,085	+159	7,812	-1	3,629	+3
	1975	15,483	+1	2,487	+52	1,579	+210	7,903	-11	3,514	-19
	1974	15,384	-31	1,633	-48	510	-39	8,900	-25	4,341	-32
	1973	22,250	-18	3,117	-5	839	-45	11,891	-19	6,403	-17
	1972	27,183	-14	3,282	-16	1,525	0	14,688	-19	7,688	-18
<u>VFR</u>	1976	195,232	+7	558	+212	58,324	+26	126,939	(*)	9,411	-21
	1975	184,708	-4	179	+26	46,339	+36	126,342	-13	11,848	-10
	1974	192,735	-29	142	-89	34,087	-4	145,382	-31	13,124	-46
	1973	272,764	-17	1,280	+214	35,436	+5	211,671	-21	24,377	-8
	1972	330,587	-10	407	-80	33,893	0	269,777	-20	26,510	-3

(*) Less than 0.5 percent.

III. AIRPORTS

Data pertaining to U.S. civil and joint-use landing facilities (including airports, heliports, stolports, and seaplane bases) were furnished by the FAA Airports Service. This information was obtained through physical inspection and mail solicitations, and was reported on the Airport Master Record (Form FAA 5010-1) and FAA Landing Facilities Information Request on Airports, Heliports, Stolports, and Seaplane Bases (Forms 5010-2 and 5010-5).

Table 3-1. Airports on Record with FAA: 1967 through 1976 ^{1/}

Year	Total	With Runway Lights	With Paved Runways	Airports of Entry
1967. . . .	10,126	3,149	3,109	64
1968. . . .	10,470	3,312	3,353	64
1969. . . .	11,050	3,430	3,650	63
1970. . . .	11,261	3,554	3,805	61
1971. . . .	12,070	3,759	4,176	64
1972. . . .	12,405	3,827	4,390	63
1973. . . .	12,700	3,880	4,527	60
1974. . . .	13,062	3,999	4,716	61
1975. . . .	13,251	4,171	4,865	62
1976. . . .	13,770	4,362	5,106	76

^{1/} Includes seaplane bases, heliports, stolports, and military fields having joint civil-military use.

Table 3-2. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases, and Reported Abandonments On Record, by FAA Region and State: December 31, 1976

FAA Region and State	Total Airport Facilities ^{1/}	Type of Facility				Reported Abandonments During Year
		Airports	Heliports	Stolports	Seaplane Bases	
Total	<u>13,770</u>	<u>11,555</u>	<u>1,674</u>	<u>41</u>	<u>500</u>	<u>296</u>
United States--total ^{2/} .	<u>13,728</u>	<u>11,524</u>	<u>1,666</u>	<u>41</u>	<u>497</u>	<u>294</u>
New England--total	<u>547</u>	<u>362</u>	<u>111</u>	<u>8</u>	<u>66</u>	<u>19</u>
Connecticut	104	56	41	1	6	2
Maine	162	114	6	2	40	5
Massachusetts	141	84	41	4	12	5
New Hampshire	57	44	7	---	6	4
Rhode Island	22	15	6	---	1	---
Vermont	61	49	10	1	1	3
Eastern--total	<u>1,860</u>	<u>1,421</u>	<u>369</u>	<u>7</u>	<u>63</u>	<u>37</u>
Delaware	32	23	9	---	---	1
District of Columbia	16	2	13	---	1	2
Maryland	135	101	29	3	2	5
New Jersey	239	130	98	---	11	2
New York	496	385	80	1	30	8
Pennsylvania	644	517	109	2	16	12
Virginia	240	209	27	1	3	7
West Virginia	58	54	4	---	---	---
Great Lakes--total	<u>2,772</u>	<u>2,435</u>	<u>249</u>	<u>2</u>	<u>86</u>	<u>45</u>
Illinois	867	734	123	---	10	11
Indiana	293	267	26	---	---	2
Michigan	421	396	15	---	10	8
Minnesota	312	261	7	---	44	9
Ohio	558	482	69	2	5	12
Wisconsin	321	295	9	---	17	3
Central--total	<u>1,243</u>	<u>1,180</u>	<u>53</u>	<u>3</u>	<u>7</u>	<u>35</u>
Iowa	250	240	8	1	1	5
Kansas	334	325	7	1	1	8
Missouri	358	328	24	1	5	12
Nebraska	301	287	14	---	---	10
Southern--total	<u>1,555</u>	<u>1,388</u>	<u>141</u>	<u>4</u>	<u>22</u>	<u>30</u>
Alabama	131	128	3	---	---	2
Florida	391	309	56	1	15	12
Georgia	262	232	28	2	---	2
Kentucky	90	86	4	---	---	1
Mississippi	148	145	3	---	---	3
North Carolina	251	238	11	---	2	4
Puerto Rico	23	14	8	---	1	2
South Carolina	123	113	10	---	---	2
Tennessee	132	121	8	1	2	2
Virgin Islands	4	2	---	---	2	---

Table 3-2. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases, and Reported Abandonments On Record, by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Total Airport Facilities ^{1/}	Type of Facility				Reported Abandonments During Year
		Airports	Heliports	Stolports	Seaplane Bases	
Southwest--total	<u>2,087</u>	<u>1,841</u>	<u>218</u>	<u>1</u>	<u>27</u>	<u>53</u>
Arkansas	166	164	---	---	2	1
Louisiana	280	176	84	---	20	9
New Mexico	139	132	7	---	---	---
Oklahoma	285	273	11	---	1	4
Texas	1,217	1,096	116	1	4	39
Rocky Mountain--total	<u>947</u>	<u>857</u>	<u>85</u>	<u>3</u>	<u>2</u>	<u>12</u>
Colorado	255	190	62	2	1	6
Montana	172	167	5	---	---	---
North Dakota	209	207	2	---	---	2
South Dakota	131	128	3	---	---	---
Utah	90	79	9	1	1	4
Wyoming	90	86	4	---	---	---
Western--total	<u>1,124</u>	<u>842</u>	<u>263</u>	<u>6</u>	<u>13</u>	<u>23</u>
Arizona	202	180	20	2	---	3
California	804	563	225	3	13	20
Nevada	118	99	18	1	---	---
Northwest--total	<u>807</u>	<u>654</u>	<u>130</u>	<u>7</u>	<u>16</u>	<u>19</u>
Idaho	187	170	12	2	3	3
Oregon	286	234	46	4	2	5
Washington	334	250	72	1	11	11
Alaskan--total	<u>762</u>	<u>518</u>	<u>46</u>	<u>---</u>	<u>198</u>	<u>21</u>
Pacific--total	<u>66</u>	<u>57</u>	<u>9</u>	<u>---</u>	<u>---</u>	<u>2</u>
Hawaii	51	42	9	---	---	2
South Pacific ^{3/}	15	15	---	---	---	---

^{1/} Includes U.S. civil and joint-use airports, heliports, stolports, and seaplane bases.

^{2/} Excludes Puerto Rico, Virgin Islands, and South Pacific.

^{3/} American Samoa, Guam, and Trust Territory.

Table 3-3. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases on Record by Type of Ownership and Landing Facilities, by FAA Region and State: December 31, 1976

FAA Region and State	Total Facilities 1/	By Ownership		Paved Airports				Unpaved Airports				Paved Airports		Unpaved Airports	
		Public	Private	Lighted		Not Lighted		Lighted		Not Lighted		Lighted	Not Lighted	Lighted	Not Lighted
Total	<u>13,770</u>	<u>4,667</u>	<u>9,103</u>									<u>3,449</u>	<u>1,657</u>	<u>913</u>	<u>7,751</u>
United States--total 2/ . . .	<u>13,728</u>	<u>4,639</u>	<u>9,089</u>									<u>3,432</u>	<u>1,645</u>	<u>913</u>	<u>7,738</u>
New England--total	<u>547</u>	<u>140</u>	<u>407</u>									<u>125</u>	<u>104</u>	<u>10</u>	<u>308</u>
Connecticut	104	15	89	10	16	2	28	---	1	3	44	26	30	1	47
Maine	162	50	112	26	---	9	6	1	3	14	103	26	15	4	117
Massachusetts	141	30	111	25	15	4	31	---	1	1	64	40	35	1	65
New Hampshire	57	16	41	11	4	2	11	---	3	3	23	15	13	3	26
Rhode Island	22	8	14	6	1	1	4	---	1	1	8	7	5	1	9
Vermont	61	21	40	10	1	1	5	---	---	10	34	11	6	---	44
Eastern--total	<u>1,860</u>	<u>291</u>	<u>1,569</u>									<u>375</u>	<u>236</u>	<u>111</u>	<u>1,138</u>
Delaware	32	3	29	2	4	---	4	---	10	1	11	6	4	10	12
District of Columbia	16	7	9	3	1	4	3	---	---	---	5	4	7	---	5
Maryland	135	25	110	13	20	10	15	---	9	2	66	33	25	9	68
New Jersey	239	31	208	13	28	8	33	---	11	10	136	41	41	11	146
New York	496	69	427	52	42	10	58	---	37	7	290	94	68	37	297
Pennsylvania	644	76	568	58	46	5	54	2	33	11	435	104	59	35	446
Virginia	240	55	185	48	19	3	19	---	8	4	139	67	22	8	143
West Virginia	58	25	33	22	4	2	8	---	1	1	20	26	10	1	21
Great Lakes--total	<u>2,772</u>	<u>662</u>	<u>2,110</u>									<u>593</u>	<u>164</u>	<u>253</u>	<u>1,762</u>
Illinois	867	97	770	65	36	9	54	2	54	21	626	101	63	56	647
Indiana	293	67	226	58	26	1	16	3	29	5	155	84	17	32	160
Michigan	421	132	289	87	21	7	12	7	38	31	218	108	19	45	249
Minnesota	312	141	171	74	2	1	5	30	11	36	153	76	6	41	189
Ohio	558	121	437	90	40	16	31	1	53	14	313	130	47	54	327
Wisconsin	321	104	217	71	23	3	9	12	13	18	172	94	12	25	190

Table 3-3. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases on Record by Type of Ownership and Landing Facilities, by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Total Facilities <u>1/</u>	By Ownership		Paved Airports				Unpaved Airports				Paved Airports		Unpaved Airports	
		Public	Private	Lighted		Not Lighted		Lighted		Not Lighted		Lighted	Not Lighted	Lighted	Not Lighted
Central--total	<u>1,243</u>	<u>446</u>	<u>797</u>									<u>358</u>	<u>61</u>	<u>144</u>	<u>680</u>
Iowa	250	115	135	88	4	---	6	20	28	7	97	92	6	48	104
Kansas	334	123	211	76	14	8	8	26	17	13	172	90	16	43	185
Missouri	358	115	243	85	27	8	17	12	17	10	182	112	25	29	192
Nebraska	301	93	208	56	8	2	12	17	7	18	181	64	14	24	199
Southern--total	<u>1,555</u>	<u>683</u>	<u>872</u>									<u>611</u>	<u>182</u>	<u>91</u>	<u>671</u>
Alabama	131	92	39	78	6	11	4	---	4	3	25	84	15	4	28
Florida	391	121	270	85	21	16	41	7	18	13	190	106	57	25	203
Georgia	262	114	148	97	7	10	19	---	8	7	114	104	29	8	121
Kentucky	90	51	39	37	3	11	6	---	6	3	24	40	17	6	27
Mississippi	148	78	70	56	5	17	4	---	8	5	53	61	21	8	58
North Carolina	251	72	179	55	21	7	9	2	19	8	130	76	16	21	138
Puerto Rico	23	12	11	9	1	3	6	---	---	---	4	10	9	---	4
South Carolina	123	63	60	50	2	2	6	6	9	5	43	52	8	15	48
Tennessee	132	77	55	70	6	6	4	---	4	1	41	76	10	4	42
Virgin Islands	4	3	1	2	---	---	---	---	---	1	1	2	---	---	2
Southwest--total	<u>2,087</u>	<u>630</u>	<u>1,457</u>									<u>595</u>	<u>301</u>	<u>65</u>	<u>1,126</u>
Arkansas	166	77	89	59	5	9	7	---	7	9	70	64	16	7	79
Louisiana	280	71	209	54	10	8	33	1	10	8	156	64	41	11	164
New Mexico	139	63	76	33	7	9	14	1	1	20	54	40	23	2	74
Oklahoma	285	127	158	101	11	11	14	3	9	12	124	112	25	12	136
Texas	1,217	292	925	231	84	37	159	3	30	21	652	315	196	33	673

Table 3-3. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases on Record by Type of Ownership and Landing Facilities, by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Total Facilities ^{1/}	By Ownership		Paved Airports				Unpaved Airports				Paved Airports		Unpaved Airports	
		Public	Private	Lighted		Not Lighted		Lighted		Not Lighted		Lighted	Not Lighted	Lighted	Not Lighted
Rocky Mountain--total	<u>947</u>	<u>459</u>	<u>488</u>									<u>259</u>	<u>93</u>	<u>75</u>	<u>520</u>
Colorado	255	80	175	48	11	15	30	2	6	15	128	59	45	8	143
Montana	172	115	57	58	1	6	3	10	3	41	50	59	9	13	91
North Dakota	209	93	116	41	1	5	4	16	7	31	104	42	9	23	135
South Dakota	131	74	57	35	2	2	3	18	10	19	42	37	5	28	61
Utah	90	55	35	33	2	8	9	1	---	13	24	35	17	1	37
Wyoming	90	42	48	27	---	4	4	1	1	10	43	27	8	2	53
Western--total	<u>1,124</u>	<u>445</u>	<u>679</u>									<u>306</u>	<u>336</u>	<u>30</u>	<u>452</u>
Arizona	202	94	108	41	9	12	23	4	7	37	69	50	35	11	106
California	804	292	512	177	58	84	195	1	15	30	244	235	279	16	274
Nevada	118	59	59	18	3	10	12	2	1	29	43	21	22	3	72
Northwest--total	<u>807</u>	<u>336</u>	<u>471</u>									<u>167</u>	<u>134</u>	<u>55</u>	<u>451</u>
Idaho	187	128	59	32	---	14	8	4	1	78	50	32	22	5	128
Oregon	286	92	194	50	10	13	29	7	11	22	144	60	42	18	166
Washington	334	116	218	52	23	22	48	14	18	28	129	75	70	32	157
Alaskan--total	<u>762</u>	<u>545</u>	<u>217</u>	40	5	11	3	59	19	435	190	<u>45</u>	<u>14</u>	<u>78</u>	<u>625</u>
Pacific--total	<u>66</u>	<u>30</u>	<u>36</u>									<u>15</u>	<u>32</u>	<u>1</u>	<u>18</u>
Hawaii	51	17	34	10	---	7	22	---	1	---	11	10	29	1	11
South Pacific ^{3/}	15	13	2	5	---	3	---	---	---	5	2	5	3	---	7

^{1/} Includes U.S. civil and joint-use airports, heliports, stolports, and seaplane bases.
^{2/} Excludes Puerto Rico, Virgin Islands, and South Pacific.
^{3/} American Samoa, Guam, and Trust Territory.

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Table 3-4. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases
On Record by Length of Longest Runway, by FAA Region and State: December 31, 1976

FAA Region and State	Total <u>1/</u>	By Length of Runway (in Feet)								
		Under 3,000	3,000- 3,999	4,000- 4,999	5,000- 5,999	6,000- 6,999	7,000- 7,999	8,000- 8,999	9,000- 9,999	10,000 and Over
Total	<u>13,770</u>	<u>8,661</u>	<u>2,487</u>	<u>991</u>	<u>742</u>	<u>309</u>	<u>160</u>	<u>101</u>	<u>60</u>	<u>259</u>
United States--total <u>2/</u> . .	<u>13,728</u>	<u>8,643</u>	<u>2,484</u>	<u>988</u>	<u>737</u>	<u>306</u>	<u>157</u>	<u>100</u>	<u>58</u>	<u>255</u>
New England--total	<u>547</u>	<u>386</u>	<u>48</u>	<u>27</u>	<u>41</u>	<u>12</u>	<u>8</u>	<u>3</u>	<u>2</u>	<u>20</u>
Connecticut	104	88	2	6	5	---	1	---	1	1
Maine	162	96	15	12	11	7	3	1	---	17
Massachusetts	141	100	15	6	13	2	2	1	1	1
New Hampshire	57	36	9	---	8	2	1	---	---	1
Rhode Island	22	15	2	2	1	1	---	1	---	---
Vermont	61	51	5	1	3	---	1	---	---	---
Eastern--total	<u>1,860</u>	<u>1,451</u>	<u>198</u>	<u>65</u>	<u>62</u>	<u>28</u>	<u>11</u>	<u>10</u>	<u>8</u>	<u>27</u>
Delaware	32	26	3	1	1	---	1	---	---	---
District of Columbia	16	13	---	1	---	1	---	---	---	1
Maryland	135	108	16	5	3	---	---	1	1	1
New Jersey	239	200	19	4	8	2	2	1	1	2
New York	496	367	53	20	18	10	3	3	4	18
Pennsylvania	644	538	53	18	16	8	2	2	2	5
Virginia	240	169	40	13	10	4	1	3	---	---
West Virginia	58	30	14	3	6	3	2	---	---	---
Great Lakes--total	<u>2,772</u>	<u>2,037</u>	<u>418</u>	<u>105</u>	<u>92</u>	<u>40</u>	<u>21</u>	<u>14</u>	<u>10</u>	<u>35</u>
Illinois	867	758	64	14	13	9	4	2	---	3
Indiana	293	209	52	13	10	3	2	1	2	1
Michigan	421	285	82	14	21	9	5	---	1	4
Minnesota	312	179	64	13	21	7	3	3	3	19
Ohio	558	401	90	35	17	7	1	4	2	1
Wisconsin	321	205	66	16	10	5	6	4	2	7
Central--total	<u>1,243</u>	<u>870</u>	<u>240</u>	<u>55</u>	<u>30</u>	<u>19</u>	<u>12</u>	<u>6</u>	<u>2</u>	<u>9</u>
Iowa	250	170	55	12	3	5	1	2	1	1
Kansas	334	234	59	15	14	2	7	1	---	2
Missouri	358	256	69	11	8	6	2	1	---	5
Nebraska	301	210	57	17	5	6	2	2	1	1
Southern--total	<u>1,555</u>	<u>747</u>	<u>434</u>	<u>152</u>	<u>113</u>	<u>43</u>	<u>21</u>	<u>19</u>	<u>10</u>	<u>16</u>
Alabama	131	39	48	21	12	5	1	2	2	1
Florida	391	218	69	35	29	14	8	7	1	10
Georgia	262	129	75	24	24	5	---	2	1	2
Kentucky	90	50	19	9	5	5	1	---	1	---
Mississippi	148	53	64	14	8	3	2	3	1	---
North Carolina	251	141	65	24	8	7	4	2	---	---
Puerto Rico	23	15	2	1	3	---	---	---	---	2
South Carolina	123	52	42	8	14	2	2	1	2	---
Tennessee	132	50	50	15	10	2	1	2	2	---
Virgin Islands	4	---	---	1	---	---	2	---	---	1

Table 3-4. U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases
On Record by Length of Longest Runway, by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Total ^{1/}	By Length of Runway (in Feet)								
		Under 3,000	3,000- 3,999	4,000- 4,999	5,000- 5,999	6,000- 6,999	7,000- 7,999	8,000- 8,999	9,000- 9,999	10,000 and Over
Southwest--total	<u>2,087</u>	<u>1,105</u>	<u>543</u>	<u>194</u>	<u>128</u>	<u>49</u>	<u>30</u>	<u>11</u>	<u>5</u>	<u>22</u>
Arkansas	166	90	43	11	12	8	2	---	---	---
Louisiana	280	171	64	14	12	5	2	1	1	10
New Mexico	139	27	25	31	33	10	9	2	---	2
Oklahoma	285	158	84	16	15	4	3	1	1	3
Texas	1,217	659	327	122	56	22	14	7	3	7
Rocky Mountain--total	<u>947</u>	<u>440</u>	<u>219</u>	<u>140</u>	<u>68</u>	<u>34</u>	<u>20</u>	<u>12</u>	<u>7</u>	<u>7</u>
Colorado	255	112	50	41	24	10	7	7	---	4
Montana	172	68	58	27	7	4	---	3	4	1
North Dakota	209	151	40	8	4	3	2	---	1	---
South Dakota	131	74	32	15	3	4	2	1	---	---
Utah	90	12	22	24	18	7	5	---	1	1
Wyoming	90	23	17	25	12	6	4	1	1	1
Western--total	<u>1,124</u>	<u>627</u>	<u>195</u>	<u>123</u>	<u>78</u>	<u>46</u>	<u>18</u>	<u>12</u>	<u>5</u>	<u>20</u>
Arizona	202	70	46	47	20	8	6	2	---	3
California	804	522	134	54	38	24	7	6	3	16
Nevada	118	35	15	22	20	14	5	4	2	1
Northwest--total	<u>807</u>	<u>553</u>	<u>112</u>	<u>58</u>	<u>50</u>	<u>11</u>	<u>4</u>	<u>2</u>	<u>4</u>	<u>13</u>
Idaho	187	98	40	28	13	2	1	1	2	2
Oregon	286	207	33	18	15	7	1	1	---	4
Washington	334	248	39	12	22	2	2	---	2	7
Alaskan--total	<u>762</u>	<u>404</u>	<u>75</u>	<u>69</u>	<u>76</u>	<u>21</u>	<u>14</u>	<u>11</u>	<u>4</u>	<u>88</u>
Pacific--total	<u>66</u>	<u>41</u>	<u>5</u>	<u>3</u>	<u>4</u>	<u>6</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>2</u>
Hawaii	51	38	4	2	2	3	---	---	1	1
South Pacific ^{3/}	15	3	1	1	2	3	1	1	2	1

^{1/} Includes U.S. civil and joint-use airports, heliports, stolports, and seaplane bases.

^{2/} Excludes Puerto Rico, Virgin Islands, and South Pacific.

^{3/} American Samoa, Guam, and Trust Territory.

Table 3-5. Airports on Record with FAA by FAA Region and State
and Other Area: October 31, 1967 through 1976 1/

FAA Region and State	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total	<u>10,126</u>	<u>10,470</u>	<u>11,050</u>	<u>11,261</u>	<u>12,070</u>	<u>12,405</u>	<u>12,700</u>	<u>13,062</u>	<u>13,251</u>	<u>13,770</u>
United States--total 2/.	<u>10,099</u>	<u>10,442</u>	<u>11,016</u>	<u>11,226</u>	<u>12,028</u>	<u>12,362</u>	<u>12,656</u>	<u>13,019</u>	<u>13,207</u>	<u>13,728</u>
New England--total	416	427	440	445	463	457	481	512	529	547
Maine	136	135	140	139	148	153	155	158	161	162
New Hampshire	44	49	51	52	54	46	50	56	58	57
Rhode Island	11	12	14	14	14	15	17	17	18	22
Massachusetts	113	114	117	118	116	117	125	131	139	141
Connecticut	75	76	74	78	86	79	83	91	91	104
Vermont	37	41	44	44	45	47	51	59	62	61
Eastern--total	<u>1,212</u>	<u>1,274</u>	<u>1,350</u>	<u>1,418</u>	<u>1,505</u>	<u>1,543</u>	<u>1,631</u>	<u>1,729</u>	<u>1,776</u>	<u>1,860</u>
New York	338	371	409	414	444	442	465	478	488	496
Pennsylvania	443	447	453	475	511	514	541	579	609	644
Virginia	138	147	151	185	192	209	220	227	230	240
Maryland	83	81	82	81	91	99	107	123	128	135
West Virginia	48	49	49	47	46	50	52	54	51	58
Delaware	21	22	24	26	25	30	30	32	32	32
New Jersey	138	154	167	184	189	192	207	222	222	239
District of Columbia	3	3	5	6	7	7	9	14	16	16
Great Lakes--total	<u>1,719</u>	<u>1,838</u>	<u>2,027</u>	<u>2,048</u>	<u>2,258</u>	<u>2,419</u>	<u>2,490</u>	<u>2,594</u>	<u>2,620</u>	<u>2,772</u>
Illinois	433	483	585	599	652	749	773	829	831	867
Indiana	153	163	180	179	199	208	220	232	237	293
Minnesota	260	265	259	262	266	276	279	295	301	312
Michigan	251	278	302	305	376	383	401	403	400	421
Ohio	397	416	451	447	491	522	536	543	548	558
Wisconsin	225	233	250	256	274	281	281	292	303	321
Central--total	<u>1,019</u>	<u>1,045</u>	<u>1,059</u>	<u>1,051</u>	<u>1,125</u>	<u>1,159</u>	<u>1,197</u>	<u>1,205</u>	<u>1,198</u>	<u>1,243</u>
Kansas	266	278	272	270	295	307	315	314	318	334
Iowa	228	230	240	236	241	244	246	248	241	250
Missouri	265	275	287	286	313	319	341	346	343	358
Nebraska	260	262	260	259	276	289	295	297	296	301
Southern--total	<u>1,199</u>	<u>1,189</u>	<u>1,287</u>	<u>1,297</u>	<u>1,365</u>	<u>1,397</u>	<u>1,409</u>	<u>1,436</u>	<u>1,474</u>	<u>1,555</u>
North Carolina	181	179	209	210	231	228	227	236	237	251
South Carolina	100	100	108	113	116	120	120	117	116	123
Georgia	169	171	192	202	218	231	232	236	248	262
Florida	281	283	296	291	323	329	332	341	355	391
Mississippi	159	149	153	152	130	134	138	141	145	148
Alabama	123	124	131	128	130	128	127	126	129	131
Tennessee	101	97	105	108	113	120	122	128	128	132
Kentucky	63	63	69	69	73	76	80	81	87	90
Puerto Rico	19	19	20	20	27	27	27	26	25	23
Virgin Islands	3	4	4	4	4	4	4	4	4	4

Table 3-5. Airports on Record with FAA by FAA Region and State
and Other Area: December 31, 1967 through 1976 ^{1/} (Continued)

FAA Region and State	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Southwest--total	<u>1,581</u>	<u>1,608</u>	<u>1,663</u>	<u>1,704</u>	<u>1,913</u>	<u>1,986</u>	<u>2,020</u>	<u>2,046</u>	<u>2,070</u>	<u>2,087</u>
Louisiana	224	210	218	221	240	260	278	286	281	280
Oklahoma	206	205	226	230	265	273	278	273	277	285
Texas	900	938	960	982	1,128	1,167	1,169	1,192	1,213	1,217
New Mexico	124	125	124	127	129	131	134	134	134	139
Arkansas	127	130	135	144	151	155	161	161	165	166
Rocky Mountain--total	<u>810</u>	<u>827</u>	<u>821</u>	<u>846</u>	<u>871</u>	<u>869</u>	<u>872</u>	<u>895</u>	<u>898</u>	<u>947</u>
Colorado	177	174	185	209	217	214	220	228	230	255
Wyoming	86	87	87	80	84	85	84	86	88	90
Utah	71	76	82	81	85	87	92	93	90	90
Montana	188	189	180	179	180	176	167	168	167	172
North Dakota	180	191	175	184	191	193	194	196	198	209
South Dakota	108	110	112	113	114	114	115	124	125	131
Western--total	<u>954</u>	<u>985</u>	<u>1,034</u>	<u>1,047</u>	<u>1,059</u>	<u>1,064</u>	<u>1,063</u>	<u>1,076</u>	<u>1,090</u>	<u>1,124</u>
California	684	699	720	730	746	754	753	769	781	804
Arizona	191	197	207	215	209	198	196	196	196	202
Nevada	79	89	107	102	104	112	114	111	113	118
Northwest--total	<u>539</u>	<u>562</u>	<u>609</u>	<u>627</u>	<u>680</u>	<u>685</u>	<u>712</u>	<u>743</u>	<u>765</u>	<u>807</u>
Washington	198	212	235	240	256	258	278	296	307	334
Oregon	177	183	206	221	255	258	264	273	277	286
Idaho	164	167	168	166	169	169	170	174	181	187
Alaskan--total	<u>626</u>	<u>667</u>	<u>691</u>	<u>708</u>	<u>762</u>	<u>766</u>	<u>766</u>	<u>766</u>	<u>769</u>	<u>762</u>
Pacific--total	<u>51</u>	<u>48</u>	<u>69</u>	<u>70</u>	<u>69</u>	<u>60</u>	<u>59</u>	<u>60</u>	<u>62</u>	<u>66</u>
Hawaii	46	43	59	59	58	48	46	47	47	51
South Pacific ^{3/}	5	5	10	11	11	12	13	13	15	15

^{1/} Includes U.S. civil and joint-use airports, heliports, stolports, and seaplane bases.

^{2/} Excludes Puerto Rico, Virgin Islands, and South Pacific.

^{3/} American Samoa, Guam, and Trust Territory.

Table 3-6. Airport Development Aid Program Status as of December 31, 1976

FAA Region and State	Air Carrier/Reliever			General Aviation		
	Total Federal Funds	Total Airports	Total Projects	Total Federal Funds	Total Airports	Total Projects
Total	<u>1,539,381,784</u>	<u>621</u>	<u>2,057</u>	<u>221,351,578</u>	<u>774</u>	<u>989</u>
United States--total 1/.	<u>1,516,143,078</u>	<u>613</u>	<u>2,026</u>	<u>221,260,370</u>	<u>773</u>	<u>988</u>
New England--total	<u>37,129,401</u>	<u>31</u>	<u>124</u>	<u>7,020,015</u>	<u>40</u>	<u>75</u>
Connecticut	8,094,674	5	19	1,551,628	2	9
Maine	5,142,480	8	31	1,523,299	16	19
Massachusetts	17,058,737	9	44	2,829,977	13	33
New Hampshire	2,124,158	4	14	757,050	4	6
Rhode Island	2,674,322	1	2	-----	---	---
Vermont	2,035,030	4	14	358,061	5	8
Eastern--total	<u>221,074,954</u>	<u>74</u>	<u>287</u>	<u>29,214,756</u>	<u>64</u>	<u>87</u>
Delaware	2,393,592	1	6	253,650	1	2
District of Columbia	-----	---	-----	-----	---	---
Maryland	15,726,691	4	14	2,566,475	3	4
New Jersey	34,766,152	5	32	6,563,506	5	7
New York	65,309,327	23	98	7,813,003	19	25
Pennsylvania	63,306,122	21	68	3,831,009	15	18
Virginia	21,798,861	12	42	4,354,836	12	17
West Virginia	17,774,209	8	27	3,832,277	9	14
Great Lakes--total	<u>237,262,840</u>	<u>101</u>	<u>253</u>	<u>40,223,434</u>	<u>121</u>	<u>146</u>
Illinois	71,108,886	25	66	8,484,452	27	35
Indiana	35,136,827	13	26	11,016,448	16	18
Michigan	56,834,400	23	57	5,713,746	19	22
Minnesota	14,840,683	15	35	5,968,203	25	26
Ohio	31,743,884	13	34	4,371,688	11	15
Wisconsin	27,598,160	12	35	4,668,897	23	30
Central--total	<u>57,344,630</u>	<u>47</u>	<u>139</u>	<u>15,527,166</u>	<u>75</u>	<u>84</u>
Iowa	16,622,190	11	27	3,131,791	16	17
Kansas	9,224,157	14	28	2,307,275	16	16
Missouri	11,618,890	8	35	4,847,406	18	22
Nebraska	19,879,393	14	49	5,240,694	25	29
Southern--total	<u>286,823,650</u>	<u>98</u>	<u>358</u>	<u>37,951,983</u>	<u>148</u>	<u>176</u>
Alabama	14,349,007	10	37	3,098,260	10	11
Florida	79,940,251	26	93	4,370,287	18	23
Georgia	67,669,197	11	37	5,946,983	26	29
Kentucky	22,549,324	7	39	3,720,679	12	14
Mississippi	13,108,008	11	31	5,706,315	34	42
North Carolina	33,901,574	12	41	7,349,506	22	29
Puerto Rico	7,864,072	2	10	91,208	1	1
South Carolina	10,886,272	6	15	3,199,590	11	11
Tennessee	32,801,897	11	46	4,469,155	14	16
Virgin Islands	3,754,048	2	9	-----	---	---

Table 3-6. Airport Development Aid Program Status as of December 31, 1976 (Continued)

FAA Region and State	Air Carrier/Reliever			General Aviation		
	Total Federal Funds	Total Airports	Total Projects	Total Federal Funds	Total Airports	Total Projects
Southwest--total	<u>215,588,682</u>	<u>71</u>	<u>288</u>	<u>37,503,256</u>	<u>141</u>	<u>176</u>
Arkansas	7,963,550	10	34	4,131,411	18	21
Louisiana	40,487,650	9	44	2,686,198	6	9
New Mexico	9,893,597	10	44	2,942,949	13	18
Oklahoma	25,803,313	12	44	5,311,481	42	47
Texas	131,440,572	30	122	22,431,217	62	81
Rocky Mountain--total	<u>121,686,985</u>	<u>58</u>	<u>192</u>	<u>16,334,255</u>	<u>73</u>	<u>87</u>
Colorado	52,846,781	14	44	3,921,380	9	11
Montana	14,575,883	15	48	2,044,820	12	12
North Dakota	10,607,943	7	25	2,679,299	15	17
South Dakota	14,013,392	9	43	2,712,102	11	13
Utah	20,731,392	5	15	3,288,809	15	19
Wyoming	8,911,594	8	17	1,687,845	11	15
Western--total	<u>144,150,414</u>	<u>59</u>	<u>195</u>	<u>17,753,726</u>	<u>57</u>	<u>82</u>
Arizona	25,521,023	11	35	3,511,782	14	16
California	100,135,616	44	145	13,915,740	41	63
Nevada	18,493,775	4	15	326,204	2	3
Northwest--total	<u>63,881,147</u>	<u>31</u>	<u>107</u>	<u>9,764,643</u>	<u>46</u>	<u>61</u>
Idaho	9,418,779	9	29	2,366,728	12	15
Oregon	26,867,583	10	31	2,389,339	14	16
Washington	27,594,785	12	47	5,008,576	20	30
Alaskan--total	<u>87,057,936</u>	<u>39</u>	<u>75</u>	<u>9,769,594</u>	<u>8</u>	<u>14</u>
Pacific--total	<u>67,381,145</u>	<u>12</u>	<u>39</u>	<u>288,750</u>	<u>1</u>	<u>1</u>
Hawaii	55,760,559	8	27	288,750	1	1
South Pacific <u>3/</u>	11,620,586	4	12	-----	---	---

1/ Excludes Puerto Rico, Virgin Islands, and South Pacific.

2/ Moscow, Idaho, and Pullman, Washington Airport collocated--counted as one.

3/ Includes American Samoa, Guam, and Trust Territory.

IV. AIRPORT ACTIVITY

The data presented in this chapter were obtained from quarterly reports submitted to the Civil Aeronautics Board by the certificated route air carriers on Schedule T-3 (a) (b) (c), Airport Activity Statistics - Revenue Service. These statistics summarize revenue; passenger enplanements; aircraft departures; and tons of freight, express, and mail enplaned at the 653 certificated points in the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration receiving scheduled and nonscheduled service during fiscal year 1975. Effective January 1, 1970, in accordance with CAB's stated definition for "Domestic Operations," operations between the 48 conterminous States, Alaska, and Hawaii have been reclassified as domestic.

Air traffic hubs are not airports; they are the cities and Standard Metropolitan Statistical Areas (SMSA) requiring aviation services. An SMSA is a county that contains at least one city of 50,000 population, or twin cities with a combined population of at least 50,000, plus any contiguous counties that are metropolitan in character and have similar economic and social relationships. These metropolitan areas constitute a primary focal point for the transportation research programs of the FAA, and the analyses of individual cities within an area are treated in relationship to the entire area. In those instances where two or more individually certificated communities are located in an SMSA, those communities are grouped under the SMSA definition throughout this publication.

Individual communities fall into four hub classifications as determined by each community's percentage of the total enplaned revenue passengers in all services and all operations of U.S. certificated route air carriers within the 50 States, the District of Columbia, and other U.S. areas designated by the

Federal Aviation Administration. Classifications in this issue are based on 193,074,155 total enplaned revenue passengers.

The percentage and number of enplaned passengers in the hub classifications for calendar year 1976 are:

<u>Hub Classification</u>	<u>Percentage of Total Enplaned Passengers</u>	<u>Number of Enplaned Passengers</u>
Large (L)	1.00 or more	2,153,350 or more
Medium (M)	0.25 to 0.99	538,338 to 2,153,349
Small (S)	0.05 to 0.24	107,668 to 538,337
Nonhub (N) 1	less than 0.05	less than 107,668

For the 12-month period ended June 30, 1976, there were 152 air traffic hubs. These hubs represented 24.0 percent of the 634 certificated points in the 50 States, the District of Columbia, and other U.S. areas receiving air carrier service during the period. The dominance of the hubs in the air traffic patterns is brought out by the fact that of the 207,172,877 passenger enplanements during the period, 95.6 percent (198,057,270) were recorded at the 152 hubs, while the nonhubs accounted for only 4.4 percent (9,115,607). Of the 95.6 percent of the passenger enplanements recorded at the hubs, the 25 large hubs accounted for 67.9 percent, the 38 medium hubs accounted for 18.0 percent, and the 89 small hubs accounted for 9.7 percent.

Commencing 1971, data for passenger enplanements include enplaned passengers in both domestic and international, and scheduled and nonscheduled service of the certificated route air carriers, for all types of aircraft for the 50 States, the District of Columbia, and other U.S. areas designed by the Federal Aviation Administration.

AIR TRAFFIC HUBS

JUNE 30, 1976

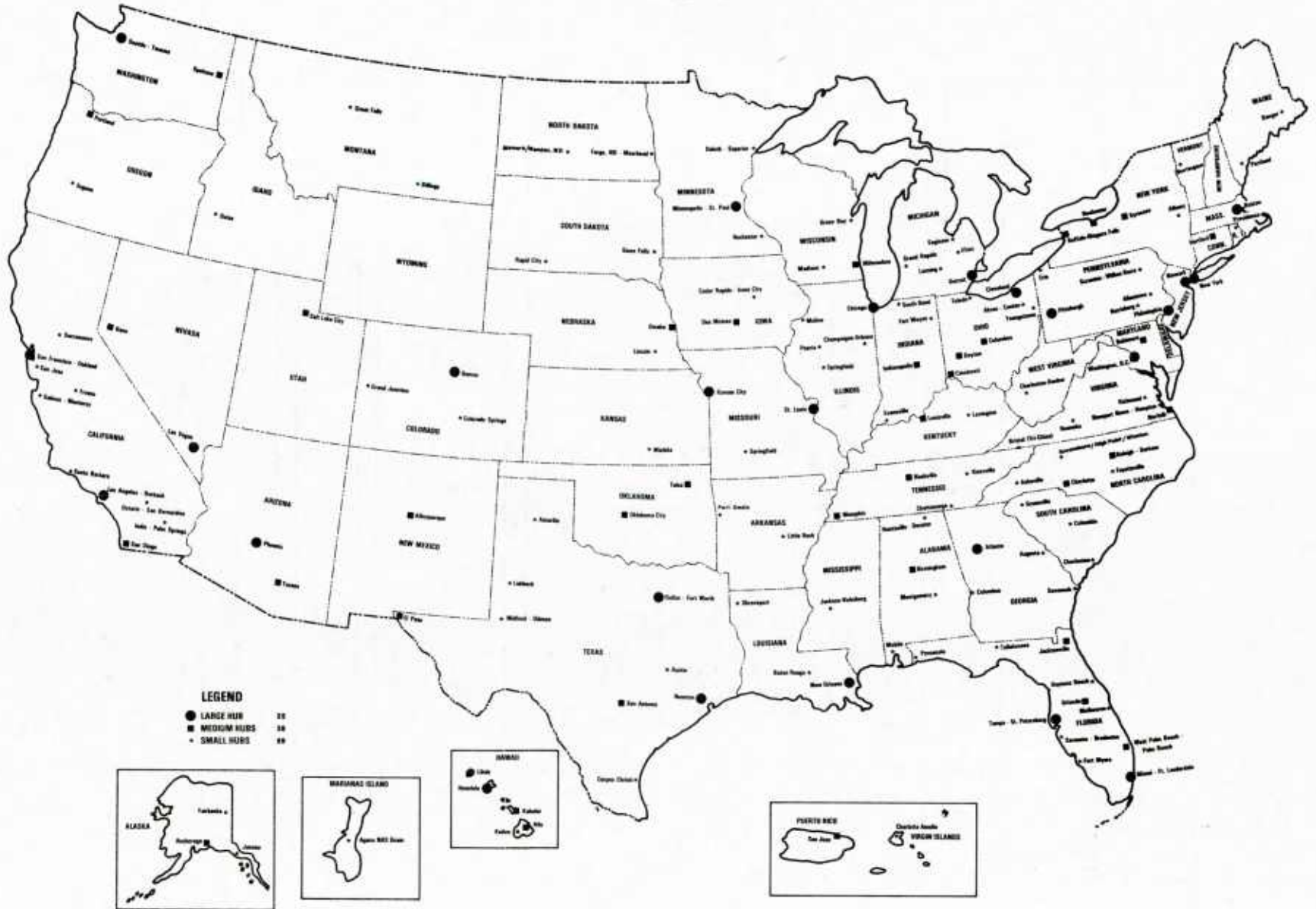


Table 4-1. Certificated Route Air Carriers and Number of Certificated Route Miles Authorized: Calendar Year 1976

Carrier Type and Certificated Route Carrier	Certificated Route Miles Operated <u>1/</u>	Carrier Type and Certificated Route Carrier	Certificated Route Miles Operated <u>1/</u>
Domestic Passenger/Cargo Carriers			
Trunk Lines:		Intra-Hawaiian Lines:	
Big Four:		Aloha Airlines	494
American Airlines	42,884	Hawaiian Airlines	400
Eastern Airlines	42,456	Local Service:	
Trans World Airlines	28,099	Air Midwest, Inc.	896
United Air Lines	47,805	Air New England	797
Other:		Allegheny Airlines	6,543
Braniff Airways	20,261	Frontier Airlines	14,916
Continental Air Lines	25,955	Hughes Air West	5,916
Delta Air Lines	45,104	North Central Airlines	6,231
National Airlines	8,425	Ozark Air Lines	6,195
Northwest Airlines	30,090	Piedmont Aviation	3,909
Western Airlines	27,054	Southern Airways	9,089
Intra-Alaskan Air Lines:		Texas International	5,562
Alaska Airlines	8,043	Helicopter:	
Kodiak-Western Alaska Airlines, Inc.	1,250	Chicago Helicopter	42 <u>2/</u>
Munz Northern	291	New York Airways	139
Reeve Aleutian Airways	3,281	S.F.O. Helicopter Airlines, Inc.	0 <u>3/</u>
Wien Air Alaska	9,746		
International and Territorial Passenger/Cargo Carriers			
Air Micronesia	14,602	National Airlines	4,541
American Airlines	21,108	Northwest Airlines	23,680
Braniff Airways	32,300	Pan American World Airways	267,504
Continental Air Lines	14,602	Trans World Airlines	78,196
Delta Air Lines	8,855	Western Airlines	6,642
Eastern Airlines	23,569		
All Cargo Carriers			
Flying Tiger Line	17,834	Seaboard World Airlines	13,521
Airlift International	10,656		
Other Carriers			
Aspen Airways	112	Wright Air Lines	92

1/ Certificated route miles authorized are based on each carrier's certificate. This is duplication in that if a pair of points are on different segments, they are counted for each segment.

2/ Carrier authorized to suspend service over its route until 6/15/78.

3/ Certificate terminated 12/22/76.

Source: Records Services Section, Office of Facilities and Operations, CAB.

Table 4-2. Domestic Airlines Traffic Enplaned at U.S. Stations
(Excluding Alaska and Hawaii): 1967 through 1976 ^{1/}

Year	Air Carrier Aircraft Departures	Number of Enplaned Passengers	Tons of Enplaned Mail	Tons of Enplaned Cargo
1967	4,296,153	123,624,098	528,667.0	1,337,894.9
1968	4,606,354	140,935,857	718,530.1	1,588,325.1
1969	4,699,273	148,072,090	753,123.8	1,740,082.8
1970 ^{2/}	5,001,557	155,938,787	782,229.9	1,926,258.3
1971 ^{2/}	4,680,678	152,291,732	862,939.3	2,075,811.5
1972	4,741,495	172,263,469	852,941.2	2,451,766.5
1973	4,818,587	182,987,738	829,023.4	2,717,932.6
1974	4,452,156	189,316,615	827,270.8	2,599,894.1
1975	4,447,559	188,495,858	825,563.2	2,356,691.3
1976	4,597,522	206,664,841	895,081.0	2,483,597.9

^{1/} These data include domestic all-cargo figures which are shown in table 4-6.
^{2/} Fiscal year data.

NOTE: Data for 1970 and subsequent years include Alaska and Hawaii. Commencing 1971 and subsequent years, data include scheduled and nonscheduled operations.

Source: CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers."

Table 4-3. American Flag Airline Traffic Enplaned at Territorial
U.S. Stations: 1967 through 1976

Year	Air Carrier Aircraft Departures	Number of Enplaned Passengers	Tons of Enplaned Mail	Tons of Enplaned Cargo
1967	256,300	5,998,573	28,798.0	69,267.5
1968	265,754	6,724,466	30,100.3	76,998.8
1969	262,091	7,137,624	33,078.0	96,194.0
1970 ^{1/}	42,941	2,331,797	4,792.9	44,719.9
1971 ^{1/}	39,445	2,192,217	3,714.3	32,199.1
1972	41,495	2,524,395	4,310.1	37,397.2
1973	46,080	2,622,340	5,109.1	40,548.0
1974 ^{2/}	35,906	2,601,804	5,639.3	45,922.6
1975	30,485	2,243,793	5,807.0	47,394.0
1976	28,559	2,258,714	5,551.2	48,329.3

^{1/} Fiscal year data.

^{2/} Includes American Samoa, Caroline Islands, Guam, Johnston Islands, Mariana Islands, Marshall Islands, Puerto Rico, and Virgin Islands.

NOTE: Commencing 1971 and subsequent years, data include scheduled and nonscheduled operations.

Source: CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers."

Table 4-4. Domestic Helicopter Traffic Enplaned at U.S. Stations
(Excluding Alaska and Hawaii): 1967 through 1976

Year	Air Carrier Aircraft Departures	Number of Enplaned Passengers	Tons of Enplaned Mail	Tons of Enplaned Cargo
1967	151,578	1,225,111	1,642.9	3,221.0
1968	141,973	1,046,715	1,583.3	2,548.2
1969	112,918	744,436	1,042.9	1,791.0
1970 <u>1/</u>	93,298	620,945	574.2	1,396.8
1971 <u>1/</u>	79,518	544,368	302.8	963.2
1972	79,979	588,288	200.5	969.2
1973	83,152	614,952	154.7	737.9
1974	80,743	591,830	163.5	418.3
1975	67,923	505,827	201.7	210.3
1976	54,123	443,651	109.0	148.8

1/ Fiscal year data.

NOTE: Commencing 1971 and subsequent years, data include scheduled and nonscheduled operations.

Source: CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers."

Table 4-5. American Flag Airline Traffic Enplaned at Foreign Stations: 1967 through 1976 1/

Year	Air Carrier Aircraft Departures	Number of Enplaned Passengers	Tons of Enplaned Mail	Tons of Enplaned Cargo
1967	190,461	7,147,437	46,958.4	130,598.1
1968	220,357	8,320,656	59,413.1	173,960.0
1969	232,640	9,328,318	58,816.9	213,858.7
1970 <u>2/</u>	188,188	8,886,734	56,003.4	203,979.4
1971 <u>2/</u>	229,164	11,852,243	80,457.5	293,380.1
1972	223,865	12,357,957	61,506.7	361,157.3
1973	224,793	12,614,201	70,614.1	366,634.1
1974	203,980	11,787,449	68,958.2	367,988.3
1975	189,918	10,908,448	62,206.1	363,510.7
1976	183,431	11,575,637	62,557.5	390,220.0

1/ Includes operations of certificated all-cargo carriers.

2/ Fiscal year data.

NOTE: Data for 1970 and subsequent years include Alaska and Hawaii. Commencing 1971 and subsequent years, data include scheduled and nonscheduled operations.

Source: CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers."

Table 4-6. Domestic All-Cargo Airline Traffic Enplaned at U.S. Stations
(Excluding Alaska and Hawaii): 1967 through 1976 ^{1/}

Year	Air Carrier Aircraft Departures	Number of Enplaned Passengers	Tons of Enplaned Mail	Tons of Enplaned Cargo
1967.	15,701	---	3,043.2	107,562.3
1968.	15,912	---	3,383.4	111,061.0
1969.	13,887	---	3,937.2	109,208.9
1970 ^{2/}	12,046	---	4,162.5	116,179.2
1971 ^{2/}	11,360	---	8,823.7	150,970.7
1972.	11,790	---	6,993.3	217,611.8
1973.	15,658	845	16,590.9	306,601.8
1974.	16,351	440	16,086.5	321,405.3
1975.	13,959	1,641	10,021.6	284,131.9
1976.	13,594	---	8,466.7	285,333.4

^{1/} These data are included in table 4-2.

^{2/} Fiscal year data.

NOTE: Data for 1970 and subsequent years include Alaska and Hawaii. Commencing 1971 and subsequent years, data include scheduled and nonscheduled operations.

Source: CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers."

TABLE 4-7.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL
 OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail
								Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10	
1	ATLANTA, GEORGIA									
2	(WILLIAM B HARTSFIELD INT'L)									
3	6.31	209839	209513	207482	13607032	118323.21	2413.18	69232.91	121.10	
4										
5	BOSTON, MASSACHUSETTS									
6	(LOGAN INTERNATIONAL)									
7	2.48	96033	93398	90879	5355214	77029.71	469.13	19889.90	1953.04	4.97
8										
9	CHICAGO, ILLINOIS									
10	(MIDWAY)									
11	0.00	583	597	573	4770	16.67	.05	34.87		
12	(MCHARE INTERNATIONAL)									
13	8.42	286253	284195	281124	18138215	338716.21	4060.91	71543.98	18243.66	
14										
15	COMMUNITY TOTAL	286836	284792	281697	18142985	338732.88	4060.96	71578.85	18243.66	
16	8.42									
17										
18	CLEVELAND, OHIO									
19	(BURKE LAKEFRONT)									
20	0.01	1786	1694	1650	32563	631.53				
21	(HOPKINS INTERNATIONAL)									
22	1.36	56676	56271	55877	2940023	46041.80	1074.63	10375.98	1137.80	
23										
24	COMMUNITY TOTAL	58462	57965	57527	2972586	46673.33	1074.63	10375.98	1137.80	
25	1.37									
26										
27	DALLAS-FORT WORTH, TEXAS									
28	(DALLAS-FORT WORTH REGIONAL)									
29	3.68	143862	143305	142406	7929000	83709.55	507.75	39307.23	194.53	6.46
30										
31	DENVER, COLORADO									
32	(STAPLETON INTERNATIONAL)									
33	2.99	108778	108365	107280	6451520	57915.58	371.89	16776.71	2255.67	
34										
35	DETROIT&ANN ARBOR, MICHIGAN									
36	(DETROIT CITY)									
37	0.01	1525	1502	1460	29064	351.95				
38	(DETROIT METROPOLITAN WAYNE CTY)									
39	1.84	77611	76609	75685	3974600	81141.27	543.08	18410.52	4339.73	.01
40										
41	COMMUNITY TOTAL	79136	78111	77145	4003664	81493.22	543.08	18410.52	4339.73	.01
42	1.85									
43										
44	HONOLULU, OAHU, HAWAII									
45	(HONOLULU INTERNATIONAL)									
46	2.25	44607	39357	37494	4852861	87949.30	72.10	10236.29	12145.74	466.81
47										
48	HOUSTON, TEXAS									
49	(HOUSTON INTERCONTINENTAL)									
50	1.51	61990	62289	61463	3259418	36291.64	306.45	13239.37	1159.74	16.34
51	(WILLIAM P HOBBY)									
52	0.01	457	448	443	23196	10.79				
53										
54	COMMUNITY TOTAL	62447	62737	61906	3282614	36302.43	306.45	13239.37	1159.74	16.34
55	1.52									
56										
57	KANSAS CITY, MISSOURI									
58	(INTERNATIONAL)									
59	1.08	55252	54815	54428	2331212	18995.89	276.71	15447.44	934.04	
60										
61	LAS VEGAS, NEVADA									
62	(MC CARRAN INTL)									
63	1.51	51319	47575	46743	3260437	3178.10	19.53	1631.97	26.93	
64										
65	LOS ANGELES/BURBANK/LNG.BCH,CAL									
66	(HOLLYWOOD-BURBANK)									
67	0.07	4686	4748	4648	161161	2137.32		.04		
68	(LOS ANGELES INTERNATIONAL)									
69	4.64	141414	139938	138303	10000962	320917.54	1947.94	39358.98	11803.06	
70	(ORANGE COUNTY)									
71	0.10	4355	4402	4340	229369	566.58	.10	.01		
72										
73	COMMUNITY TOTAL	150455	149088	147291	10391492	323621.44	1948.04	39358.13	11803.06	
74	4.81									
75										
76	MIAMI/FT LAUDERDALE,FLORIDA									
77	(FT. LAUDERDALE-HOLLYWOOD INTL)									
78	0.91	36653	36443	35885	1963761	4841.34	58.68	1910.34	64.10	
79	(MIAMI INTERNATIONAL)									
80	2.28	81975	80639	79672	4912306	113113.97	801.52	13897.62	1875.25	55.68
81										
82	COMMUNITY TOTAL	118628	117082	115557	6876067	117955.31	860.20	15807.96	1939.35	55.68
83	3.19									
84										
85	MINNEAPOLIS/ST. PAUL,MINNESOTA									
86	(MINNEAPOLIS-ST PAUL INTL)									
87	1.67	65342	64533	64021	3604637	46999.86	213.39	18195.44	1930.77	
88										
89	NEWARK, NEW JERSEY									
90	(NEWARK)									
91	1.54	63639	63007	61869	3336376	53350.02	660.04	18600.22	4848.27	
92										
93	NEW ORLEANS, LOUISIANA									
94	(INTERNATIONAL/MOISANT FIELD)									
95	1.10	45453	45185	44900	2370981	17331.92	455.68	5757.13	306.87	
96										
97	NEW YORK, NEW YORK									
98	(JOHN F KENNEDY INTL)									
99	3.33	107278	101119	98709	7191713	331417.87	728.22	52039.75	27152.52	.18
100	(LA GUARDIA)									
101	3.31	131535	125791	122521	7146477	29361.67	646.07	18381.87	1129.04	
102	(WALL STREET HELIPORT)									
103	0.00	3314	4108	2924	12705	18.23				
104										
105	COMMUNITY TOTAL	242127	231018	224154	14350895	360797.77	1374.29	70421.62	28281.56	.18
106	6.64									
107										
108	PHILADELPHIA,PA/CAMDEN,NJ									
109	(INTERNATIONAL)									
110	1.68	66440	65666	64861	3624912	52982.46	581.65	19801.79	3963.05	
111										
112										

TABLE 4-7.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL
 OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED OCTOBER 31, 1976

Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons					
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
								Priority	Nonpriority		
1	2	3	4	5	6	7	8	9	10		
1	PHOENIX, ARIZONA										
2	PHOENIX SKY HARBOR INTL)										
3	1.06	45379	45380	44967	2284432	12936.73	50.89	5423.68	905.53		
4	PITTSBURGH, PA/WHEELING W VA										
5	(GREATER PITTSBURGH)										
6	1.82	88155	87719	86821	3922312	20084.74	381.09	12923.61	1119.31		
7	ST. LOUIS, MISSOURI										
8	ILAMBERT-ST LOUIS MUNI)										
9	1.76	86322	86160	85491	3799713	29708.80	231.21	17388.20	1062.79		
10	SAN FRANCISCO/OAKLAND, CAL.										
11	(MARIN COUNTY HELIPORT)										
12	0.01	3060	3720	3023	22963	.06					
13	OAKLAND METROPOLITAN INTL)										
14	0.13	11992	12803	11774	300077	637.32	11.23	796.36	3.25		
15	SAN FRANCISCO INTL)										
16	3.06	106997	106432	103726	6692579	184845.33	1494.36	32326.39	15859.00	.25	
17	MEMERYVILLE HELIPORT)										
18	0.00	2801	3487	2847	11737	.56					
19	COMMUNITY TOTAL	3.20	124910	126442	121370	6937356	185483.27	1505.59	33122.75	15862.25	.25
20	SEATTLE/TACOMA, WASHINGTON										
21	BOEING FIELD INTL.)										
22	0.00	62	58	58	2916	33.34		19.24	2.09		
23	(SEATTLE-TACOMA INTERNATIONAL)										
24	1.57	53843	54438	52446	3382632	139014.77	605.84	16645.19	6089.30		
25	COMMUNITY TOTAL	1.57	53905	54496	52504	3385548	139048.11	605.84	16664.43	6091.39	
26	TAMPA-ST. PETERSBURG/CLEARWATER, FLA										
27	TAMPA INTERNATIONAL)										
28	1.17	53105	53081	52532	2522871	14919.80	214.78	7170.08	407.31		
29	WASHINGTON, DIST. OF COL.										
30	(DUWELLES INTERNATIONAL)										
31	0.57	26709	25914	25736	1245621	11885.63	49.92	8111.69	2956.13		
32	(WASHINGTON NATIONAL)										
33	2.66	172193	99228	98367	5748900	19732.20	242.87	24073.21	4476.51		
34	COMMUNITY TOTAL	3.23	128902	125142	124103	6994521	31617.83	292.79	32184.90	7432.64	
35	OVER-ALL TOTAL, LARGE HUBS	67.90	2529333	2493932	2455428	146590308	2357141.26	19490.39	598947.11	128466.13	550.70
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TABLE 4-8.
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail
								Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10	
1	ALBUQUERQUE, NEW MEXICO									
2	(ALBUQUERQUE SUNPRT/KIRTLNO AF8)									
3	0.40	21778	21872	21692	872621	3473.88	16.35	2520.88	114.83	
4	ANCHORAGE, ALASKA									
5	(ANCHORAGE INTERNATIONAL)									
6	0.41	16910	16519	15838	888726	37425.69	7.84	10977.83	5448.02	3.87
7	BALTIMORE, MARYLAND									
8	(BALTO/WASH INTL)									
9	0.66	33295	32967	32604	1440313	17423.38	228.90	10331.81	494.30	
10	BIRMINGHAM, ALABAMA									
11	(BIRMINGHAM MUNI)									
12	0.29	20642	20520	20392	643183	2140.00	82.75	3299.25	21.40	
13	BUFFALO/NIAGARA FALLS, NEW YORK									
14	(GREATER BUFFALO INTERNATIONAL)									
15	0.70	37385	37995	37004	1522282	12498.26	226.50	4443.44	748.27	
16	(INTERNATIONAL)									
17	0.00	5	1	1	396	3.06				
18	COMMUNITY TOTAL	37390	37996	37005	1522678	12501.32	226.50	4443.44	748.27	
19	0.70									
20	CHARLOTTE, NORTH CAROLINA									
21	(DOUGLAS MUNI)									
22	0.60	34352	34396	34088	1312678	13425.79	567.20	7110.41	177.96	
23	CINCINNATI, OHIO									
24	(GREATER CINCINNATI)									
25	0.61	38298	38387	38114	1333276	11200.45	91.76	6711.70	518.06	
26	COLUMBUS, OHIO									
27	(PORT COLUMBUS INTERNATIONAL)									
28	0.48	27379	27205	27010	1050815	6111.11	133.38	4540.04	318.44	
29	DAYTON, OHIO									
30	(JAMES M COX DAYTON MUNI)									
31	0.38	25004	25056	24830	836282	14496.58	108.39	3419.58	200.33	
32	DES MOINES, IOWA									
33	(DES MOINES MUNI)									
34	0.25	15588	15559	15393	549821	2273.95	30.71	4015.10	26.13	
35	EL PASO, TEXAS									
36	(EL PASO INTERNATIONAL)									
37	0.27	13405	13344	13256	589277	6342.98	9.42	1611.12	.20	
38	GREENSBORO/HIGH PT/WINSTN, N.C.									
39	(GREENSBORO-HIGH PT-WINSTN REG.)									
40	0.23	14472	14441	14331	504469	3586.40	272.97	2153.11	13.57	
41	ISMITH-REYNOLDS									
42	0.02	4466	4146	4116	54114	227.72		3.08		
43	COMMUNITY TOTAL	18938	18587	18447	558583	3814.12	272.97	2156.19	13.57	
44	0.25									
45	HARTFD, CON/SPGFLD&WESTFLO, MASS									
46	(BRAOLEY INTL)									
47	0.56	28415	28554	28055	1211972	14797.37	207.54	6826.46	195.44	.01
48	HILO, HAWAII, HAWAII									
49	(GENERAL LYMAN FIELD)									
50	0.28	9032	8144	7663	619060	22697.25	.05	452.73	388.34	
51	INDIANAPOLIS, INDIANA									
52	(INDIANAPOLIS MUNI/WEIR-COOK)									
53	0.61	37445	37636	37141	1316929	16464.45	237.59	7436.13	994.26	
54	JACKSONVILLE, FLORIDA									
55	(JACKSONVILLE INTERNATIONAL)									
56	0.36	20572	20604	20406	788721	2452.28	20.96	3347.65	5.37	
57	KAHULUI, MAUI, HAWAII									
58	(KAHULUI)									
59	0.54	18852	16774	15349	1180509	2875.35		359.76	416.85	
60	LIHUE, KAUAI, HAWAII									
61	(LIHUE)									
62	0.44	11827	9293	8817	964361	1466.51		183.40	253.02	
63	LOUISVILLE, KENTUCKY									
64	(STANDIFORD FIELD)									
65	0.41	27645	27630	27465	885618	5885.63	88.57	3894.23	20.08	
66	MEMPHIS, TENNESSEE									
67	(MEMPHIS INTERNATIONAL)									
68	0.93	54696	54745	54304	2015073	17250.87	268.41	9127.56	73.76	
69	MILWAUKEE, WISCONSIN									
70	(GENERAL MITCHELL FIELD)									
71	0.58	38134	38166	37502	1263495	11473.49	98.28	5400.71	122.60	
72	NASHVILLE, TENNESSEE									
73	(METROPOLITAN)									
74	0.41	28271	28149	27943	904325	7693.33	161.62	3634.12	89.50	
75	NORFOLK/VA BCH/PTSMH/CHESPEKE, VA									
76	(NORFOLK REGIONAL)									
77	0.34	17168	17161	17051	734073	1839.62	35.96	2146.30	.73	
78	OKLAHOMA CITY, OKLAHOMA									
79	(WILL ROGERS WORLD)									
80	0.38	23941	23953	23796	834230	3775.85	4.91	3864.70	509.33	
81	OMAHA, NEBRASKA									
82	(DODD AIRFIELD)									
83	0.37	22650	22613	22348	812681	4992.55	53.66	4330.79	54.72	

TABLE 4-8
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

L i n e No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons					
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
								Priority	Nonpriority		
	1	2	3	4	5	6	7	8	9	10	
1	ORLANDO, FLORIDA										
2	(MCCOY AFS)										
3											
4	0.81	35806	35652	35178	1750536	12982.05	52.29	3067.13	7.42		
5	PORTLAND, OREGON										
6	(PORTLAND INTERNATIONAL)										
7	0.77	38380	39016	37932	1666306	20932.51	122.14	5595.11	535.06		
8											
9	RALEIGH/DURHAM, NORTH CAROLINA										
10	(RALEIGH-DURHAM)										
11	0.29	15286	15269	15094	624622	3639.98	81.67	2525.81	21.94		
12	RENO, NEVADA										
13	(RENO INTL)										
14	0.26	11681	11599	11441	577927	1454.98	12.34	851.88	55.62		
15											
16	ROCHESTER, NEW YORK										
17	(ROCHESTER-MONROE COUNTY)										
18	0.36	22206	22318	21940	792390	4404.62	99.12	3755.70	15.38		
19											
20	SALT LAKE CITY, UTAH										
21	(SALT LAKE CITY INTL)										
22	0.70	32493	32652	32198	1519811	9774.59	63.70	4936.33	62.67		
23											
24	SAN ANTONIO, TEXAS										
25	(SAN ANTONIO INTERNATIONAL)										
26	0.41	20194	20163	19989	894182	4469.14	27.75	3755.70	335.18		
27											
28	SAN DIEGO, CALIFORNIA										
29	(SAN DIEGO INTNL-LINDBERGH FLD)										
30	0.69	22990	22996	22677	1499878	9106.73	83.68	3729.18	22.15		
31											
32	SAN JUAN, PUERTO RICO										
33	(PUERTO RICO INTERNATIONAL)										
34	0.79	15920	15745	15401	1720646	42911.90	4.20	2927.57	70.22	4.24	
35											
36	SPOKANE, WASHINGTON										
37	(SPOKANE INTERNATIONAL)										
38	0.29	14717	14908	14469	633087	3024.81	18.04	1732.21	22.93		
39											
40	SYRACUSE, NEW YORK										
41	(CLARENCE E HANGCOCK)										
42	0.32	16097	16256	15940	706690	4031.92	67.77	1800.33	49.29		
43											
44	TUCSON, ARIZONA										
45	(TUCSON INTL)										
46	0.30	17205	17255	17124	647649	2404.44	38.70	1155.35	5.38		
47											
48	TULSA, OKLAHOMA										
49	(TULSA INTL)										
50	0.34	21810	21841	21718	746716	6301.34	28.34	3203.01	1109.72		
51											
52	WEST PALM BEACH/PALM BEACH, FLA										
53	(PALM BEACH INTERNATIONAL)										
54	0.33	17171	17122	16978	731674	1664.97	121.29	176.25	9.41		
55											
56	OVER-ALL TOTAL, MEDIUM HUBS	18.17	943583	938622	924588	39641614	371397.78	3774.75	151453.45	13527.88	8.12
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TABLE 4-9.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL
 OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail
								Priority	Nonpriority	
2	3	4	5	6	7	8	9	10		
1	AKRON/CANTON, OHIO									
2	(AKRON-CANTON)									
3	0.11	6672	6663	6607	244546	778.17	18.30	1273.06	1.90	
4	ALBANY, NEW YORK									
5	(ALBANY COUNTY)									
6	0.24	12619	13082	12575	523838	1134.53	6.85	1002.20	2.01	
7	ALLENTOWN/BETHLEHEM/EASTON, PA									
8	(ALLENTOWN-BETHLEHEM-EASTON)									
9	0.10	4679	4646	4615	231924	279.73	7.43	10.46	.57	
10	AMARILLO/BCRGER, TEXAS									
11	(AMARILLO AIR TERMINAL)									
12	0.10	6591	6606	6523	230319	559.55	.04	368.11		
13	ASHEVILLE, NORTH CAROLINA									
14	(ASHEVILLE MUNI)									
15	0.07	6623	6655	6578	154584	757.84	1.51	349.59		
16	ASHLAND, KY./HUNTINGTON, W.VA.									
17	(TRI-STATE/WALKER-LONG FIELD)									
18	0.05	5089	5173	5062	109794	198.34	.37	238.11		
19	AUGUSTA, GEORGIA									
20	(BUSH FIELD)									
21	0.08	7220	7256	7178	177119	759.59	6.94	226.41	.01	
22	AUSTIN, TEXAS									
23	(ROBERT NUELLER MUNI)									
24	0.20	9955	9983	9911	430788	1250.00	.55	1428.74		
25	BAKERSFIELD, CALIFORNIA									
26	(NEAOWS FIELD)									
27	0.05	3247	3243	3236	111121	229.65	7.31	39.39	.71	
28	BANGOR, MAINE									
29	(BANGOR INTERNATIONAL)									
30	0.05	2349	2368	2329	116921	897.35	1.40	80.87	2.51	
31	BATON ROUGE, LOUISIANA									
32	(RYAN)									
33	0.08	7087	7106	7027	183749	563.54	10.13	120.73		
34	BILLINGS, MONTANA									
35	(LOGAN FIELD)									
36	0.14	9753	9848	9732	304534	964.82	.64	1383.74	4.01	
37	BISMARCK/NANDAN, NORTH DAKOTA									
38	(BISMARCK MUNI)									
39	0.05	5517	5512	5479	120302	273.69	.58	325.47	2.34	
40	BOISE, IDAHO									
41	(BOISE AIR TERMINAL/GOWEN FLD)									
42	0.17	9434	9415	9322	385151	873.49	23.10	1072.24	9.27	
43	BRISTOL/KINGSPT/JHNSN CTY, TENN									
44	(TRI CITY)									
45	0.08	9172	9212	9136	191304	1721.87	7.74	341.89		
46	BURLINGTON, VERMONT									
47	(BURLINGTON INTERNATIONAL)									
48	0.05	5483	5667	5396	121692	587.14	1.25	178.33		
49	CEGAR RAPIOS/IOWA CITY, IOWA									
50	(CEGAR RAPIOS MUNI)									
51	0.09	8064	8110	8001	212935	1788.58	26.14	341.44	.12	
52	CHAMPAIGN/URBANA, ILLINOIS									
53	(UNIVERSITY OF ILLINOIS-WILLARD)									
54	0.05	5993	6043	5927	113156	145.49	.73	205.07	2.34	
55	CHARLESTON, SOUTH CAROLINA									
56	(CHARLESTON AFB/MUNI)									
57	0.16	8112	8070	7979	352294	1064.90	32.99	595.92	44.60	
58	CHARLESTON/OUNBAR, W. VIRGINIA									
59	(KANAWHA)									
60	0.11	8591	8703	8544	246051	455.26	3.41	475.84	.57	
61	CHARLOTTE AMALIE, VIRGIN IS. US									
62	(HARRY S. TRUMAN)									
63	0.06	2491	2527	2447	130087	217.42		97.37	3.02	
64	CHATTANOOGA, TENNESSEE									
65	(LOVELL FIELD)									
66	0.12	10105	10138	10032	259578	1132.11	8.93	921.48	1.10	
67	COLORADO SPRINGS, COLORADO									
68	(PETERSON FIELD)									
69	0.13	8141	8299	8071	283051	1629.76	3.87	231.18		
70	COLUMBIA, SOUTH CAROLINA									
71	(COLUMBIA METROPOLITAN)									
72	0.17	9251	9130	9057	372315	1051.70	114.51	1297.13	2.00	
73	COLUMBUS, GEORGIA									
74	(COLUMBUS METROPOLITAN)									
75	0.07	7616	7566	7462	158061	590.98	15.39	107.74	.20	
76	CORPUS CHRISTI, TEXAS									
77	(CORPUS CHRISTI INTERNATIONAL)									
78	0.09	4882	4905	4852	208918	509.38	7.37	449.74		
79	DAYTONA BEACH, FLORIDA									
80	(DAYTONA BEACH REGIONAL)									
81	0.12	7175	7192	7139	273278	682.00	1.76	12.72	13.18	
82	DULUTH, MINN./SUPERIOR, WIS.									
83	(DULUTH INTERNATIONAL)									
84	0.05	6440	6470	6379	124865	730.58	.49	135.94	.01	

TABLE 4-9.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL
 OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail
								Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10	
1	ERIE, PENNSYLVANIA									
2	(ERIE INTL)									
3	0.06	4155	4202	4090	129724	533.74	17.32	174.09		
4	EUGENE, OREGON									
5	(MAHLON SWEET FIELO)									
6	0.07	5106	5304	5037	169769	552.21	12.73	234.00	2.78	
7	EVANSVILLE, INDIANA									
8	(EVANSVILLE ORESS REGIONAL)									
9	0.10	5890	5917	5874	216758	1595.76	46.52	317.79	2.63	
10	FAIRBANKS, ALASKA									
11	(FAIRBANKS INTERNATIONAL)									
12	0.15	10563	9613	9244	331794	7150.54		2371.66	1811.15	
13	FARGO, N.D./MORHEAD, MINNESOTA									
14	(HECTOR FIELO)									
15	0.07	5608	5607	5548	154765	401.35	7.59	537.26	5.35	
16	FAYETTEVILLE, NORTH CAROLINA									
17	(FAYETTEVILLE MUNI/GRANNIS FLO)									
18	0.06	6469	6526	6449	148658	690.30	4.27	135.81		
19	FLINT, MICHIGAN									
20	(BISHOP)									
21	0.05	4483	4503	4433	115667	182.41	7.85	332.67	.03	
22	FORT MYERS, FLORIDA									
23	(PAGE FIELO)									
24	0.09	3848	3857	3833	210109	374.67	5.37	6.43		
25	FORT WAYNE, INDIANA									
26	(MUNICIPAL/BAER FIELO)									
27	0.10	5536	5508	5476	220046	1886.59	71.37	514.35	120.24	
28	FRESNO, CALIFORNIA									
29	(FRESNO AIR TERMINAL)									
30	0.15	4992	4971	4944	338839	751.27	28.56	519.87	3.41	
31	GAINESVILLE, FLORIDA									
32	(GAINESVILLE MUNI)									
33	0.05	1827	1830	1822	109738	219.99	17.03	110.53		
34	GRAND JUNCTION, COLORADO									
35	(WALKER FIELO)									
36	0.05	3829	3756	3724	127164	339.09	10.03	93.51		
37	GRAND RAPIDS, MICHIGAN									
38	(KENT COUNTY)									
39	0.15	11802	11868	11649	325537	1655.19	28.16	1047.59	.66	
40	GREAT FALLS, MONTANA									
41	(GREAT FALLS INTERNATIONAL)									
42	0.06	6252	6271	6217	145370	556.21	.25	243.17	2.35	
43	GREEN BAY/CLINTONVILLE, WIS.									
44	(AUSTIN-STRAUBEL FIELO)									
45	0.12	10447	10853	10696	269067	1825.93	4.26	750.44	.14	
46	GREENVILLE/SPARTANBURG, S.C.									
47	(GREENVILLE-SPARTANBURG)									
48	0.12	7930	7883	7834	266073	1239.68	105.17	873.20	1.21	
49	AGANA NAS, GUAM ISLAND									
50	(AGANA FIELO)									
51	0.09	3086	3019	2819	194789	3264.22		1173.03	895.19	5.28
52	HARRISBURG/YORK, PA.									
53	(HARRISBURG INTERNATIONAL)									
54	0.12	5088	5061	5007	273436	1037.38	3.78	1238.16	.01	
55	HUNTSVILLE/DECATUR, ALABAMA									
56	(MADISON COUNTY JETPORT)									
57	0.10	8727	8698	8645	229696	1214.34	13.47	167.72	.20	
58	INDIO/PALM SPRINGS, CALIFORNIA									
59	(PALM SPRINGS MUNI)									
60	0.07	3464	3510	3417	154115	199.91	.02	.42		
61	JACKSON-VICKSBURG, MISS.									
62	(ALLEN C THOMPSON FIELO)									
63	0.16	10868	10884	10816	349024	1828.79	20.61	1291.49		
64	JUNEAU, ALASKA									
65	(JUNEAU MUNI)									
66	0.05	3163	3164	3053	122790	711.24		386.04	281.80	
67	KA(LUA-KONA, HAWAII)									
68	(KE-AHCLE)									
69	0.20	6533	5635	5366	440049	1914.59		97.49	134.40	
70	KALAMAZOO-BATTLE CREEK, MICH.									
71	(KALAMAZOO MUNI)									
72	0.05	5396	5424	5362	110196	263.84	1.11	327.56		
73	KNOXVILLE, TENNESSEE									
74	(MC GHEE TYSON)									
75	0.18	13716	13670	13588	406522	2453.20	51.84	1263.22	8.45	
76	LANSING, MICHIGAN									
77	(CAPITAL CITY)									
78	0.08	7866	7904	7764	180025	427.25	16.55	365.90		
79	LEXINGTON/FRANKFURT, KENTUCKY									
80	(BLUE GRASS)									
81	0.11	8636	8655	8587	251280	1477.81	32.22	367.42	.58	
82	LINCOLN, NEBRASKA									
83	(LINCOLN MUNI)									
84	0.08	6762	6747	6681	173497	399.76	10.33	150.24	.09	

TABLE 4-9.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

		12 MONTHS ENDED DECEMBER 31, 1976									
Line No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons					
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
					Priority			Nonpriority	8		9
1	LITTLE ROCK, ARKANSAS										
2	(ADAMS FIELD)										
3	0.20	12264	12322	12210	443474	2674.99	33.69	1209.38		.73	
4											
5	LUBBOCK, TEXAS										
6	(LUBBOCK REGIONAL)										
7	0.12	7601	7621	7539	258724	1587.54	.46	337.28			
8											
9	MADISON, WISCONSIN										
10	(TRUAX FIELD)										
11	0.14	12542	12538	12379	308592	2174.62	2.79	328.42		.09	
12											
13	MELBOURNE, FLORIDA										
14	(CAPE KENNEDY REGIONAL)										
15	0.06	3823	3831	3812	141305	449.97	8.24	3.81		2.06	
16											
17	MIDLAND/ODESSA, TEXAS										
18	(MIDLAND REGIONAL)										
19	0.11	7138	7111	7072	242182	1208.07	.17	563.49			
20											
21	MOBILE, AL/PASCAGOULA, MISS										
22	(BATES FIELD)										
23	0.13	10812	10837	10751	288005	764.30	23.58	191.75		1.14	
24											
25	MOLINE, ILLINOIS/OAVENPORT, IOWA										
26	(OUAO-CITY)										
27	0.13	9712	9670	9592	284963	752.53	15.14	627.63		.54	
28											
29	MONTGOMERY, ALABAMA										
30	(CANNELLY FIELD)										
31	0.09	7387	7391	7329	201821	694.73	16.51	327.98		25.80	
32											
33	NEWPT NEW/HAMPTN/WILBG/YKTN, VA										
34	(PATRICK HENRY)										
35	0.08	6059	6072	6025	190124	510.22	20.90	48.38			
36											
37	ONTARIO/SAN BERNARD/RIVERSE, CA										
38	(ONTARIO INTERNATIONAL)										
39	0.17	9408	9381	9255	386751	1809.30	18.72	67.08		1.85	
40											
41	PENSACOLA, FLORIDA										
42	(PENSACOLA REGIONAL)										
43	0.09	4997	5022	4990	201294	385.96	11.61	871.55		6.42	
44											
45	PEORIA, ILLINOIS										
46	(GREATER PEORIA)										
47	0.09	8770	8777	8698	200367	693.69	.91	445.28		.13	
48											
49	PORTLAND, MAINE										
50	(PORTLAND INTERNATIONAL JETPORT)										
51	0.08	6523	6844	6408	189936	815.97	3.85	251.86			
52											
53	PROVIDENCE, RHODE ISLAND										
54	(THEODORE FRANCIS GREEN STATE)										
55	0.19	11018	11103	10865	420895	2960.10	30.75	1713.53		10.36	
56											
57	RAPID CITY, SOUTH DAKOTA										
58	(RAPID CITY REGIONAL)										
59	0.05	4818	4865	4790	128193	256.57	.01	223.37		2.04	
60											
61	RICHMOND, VIRGINIA										
62	(RICHARD E BYRD FLYING FIELD)										
63	0.20	11931	11884	11782	438575	1256.19	11.98	1962.11		6.71	
64											
65	ROANOKE, VIRGINIA										
66	(ROANOKE MUNI)										
67	0.16	14329	14469	14293	355079	1625.76	.95	704.96		.34	
68											
69	ROCHESTER, MINNESOTA										
70	(ROCHESTER MUNI)										
71	0.07	7660	7780	7630	160304	246.53	1.34	182.98		.45	
72											
73	SACRAMENTO, CALIFORNIA										
74	(SACRAMENTO METROPOLITAN)										
75	0.23	8708	8737	8614	509595	1104.76	24.73	1890.25			
76											
77	SAGINAW/BAY CITY/MIDLAND, MICH.										
78	(TRI CITY)										
79	0.08	5548	5596	5506	188800	389.64	13.28	303.96		3.36	
80											
81	SALINAS/MONTEREY, CALIFORNIA										
82	(PENINSULA)										
83	0.10	4389	4405	4368	221696	309.37	18.07	1.11			
84											
85	SAN JOSE, CALIFORNIA										
86	(SAN JOSE MUNI)										
87	0.18	11076	11106	10958	404419	3033.90	21.87	537.58			
88											
89	SANTA BARBARA CALIFORNIA										
90	(SANTA BARBARA)										
91	0.07	3374	3376	3360	165126	330.58	17.86	9.02		.15	
92	(SANTA MARIA PUBLIC)										
93	0.00	709	729	700	17679	71.92					
94											
95	COMMUNITY TOTAL										
96	0.07	4083	4105	4060	182805	402.50	17.86	9.02		.15	
97											
98	SARASOTA/BRAEDENTON, FLORIDA										
99	(SARASOTA-BRAEDENTON)										
100	0.15	7814	7860	7775	334110	767.26	7.86	2.03		.80	
101											
102	SAVANNAH, GEORGIA										
103	(SAVANNAH MUNI)										
104	0.12	5087	5113	5070	269286	558.01	2.65	234.13			
105											
106	SCRANTON/WILKES-BARRE, PENNA.										
107	(WILKES-BARRE-SCRANTON)										
108	0.06	2936	2923	2879	139254	325.11	3.83	119.28		.33	
109											
110	SHREVEPORT, LOUISIANA										
111	(GREATER SHREVEPORT MUNI)										
112	0.16	13579	13620	13546	353379	1962.48	14.26	1313.78			

TABLE 4-9.
 AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL IN TOTAL
 OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS

12 MONTHS ENDED DECEMBER 31, 1976

L i n e No.	Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail
								Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10	
1	SIoux FALLS, SOUTH OAKOTA									
2	(JOE FCS5 FIELO)									
3	0.11									
4		11869	11879	11740	242531	1109.25	1.09	1095.57	4.21	
5	SOUTH BEND, INDIANA									
6	(ST JOSEPH COUNTY)									
7	0.09	6120	6088	6015	196005	866.37	62.27	398.76	.12	
8										
9	SPRINGFIELD, ILLINOIS									
10	(CAPITAL)									
11	0.05	5746	5774	5716	108050	302.56	.08	279.54	5.11	
12										
13	SPRINGFIELD, MISSOURI									
14	(SPRINGFIELD MUNI)									
15	0.06	5083	5091	5049	133730	515.75	.19	28.03	.09	
16										
17	TALLAHASSEE, FLORIDA									
18	(TALLAHASSEE MUNI)									
19	6.10	6631	6637	6571	227330	298.42	26.75	460.92	52.41	
20										
21	TOLEDO, OHIO									
22	(TOLEDO EXPRESS)									
23	0.13	8238	8254	8184	287707	601.73	6.11	931.33	.46	
24										
25	WATERLOO, IOWA									
26	(WATERLOO MUNI)									
27	0.05	5872	5896	5838	108320	666.05	19.69	195.14	.01	
28										
29	WICHITA, KANSAS									
30	(WICHITA MUNI)									
31	0.21	12387	12421	12334	456598	2836.47	.48	2391.31	10.01	
32										
33	YOUNGSTOWN, OHIO									
34	(YOUNGSTOWN MUNI)									
35	0.06	3705	3700	3648	130208	391.55	13.44	179.35	.08	
36										
37	OVER-ALL TOTAL,									
38	SMALL HUBS									
39	9.75	666496	667151	657832	21871179	94282.94	1281.95	48833.90	3496.94	5.28
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Table 4-10. Domestic Intercity Passenger-Miles by Mode of Travel and Class of Service: 1967 through 1976
(In Millions)

Mode and Class	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total	<u>1,001,108</u>	<u>1,057,145</u>	<u>1,105,469</u>	<u>1,161,625</u>	<u>1,207,341</u>	<u>1,277,070</u>	<u>1,323,770 r/</u>	<u>1,232,924 r/</u>	<u>1,285,379 r/</u>	<u>1,363,218</u>
Total common carrier	<u>111,308</u>	<u>120,745</u>	<u>128,469</u>	<u>135,625</u>	<u>136,341</u>	<u>148,070</u>	<u>157,770 r/</u>	<u>161,924 r/</u>	<u>162,379 r/</u>	<u>176,218</u>
Scheduled air carrier <u>1/</u>	75,487	87,508	95,946	104,146	106,438	118,138	126,317	128,425 <u>r/</u>	131,728 <u>r/</u>	145,271
Regular service	18,436	19,762	20,186	19,797	19,370	21,956	23,564	24,602 <u>r/</u>	23,622 <u>r/</u>	24,400
Coach service	57,051	67,746	75,760	84,349	87,068	96,182	102,753	103,823 <u>r/</u>	108,106 <u>r/</u>	120,871
Class I line-haul railways <u>2/</u>	10,921	8,737	7,623	6,179	4,403	4,332	5,053	5,799	5,251 <u>r/</u>	5,847
First-class service	1,592	1,178	1,021	765	516	520	583	613	502 <u>r/</u>	570
Coach service	9,329	7,559	6,602	5,414	3,887	3,812	4,470	5,186	4,749 <u>r/</u>	5,277
Motor carriers <u>3/</u> Class I, II, III	24,900	24,500	24,900	25,300	25,500	25,600	26,400 <u>r/</u>	27,700 <u>r/</u>	25,400 <u>r/</u>	25,100
Private automobiles <u>4/</u>	<u>889,800</u>	<u>936,400</u>	<u>977,000</u>	<u>1,026,000</u>	<u>1,071,000</u>	<u>1,129,000</u>	<u>1,166,000 r/</u>	<u>1,071,000 r/</u>	<u>1,123,000 r/</u>	<u>1,187,000</u>
Percent air to total	7.5	8.3	8.7	9.0	8.8	9.3	9.5 <u>r/</u>	10.4 <u>r/</u>	10.3 <u>r/</u>	10.6
Percent air to total common carrier	67.8	72.5	74.7	76.8	78.1	79.8	80.1 <u>r/</u>	79.3 <u>r/</u>	81.1 <u>r/</u>	82.4
Percent total rail to air	14.5	10.0	7.9	5.9	4.1	3.7	4.0	4.5	4.0 <u>r/</u>	4.0
Percent first-class rail to total air	2.1	1.3	1.0	0.7	0.5	0.4	0.5	0.5	0.4	0.4

r/ Revised.

1/ Scheduled operations of domestic trunk and local service carriers.

2/ Includes Pullman Company and excludes commutation.

3/ Excludes intrastate and other local movements. Series revised to include Alaska and Hawaii.

4/ Series revised to include Alaska and Hawaii.

Source: Interstate Commerce Commission, Bureau of Economics, and Transportation Facts and Trends, July 1977.

V. U.S. CIVIL AIR CARRIER FLEET

Data pertaining to the U.S. civil air carrier fleet are obtained from the Monthly Aircraft/Engine Utilization Reports submitted by the air carrier operators. The U.S. air carrier fleet (for these statistics) is comprised of: (1) certificated route air carriers, (2) supplemental carriers, and (3) commercial operators of large aircraft.

Table 5-1. Composition of the U.S. Air Carrier Fleet by Type of Aircraft and Number of Engines: December 31, 1976 through 1983 ^{1/}

Type of Aircraft	Dec. 31 1976	Forecast Air Carrier Fleet* December 31						
		1977	1978	1979	1980	1981	1982	1983
Total	<u>2,492</u>	<u>2,563</u>	<u>2,629</u>	<u>2,708</u>	<u>2,780</u>	<u>2,862</u>	<u>2,939</u>	<u>3,027</u>
Fixed-Wing aircraft--total	<u>2,487</u>	<u>2,556</u>	<u>2,620</u>	<u>2,698</u>	<u>2,769</u>	<u>2,850</u>	<u>2,926</u>	<u>3,013</u>
Jet	<u>2,139</u>	<u>2,185</u>	<u>2,278</u>	<u>2,383</u>	<u>2,475</u>	<u>2,573</u>	<u>2,665</u>	<u>2,773</u>
2- and 3-engine	1,557	1,577	1,679	1,795	1,899	1,999	2,094	2,218
4-engine	582	608	599	588	576	574	571	555
Turboprop	<u>245</u>	<u>260</u>	<u>247</u>	<u>233</u>	<u>220</u>	<u>214</u>	<u>208</u>	<u>198</u>
1- and 2-engine	176	188	180	175	170	166	162	158
4-engine	69	72	67	58	50	48	46	40
Piston	<u>103</u>	<u>111</u>	<u>95</u>	<u>82</u>	<u>74</u>	<u>63</u>	<u>53</u>	<u>42</u>
1- and 2-engine	66	73	66	60	55	51	47	42
4-engine	37	38	29	22	19	12	6	---
Rotary-wing--total	<u>5</u>	<u>7</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>
Turbine	<u>4</u>	<u>7</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>
Piston	<u>1</u>	---	---	---	---	---	---	---

* Source: Aviation Forecast: Calendar Years 1977 through 1983, Department of Transportation, Federal Aviation Administration, Office of Aviation Economics, Aviation Forecast Branch.

^{1/} Does not include aircraft operated by Air Taxi operators who hold authority to operate aircraft over 12,500 pounds, or turbojet aircraft under blanket authority, or aircraft operated by Air Travel Clubs. These aircraft are shown in separate tables.

NOTE: Included in the forecast are all passenger and cargo aircraft owned or leased by and in the domestic or international service of the United States certificated route, supplemental, intrastate, and commercial air carriers. Aircraft used for training and aircraft that have been withdrawn from service and are awaiting disposal are not included here.

Table 5-2. Composition of U.S. Air Carrier Fleet by Type of Aircraft:
December 1967 through 1976 ^{1/}

Year	Total	Fixed-Wing Aircraft					Rotary-Wing Aircraft		
		Total Fixed-Wing	Turbine			Piston	Total Rotary-Wing	Turbine	Piston
			Total	Turbojet	Turboprop				
1967	2,452	2,430	1,788	1,344	444	642	22	17	5
1968	2,586	2,570	2,239	1,781	458	331	16	13	3
1969	2,690	2,672	2,448	2,068	380	224	18	15	3
1970	2,679	2,663	2,510	2,136	374	153	16	13	3
1971	2,642	2,628	2,482	2,132	350	146	14	11	3
1972	2,583	2,569	2,436	2,118	318	133	14	11	3
1973	2,599	2,586	2,449	2,145	304	137	13	10	3
1974	2,472	2,462	2,344	2,078	266	118	10	10	---
1975	2,495	2,488	2,374	2,114	260	114	7	7	---
1976	2,492	2,487	2,384	2,139	245	103	5	4	1

^{1/} Includes only those aircraft used during the last quarter.

Does not include aircraft operated by air taxi operators who hold authority to operate aircraft over 12,500 pounds, turbojet aircraft under blanket authority, or aircraft operated by air travel clubs. These aircraft are shown on separate tables.

Table 5-3. Total Aircraft in Operation by the U.S. Air Carrier Fleet by Type of Carrier and by Type of Aircraft: December 1975 and 1976 ^{1/}

Type of Aircraft	All Air Carriers		Certificated Route Air Carriers		Supplemental Air Carriers		Commercial Operators	
Total	<u>2,492</u>	<u>2,495</u>	<u>2,271</u>	<u>2,267</u>	<u>77</u>	<u>74</u>	<u>144</u>	<u>154</u>
Fixed-wing--total	<u>2,487</u>	<u>2,488</u>	<u>2,266</u>	<u>2,260</u>	<u>77</u>	<u>74</u>	<u>144</u>	<u>154</u>
Turbine powered--total	2,384	2,374	2,223	2,215	76	72	85	87
Turbojet--total	2,139	2,114	2,043	2,022	48	45	48	47
4-engine	582	602	533	561	42	33	7	8
3-engine	1,022	994	992	961	3	8	27	25
2-engine	535	518	518	500	3	4	14	14
Turboprop--total	245	260	180	193	28	27	37	40
4-engine	69	68	21	16	27	27	21	25
2-engine	176	192	159	177	1	0	16	15
Piston-powered--total	103	114	43	45	1	2	59	67
4-engine	37	37	2	1	---	---	35	36
2-engine	55	69	31	37	1	2	23	30
1-engine	11	8	10	7	---	---	1	1
Rotary-wing--total	<u>5</u>	<u>7</u>	<u>5</u>	<u>7</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Turbine-powered	4	7	4	7	---	---	---	---
Piston-powered	1	---	1	---	---	---	---	---

^{1/} Does not include aircraft operated by air taxi operators who hold authority to operate aircraft over 12,500 pounds, turbojet aircraft under blanket authority, or aircraft operated by air travel clubs. These aircraft are shown in separate tables.

Table 5-4. Composition of U.S. Air Carrier Fleet by Type of Aircraft, Number of Engines, and Model: December 31, 1975 and 1976 ^{1/}

Type of Aircraft, Number of and Model	1976	1975	Type of Aircraft, Number of and Model	1976	1975
Total aircraft	<u>2,492</u>	<u>2,495</u>	Hawker Siddeley HS-74B . . .	1	1
Total fixed-wing	<u>2,487</u>	<u>2,488</u>	Nihon YS-11	23	23
Turbine-powered--total	<u>2,384</u>	<u>2,374</u>	Short SC-7	---	2
Four-engine--total	<u>651</u>	<u>670</u>	Piston-powered--total	<u>103</u>	<u>114</u>
Turbojet--total	<u>582</u>	<u>602</u>	Four-engine--total	<u>37</u>	<u>37</u>
Boeing 707	240	264	Douglas DC-4	1	1
Boeing 720	25	29	Douglas DC-6	33	33
Boeing 747	105	98	Douglas DC-7	2	2
Douglas DC-8	211	210	Lockheed 1049	1	1
Lockheed L-1329	1	1	Twin-engine--total	<u>55</u>	<u>69</u>
Turboprop--total	<u>69</u>	<u>68</u>	Aero Commander AC-500 . . .	3	3
Lockheed L-188	49	48	Beech BE-18	2	3
Lockheed L-382	20	20	Britten Norman BN-2A	2	---
Three-engine turbojet--total . .	<u>1,022</u>	<u>994</u>	Cessna C-421	---	1
Boeing 727	820	792	Convair CV-340/440	7	8
Douglas DC-10	125	125	Curtiss Wright CW-46	16	19
Lockheed 1011	77	77	Doriner DO-28	1	---
Twin-engine--total	<u>711</u>	<u>710</u>	Douglas DC-3	8	13
Turbojet--total	<u>535</u>	<u>518</u>	Fairchild C-82	2	2
Boeing 737	152	147	Grumman G-21	4	5
British Aircraft Corp. BAC-111	31	30	Grumman G-44	1	3
Douglas DC-9	352	341	Martin M-404	9	12
Turboprop--total	<u>176</u>	<u>192</u>	Single-engine--total	<u>11</u>	<u>8</u>
Beech BE-99	3	4	Cessna C-150	---	1
Convair CV-580	71	69	Cessna C-185	2	2
Convair CV-600	12	19	Cessna C-206	4	1
Convair CV-640	13	13	Cessna C-207	3	2
DeHavilland OHC-6	18	21	DeHavilland OHC-2	1	1
Fairchild F-27	7	10	DeHavilland DHC-3	1	1
Fairchild F-227	27	29	Total rotary-wing	5	7
Grumman G-159	1	1	Turbine-powered--total	<u>4</u>	<u>7</u>
			Sikorsky S-61	4	7
			Piston-powered--total	<u>1</u>	<u>---</u>
			Hiller UH-12E	1	---

^{1/} Includes only those aircraft used during the last quarter. Does not include aircraft operated by air taxi operators who hold authority to operate aircraft over 12,500 pounds, turbojet aircraft under blanket authority, or aircraft operated by air travel clubs. These aircraft are shown in separate tables.

Table 5-5. Revenue Load Capacity of the U.S. Certificated Route Air Carriers:
December 1967 through 1976

Year	Air Carrier Fleet <u>1/</u>		Revenue Load Capacity (Tons)		
	Number (1)	Index (1967=100) (2)	Per Aircraft <u>2/</u> (3)	Total Fleet (1)x(3)	Index (1967=100)
1967.	2,194	100.0	14.7	32,251.8	100.0
1968.	2,317	105.6	15.5	35,913.5	111.4
1969.	2,423	110.4	16.2	39,252.6	121.7
1970.	2,437	111.1	17.2	41,916.4	130.0
1971.	2,389	108.9	18.5	44,196.5	137.0
1972.	2,361	107.6	19.1	45,095.1	139.8
1973.	2,361	107.6	20.0	47,220.0	146.4
1974.	2,244	102.3	20.7	46,450.8	144.2
1975.	2,267	103.3	21.0	47,607.0	147.6
1976.	2,271	103.5	21.2	48,145.2	149.3

1/ Office of Management Systems, Federal Aviation Administration.
2/ Bureau of Accounts and Statistics, CAB.

Table 5-6. Revenue Load Capacity of Helicopters in the U.S. Certificated
Route Air Carrier Fleet: December 1967 through 1976

Year	Helicopter Fleet <u>1/</u>		Revenue Load Capacity (Tons)		
	Number (1)	Index (1967=100) (2)	Per Aircraft <u>2/</u> (3)	Total Fleet (1)x(3)	Index (1967=100)
1967.	22	100.0	2.4	52.8	100.0
1968.	16	72.7	2.4	38.4	72.7
1969.	18	81.8	2.3	41.4	78.4
1970.	16	72.7	2.2	35.2	66.7
1971.	14	63.6	2.2	30.8	58.3
1972.	14	63.6	2.3	32.2	61.0
1973.	13	59.1	2.3	29.9	56.6
1974.	10	45.5	2.3	23.0	43.6
1975.	7	31.8	2.4	16.8	31.8
1976.	5	22.7	2.4	12.0	22.7

1/ Office of Management Systems, Federal Aviation Administration.
2/ Bureau of Accounts and Statistics, CAB.

Table 5-7. Aircraft in Operation by Certificated Route Air Carriers by Type of Aircraft and Number of Engines: December 1967 through 1976 ^{1/}

Type of Aircraft	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total	<u>2,194</u>	<u>2,317</u>	<u>2,423</u>	<u>2,437</u>	<u>2,389</u>	<u>2,361</u>	<u>2,361</u>	<u>2,244</u>	<u>2,267</u>	<u>2,271</u>
Fixed-wing aircraft--total . . .	<u>2,172</u>	<u>2,301</u>	<u>2,405</u>	<u>2,421</u>	<u>2,375</u>	<u>2,347</u>	<u>2,348</u>	<u>2,234</u>	<u>2,260</u>	<u>2,266</u>
Four-engine	1,032	928	919	951	879	793	735	612	578	556
Turbojet	679	778	840	891	847	768	712	594	561	533
Turboprop	175	128	61	55	29	22	20	17	16	21
Piston	178	22	18	5	3	3	3	1	1	2
Three-engine	394	516	605	631	651	738	844	893	961	992
Twin-engine	719	835	870	825	831	803	754	717	714	708
Turbojet	219	406	528	519	530	522	500	501	500	518
Turboprop	238	281	261	256	255	234	218	184	177	159
Piston	262	148	81	50	46	47	36	32	37	31
Single-engine	27	22	11	14	14	13	15	12	7	10
Turboprop	7	7	5	5	3	---	---	---	---	---
Piston	20	15	6	9	11	13	15	12	7	10
Rotary-wing--total	<u>22</u>	<u>16</u>	<u>18</u>	<u>16</u>	<u>14</u>	<u>14</u>	<u>13</u>	<u>10</u>	<u>7</u>	<u>5</u>
Turbine	17	13	15	13	11	11	10	10	7	4
Piston	5	3	3	3	3	3	3	---	---	1

^{1/} Excludes aircraft not used in air carrier operations (such as those used for crew training and general utility purposes and aircraft held for disposal).

Table 5-8. Aircraft in Operation by Certificated Route Air Carriers by Make and Model:
December 31, 1967 through 1976 1/

Aircraft Make and Model	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total . . .	<u>2,194</u>	<u>2,317</u>	<u>2,423</u>	<u>2,437</u>	<u>2,389</u>	<u>2,361</u>	<u>2,361</u>	<u>2,244</u>	<u>2,267</u>	<u>2,271</u>
Turbojet--4-engine-- total	<u>679</u>	<u>778</u>	<u>840</u>	<u>891</u>	<u>847</u>	<u>768</u>	<u>712</u>	<u>594</u>	<u>561</u>	<u>533</u>
Boeing 707	327	380	417	399	359	337	315	281	264	240
Boeing 720	135	134	127	115	106	56	44	30	23	18
Convair 990	11	6	---	---	---	---	---	---	---	---
Convair 880	45	41	41	41	41	41	37	---	---	---
Oouglas OC-8	161	217	254	257	236	227	207	180	177	171
Boeing 747	---	---	1	79	104	105	109	103	97	104
Lockheed 1329	---	---	---	---	1	1	---	---	---	---
Turbojet--3-engine-- total	<u>394</u>	<u>516</u>	<u>605</u>	<u>631</u>	<u>651</u>	<u>738</u>	<u>844</u>	<u>893</u>	<u>961</u>	<u>992</u>
Boeing 727	394	516	605	631	638	662	710	724	765	793
Oouglas OC-10	---	---	---	---	13	59	86	103	121	122
Lockheed 1011	---	---	---	---	---	17	48	66	76	77
Turbojet--2-engine-- total	<u>219</u>	<u>406</u>	<u>528</u>	<u>519</u>	<u>530</u>	<u>522</u>	<u>500</u>	<u>501</u>	<u>500</u>	<u>518</u>
BAC-111	57	60	60	59	58	58	31	36	30	31
Oouglas OC-9	142	260	316	327	334	329	335	329	337	349
Sud Caravelle	20	20	20	---	---	---	---	---	---	---
Boeing 737	---	66	132	133	133	134	134	136	133	138
Oassault MO-20	---	---	---	---	5	1	---	---	---	---
Turboprop--4-engine-- total	<u>175</u>	<u>128</u>	<u>61</u>	<u>55</u>	<u>29</u>	<u>22</u>	<u>20</u>	<u>17</u>	<u>16</u>	<u>21</u>
Canadair CL-44	19	14	9	8	1	---	---	---	---	---
Lockheed L-188	109	86	40	36	24	19	19	17	16	21
Lockheed L-382	9	9	9	8	4	3	1	---	---	---
Vickers Viscount	38	19	3	3	---	---	---	---	---	---
Turboprop--1- and 2-engine--total	<u>245</u>	<u>288</u>	<u>266</u>	<u>261</u>	<u>258</u>	<u>234</u>	<u>218</u>	<u>184</u>	<u>177</u>	<u>159</u>
Beech BE-99	---	---	---	3	5	1	---	---	3	3
Convair CV-580/640	113	148	143	118	115	110	105	89	69	69
Convair 600	---	---	---	24	22	25	24	16	19	12
DeHavilland OHC-6	---	6	9	6	8	13	9	8	21	18
Fairchild FH-227	58	55	53	47	48	32	31	33	29	27
Fairchild FH-27	48	47	36	35	34	29	24	15	10	7
Nihon YS-11	2	9	17	21	21	22	23	21	23	23
Nord NO-262	12	12	---	---	---	---	---	---	---	---
Pilatus PC-6A-68	7	7	5	5	3	---	---	---	---	---
Short SC-7	5	4	3	2	2	2	2	2	3	---

See footnotes at end of table.

Table 5-8. Aircraft in Operation by Certificated Route Air Carriers by Make and Model:
December 31, 1967 through 1976 1/ (Continued)

Aircraft Make and Model	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Piston--4-engine-- total	<u>178</u>	<u>22</u>	<u>18</u>	<u>5</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>2</u>
Douglas OC-4	4	---	---	---	---	---	---	---	---	---
Douglas DC-6, 6A, 6B	102	7	7	3	3	3	3	1	1	2
Douglas OC-7, 7B, 7C	27	15	10	2	---	---	---	---	---	---
Lockheed 749	6	---	---	---	---	---	---	---	---	---
Lockheed 1049	38	---	1	---	---	---	---	---	---	---
Lockheed 1649	1	---	---	---	---	---	---	---	---	---
Piston--2-engine-- total	<u>262</u>	<u>148</u>	<u>81</u>	<u>50</u>	<u>46</u>	<u>47</u>	<u>36</u>	<u>32</u>	<u>37</u>	<u>31</u>
Convair 28-5ACF	4	4	2	---	---	---	---	---	---	---
Convair 240	11	3	1	---	---	1	---	---	---	---
Convair 340	78	46	7	6	---	5	4	3	4	4
Convair 440	---	---	---	---	4	2	2	3	3	1
Curtiss C-46, 20T	12	7	6	6	3	3	2	2	2	2
Douglas DC-3, 3A	70	14	5	2	2	2	2	---	4	4
Grumman G-21/SA-16	20	19	13	12	12	11	6	6	5	4
Grumman G-44/44A	2	3	3	2	2	1	1	1	3	1
Grumman G-73	2	1	1	1	1	1	1	1	---	---
Martin 404	57	46	37	18	17	17	14	12	9	7
Other 2-engine piston	6 <u>2/</u>	5 <u>2/</u>	6 <u>2/</u>	3 <u>3/</u>	5 <u>4/</u>	4 <u>5/</u>	4 <u>6/</u>	4 <u>7/</u>	7 <u>8/</u>	8 <u>9/</u>
Piston--1-engine-- total	<u>20</u>	<u>15</u>	<u>6</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>15</u>	<u>12</u>	<u>7</u>	<u>10</u>
Cessna 150/172/180 185, 206/207	12	11	5	8	9	8	13	10	5	8
Dehavilland OH/DHC	4	---	---	---	---	---	---	1	2	2
Pilatus PC-6	3	2	---	---	---	3	---	---	---	---
Other 1-engine piston	1 <u>10/</u>	2 <u>11/</u>	1 <u>12/</u>	1 <u>13/</u>	2 <u>14/</u>	2 <u>15/</u>	2 <u>16/</u>	1 <u>17/</u>	---	---
Helicopters--total	<u>22</u>	<u>16</u>	<u>18</u>	<u>16</u>	<u>14</u>	<u>14</u>	<u>13</u>	<u>10</u>	<u>7</u>	<u>5</u>
Boeing V107-II (Turbine)	7	4	4	4	---	---	---	---	---	---
Sikorsky S61 (Turbine)	9	8	8	6	8	7	7	7	7	4
Sikorsky S62 (Turbine)	1	1	---	---	---	---	---	---	---	---

See footnotes at end of table.

Table 5-B. Aircraft in Operation by Certificated Route Air Carriers by Make and Model:
December 31, 1967 through 1976 1/ (Continued)

Aircraft Make and Model	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Sikorsky S55	2	---	---	---	---	---	---	---	---	---
Sikorsky S58	3	3	3	3	3	3	3	---	---	---
Bell 206 (Turbine)	---	---	3	3	3	4	3	3	---	---
Hiller UH-125 . . .	---	---	---	---	---	---	---	---	---	1

1/ Aircraft not used in air carrier operations, such as those used for crew training and general utility purposes and aircraft held for disposal are excluded.

2/ Includes 3 Piper PA-31's; 1 PA-23; and 1 Aero Commander 680.

3/ Includes 1 Aero Commander 680; 1 Cessna 402; and 1 Piper PA-31.

4/ Includes 2 Aero Commander AC-680's; 1 AC-500; 1 Cessna 402; and 1 Piper PA-23.

5/ Includes 1 Aero Commander AC-500; and 3 Cessna CE-402's.

6/ Includes 1 Aero Commander AC-500; 1 Cessna CE-310; and 2 CE-402's.

7/ Includes 1 Aero Commander AC-500; 1 Beech BE-18; 1 Cessna CE-310, and 1 CE-402.

8/ Includes 3 Aero Commander AC-500's; 3 Beech BE-18's; 1 Cessna C-421.

9/ Includes 3 Aero Commander AC-500's; 2 Beech BE-18's; 2 Britten Norman BN-2A's; 1 Dornier DO-28.

10/ Helio H-395.

11/ Includes 1 Helio HE-250 and 1 Piper PA-23.

12/ Piper PA-28.

13/ Helio HE-250.

14/ Includes 1 Helio HE-250 and 1 Piper PA-28.

15/ Includes 1 Piper PA-28 and 1 Helio HE-250.

16/ Includes 1 Helio HE-250 and 1 Piper PA-28.

17/ Includes 1 Piper PA-29.

Table 5-9. Total Flight Time by Type of Aircraft in the U.S. Air Carrier Fleet: 1975 and 1976

Type of Aircraft, Number of Engines, and Model	Hours		Type of Aircraft, Number of Engines, and Model	Hours	
	1976	1975		1976	1975
Total aircraft	<u>6,344,300</u> 1/	<u>6,060,724*</u>	DeHavilland DHC-6	36,880	32,476
Total fixed-wing	<u>6,338,778</u>	<u>6,052,196</u>	Fairchild F-27	13,729	19,069
Turbine-powered--total	<u>6,188,286</u>	<u>5,953,382</u>	Fairchild F-227	43,591	57,864
Four-engine--total	<u>1,749,028</u>	<u>1,887,015</u>	Grumman G-159	545	139
Turbojet--total	<u>1,693,527</u>	<u>1,770,203</u>	Hawker Siddeley HS-748	2,580	2,627
Boeing 707	740,197	819,202	Nord ND-262	18,758	5,209
Boeing 720	60,047	76,880	Nihon Y5-11	55,028	53,117
Boeing 747	362,466	333,770	Shorth SC-7	905	2,233
Convair CV-22	378	---	Shorth 5D-33D	432	---
Douglas DC-8	529,885	540,054	Piston-powered--total	<u>150,492</u>	<u>98,814</u>
Lockheed L-1329	554	297	Four-engine--total	<u>22,481</u>	<u>14,819</u>
Turboprop--total	<u>55,501</u>	<u>116,812</u>	Douglas DC-4	232	243
Lockheed L-188	36,928	54,689	Douglas DC-6	21,064	13,430
Lockheed L-382	18,573	62,123	Douglas DC-7	1,185	1,098
Three-engine--total	<u>2,696,064</u>	<u>2,464,673</u>	Lockheed L-1049	---	48
Boeing 8-727	2,126,692	1,966,584	Twin-engine--total	<u>121,847</u>	<u>78,698</u>
Douglas DC-10	365,104	323,219	Britten-Norman BN-2A	1,165	---
Lockheed L-1011	204,268	174,870	Aero Commander AC-500	967	2,155
Twin-engine--total	<u>1,743,194</u>	<u>1,601,694</u>	Aero Commander AC-680	758	---
Turbojet--total	<u>1,401,237</u>	<u>1,263,805</u>	Beech 8E-18	891	640
Boeing 8-737	331,093	312,736	Cessna CE-310	---	198
British Aircraft Corp. 8AC-111	75,790	78,247	Cessna CE-402	---	55
Convair CV-30	1,232	1,548	Cessna CE-421	33	281
Dassault MD-20	71,916	17,293	Convair CV-240	24	53
DeHavilland DHC-125	1,136	189	Convair CV-340/440	10,355	11,303
Douglas DC-9	907,681	851,612	Curtis Wright CW-46	9,747	11,446
Grumman G-1159	3,208	409	Donier DD-28	294	---
Hamburger Flugzeubau HF-320	726	35	Douglas DC-3	75,798	28,167
Learjet LR-23	273	21	Fairchild C-82	1,812	1,919
Learjet LR-25	5,675	1,381	Grumman G-21	2,980	3,111
Learjet LR-35	2,029	212	Grumman G-44	1,485	1,174
Rockwell International NA-265	478	122	Grumman G-73	275	251
Turboprop--total	<u>341,957</u>	<u>337,889</u>	Martin M-404	15,263	17,945
Aero Commander AC-680	---	190	Single-engine--total	<u>6,164</u>	<u>5,297</u>
Beech 8E-99	3,743	5,959	Cessna CE-150	---	223
Convair CV-580	138,820	139,178	Cessna CE-185	1,236	948
Convair CV-600	18,472	14,090	Cessna CE-206	1,599	1,020
Convair CV-640	8,474	5,738	Cessna CE-207	1,933	2,297
			DeHavilland DHC-2	783	204
			DeHavilland DHC-3	613	551
			Piper PA-28	---	54
			Total rotary-wing	<u>5,522</u>	<u>8,528*</u>
			Turbine-powered--total	<u>5,522</u>	<u>8,528*</u>
			Bell 8L-206	---	675
			Sikorsky S-61	5,522	7,853

1/ Includes 5,842,018 hours for Certificated Route Air Carriers; 124,971 hours for Supplemental Carriers; 176,857 hours for Commercial Carriers; 195,947 hours for Air Taxi; and 4,507 hours for travel clubs.
Prior to 1975, total flight time included only Certificated Route Air Carriers, Supplemental Carriers, and Commercial Carriers.

*Revised

Table 5-10. Total Fixed-Wing Aircraft in Certificated Route Air Carrier Operations
by Carrier and by Engine Type: December 31, 1976

Air Carrier Group and Carrier	Total Turbine and Piston	Turbine						Piston			
		Total Turbine	Turbojet			Turboprop		Total Piston	4-Engine	2-Engine	1-Engine
			4-Engine	3-Engine	2-Engine	4-Engine	2-Engine				
Total	<u>2,266</u>	<u>2,223</u>	<u>533</u>	<u>992</u>	<u>518</u>	<u>21</u>	<u>159</u>	<u>43</u>	<u>2</u>	<u>31</u>	<u>10</u>
Domestic passenger/cargo											
Total	<u>2,124</u>	<u>2,081</u>	<u>404</u>	<u>979</u>	<u>518</u>	<u>21</u>	<u>159</u>	<u>43</u>	<u>2</u>	<u>31</u>	<u>10</u>
Trunk carriers 1/	<u>1,623</u>	<u>1,623</u>	<u>404</u>	<u>967</u>	<u>238</u>	<u>14</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
American	235	235	95	140	---	---	---	---	---	---	---
Braniff	86	86	12	74	---	---	---	---	---	---	---
Continental	56	56	---	56	---	---	---	---	---	---	---
Delta	195	195	34	103	58	---	---	---	---	---	---
Eastern	239	239	---	145	90	14	---	---	---	---	---
National	53	53	---	53	---	---	---	---	---	---	---
Northwest	113	113	28	85	---	---	---	---	---	---	---
Trans World	208	208	94	96	18	---	---	---	---	---	---
United	363	363	118	187	58	---	---	---	---	---	---
Western	75	75	23	28	24	---	---	---	---	---	---
Local service carriers	<u>409</u>	<u>399</u>	<u>---</u>	<u>3</u>	<u>257</u>	<u>---</u>	<u>139</u>	<u>10</u>	<u>---</u>	<u>10</u>	<u>---</u>
Air New England	24	20	---	---	---	---	20	4	---	4	---
Allegheny	88	88	---	---	90	---	8	---	---	---	---
Frontier	52	52	---	---	21	---	31	---	---	---	---
Hughes Air West	42	42	---	3	34	---	5	---	---	---	---
North Central	53	53	---	---	26	---	27	---	---	---	---
Ozark	44	44	---	---	27	---	17	---	---	---	---
Piedmont Aviation	41	41	---	---	20	---	21	---	---	---	---
Southern	34	28	---	---	28	---	---	6	---	6	---
Texas International	31	31	---	---	21	---	10	---	---	---	---
Intra-Alaska carriers	<u>58</u>	<u>30</u>	<u>---</u>	<u>9</u>	<u>7</u>	<u>2</u>	<u>12</u>	<u>28</u>	<u>2</u>	<u>16</u>	<u>10</u>
Alaska Airlines	9	9	---	9	---	---	---	---	---	---	---
Kodiak-Western Alaska Airlines	15	---	---	---	---	---	---	15	---	7	8
Munz Northern	8	---	---	---	---	---	---	8	---	6	2
Reeve Aleutian	9	4	---	---	---	2	2	5	2	3	---
Wien Air Alaska	17	17	---	---	7	---	10	---	---	---	---

Table 5-10. Total Fixed-Wing Aircraft in Certificated Route Air Carrier Operations
by Carrier and by Engine Type: December 31, 1976 (Continued)

Air Carrier Group and Carrier	Total Turbine and Piston	Turbine						Piston			
		Total Turbine	Turbojet			Turboprop		Total Piston	4-Engine	2-Engine	1-Engine
			4-Engine	3-Engine	2-Engine	4-Engine	2-Engine				
Intra-Hawaii carriers . . .	<u>21</u>	<u>21</u>	---	---	<u>16</u>	<u>5</u>	---	---	---	---	---
Aloha	8	8	---	---	8	---	---	---	---	---	---
Hawaiian	13	13	---	---	8	5	---	---	---	---	---
International and territorial passenger/ cargo--total	<u>108</u>	<u>108</u>	<u>95</u>	<u>13</u>	---	---	---	---	---	---	---
Pan American	108	108	95	13	---	---	---	---	---	---	---
All-cargo carriers--total . .	<u>34</u>	<u>34</u>	<u>34</u>	---	---	---	---	---	---	---	---
Airlift International . .	7	7	7	---	---	---	---	---	---	---	---
Flying Tiger	19	19	19	---	---	---	---	---	---	---	---
Seaboard World	8	8	8	---	---	---	---	---	---	---	---
Other--total	<u>13</u>	<u>8</u>	---	---	---	---	<u>8</u>	<u>5</u>	---	<u>5</u>	---
Aspen	10	6	---	---	---	---	6	4	---	4	---
Wright	3	2	---	---	---	---	2	1	---	1	---

1/ All truck carriers except United have both domestic and international/territorial operating certificates.

Table 5-11. Four-Engine Turbine-Powered Fixed-Wing Aircraft in Certificated Route Air Carrier Operations by Carrier and by Manufacturer and Model: December 31, 1976 ^{1/}

Carrier Group and Carrier	Total 4-Engine Turbine Aircraft	Turbojet			Douglas DC-8	Total Turboprop Lockheed L-188
		Total Turbojet	Boeing			
			707/720	747		
Total	<u>554</u>	<u>533</u>	<u>258</u>	<u>104</u>	<u>171</u>	<u>21</u>
Domestic passenger/cargo--total	<u>425</u>	<u>505</u>	<u>202</u>	<u>60</u>	<u>142</u>	<u>21</u>
Trunk carriers ^{2/}	418	404	202	60	142	14
American	95	95	85 ^{3/}	10	---	---
Braniff	12	12	---	1	11	---
Delta	34	34	---	3	31	---
Eastern	14	---	---	---	---	14
Northwest	28	28	8 ^{3/}	20	---	---
Trans World	94	94	86 ^{3/}	8	---	---
United	118	118	---	18	100	---
Western	23	23	23 ^{4/}	---	---	---
Local service carriers	---	---	---	---	---	---
Intra-Alaska carriers	<u>2</u>	---	---	---	---	<u>2</u>
Intra-Hawaii carriers	<u>5</u>	---	---	---	---	<u>5</u>
International and territorial passenger/cargo--total	<u>95</u>	<u>95</u>	<u>56</u>	<u>39</u>	---	---
Pan American	95	95	56 ^{3/}	39	---	---
All-cargo carriers--total	<u>34</u>	<u>34</u>	---	<u>5</u>	<u>29</u>	---
Airlift International	7	7	---	---	7	---
Flying Tiger	19	19	---	3	16	---
Seaboard World	8	8	---	2	6	---

^{1/} All carriers constituting this group are listed in table 5-10.

^{2/} All trunk carriers except United have both domestic and international/territorial operating certificates.

^{3/} Boeing 8-707.

^{4/} Boeing 8-707,5; 8-720,18.

Table 5-12. Two- and Three-Engine Turbine-Powered Fixed-Wing Aircraft in Certificated Route Air Carrier Operations by Carrier and by Manufacturer and Model: December 31, 1976 1/

Carrier Group and Carrier	Total Turbine Aircraft	Total 3-Engine Turboprop 8-727 L-1011	Total 2-Engine Turboprop and Turboprop	Total 2-Engine Turboprop	Boeing 737	Turboprop Douglas DC-9	Other	Total 2-Engine Turboprop	Convair CV-580/ CV-580/	Turboprop Fairchild F-27/F-227	Other
Total	1,669	992	677	518	138	349	31	159	81	34	44
Domestic passenger/cargo--total,	1,656	979	677	518	138	349	31	159	81	34	44
Trunk carriers 2/	1,205	967	238	238	82	156	---	---	---	---	---
American	140	140 3/	---	---	---	---	---	---	---	---	---
Brantiff	74	74 4/	---	---	---	---	---	---	---	---	---
Continental	56	56 5/	---	---	---	---	---	---	---	---	---
Delta	161	103 6/	58	58	---	58	---	---	---	---	---
Eastern	225	145 7/	80	80	---	80	---	---	---	---	---
National	53	53 8/	---	---	---	---	---	---	---	---	---
Northwest	85	85 9/	---	---	---	---	---	---	---	---	---
Trans World	114	96 10/	18	18	---	18	---	---	---	---	---
United	245	187 11/	58	58	58	---	---	---	---	---	---
Western	52	28 12/	24	24	24	---	---	---	---	---	---
Local service carriers,	399	3	396	257	41	185	31	139	73	28	38
Air New England	20	---	20	---	---	---	---	20	---	6 13/	14 14/
Allegheny	88	---	88	80	---	49	31 15/	8	8 16/	---	---
Frontier	52	---	52	21	21	---	---	31	28 16/	---	3 17/
Hughes Airwest	42	3 4/	39	34	---	34	---	5	---	5 18/	---
North Central	53	---	53	26	---	26	---	27	27 16/	---	---
Ozark	44	---	44	27	---	27	---	17	---	17 13/	---
Piedmont Aviation	41	---	41	20	20	---	---	21	---	---	21 19/
Southern	28	---	28	28	---	28	---	---	---	---	---
Texas International	31	---	31	21	---	21	---	10	10 20/	---	---
Intra-Alaska	28	9	19	7	7	---	---	12	---	6	6
Alaska Air-lines	9	9 4/	---	---	---	---	---	---	---	---	---
Reeve Aleutian	2	---	2	---	---	---	---	2	---	---	2 19/
Wien Air Alaska	17	---	17	7	7	---	---	10	---	6 21/	4 17/
Intra-Hawaii	16	---	16	16	8	8	---	---	---	---	---
Aloha	8	---	8	8	8	---	---	---	---	---	---
Hawaiian	8	---	8	8	---	8	---	---	---	---	---

Table 5-12. Two- and Three-Engine Turbine-Powered Fixed-Wing Aircraft in Certificated Route Air Carrier Operations by Carrier and by Manufacturer and Model: December 31, 1976 ^{1/} (continued)

Carrier Group and Carrier	Total Turbine Aircraft	Total 3-Engine Turboprop B-727 DC-10 L-1011	Total 2-Engine Turboprop and Turboprop	Total 2-Engine Turboprop	Boeing 737	Turboprop Douglas DC-9	Other	Total 2-Engine Turboprop	Convair CV-580/600	Turboprop Fairchild F-27/F-27	Other
International/territorial passenger/cargo--total.	13	13	---	---	---	---	---	---	---	---	---
Pan American,	13	13 ^{4/}	---	---	---	---	---	---	---	---	---
Other--total,	8	---	8	---	---	---	---	8	6 ^{16/} 2 ^{20/}	---	---
Aspen	6	---	6	---	---	---	---	---	---	---	---
Wright,	2	---	2	---	---	---	---	---	---	---	---

^{1/} All carriers constituting this group are listed in table 5-1D.

^{2/} All trunk carriers except United have both domestic and international/territorial operating certificates.

^{3/} Boeing B-727, 115; Douglas DC-1D, 25.

^{4/} Boeing B-727.

^{5/} Boeing B-727, 4D; Douglas DC-1D, 16.

^{6/} Boeing B-727, 82; Lockheed L-1011, 21.

^{7/} Boeing B-727, 115; Lockheed L-1011, 30.

^{8/} Boeing B-727, 38; Douglas DC-1D, 15.

^{9/} Boeing B-727, 63; Douglas DC-1D, 22.

^{10/} Boeing B-727, 7D; Lockheed L-1011, 26.

^{11/} Boeing B-727, 150; Douglas DC-1D, 37.

^{12/} Boeing B-727, 21; Douglas DC-10, 7.

^{13/} Fairchild FH-227.

^{14/} Beech BE-99, 3; DeHavilland DHC-6, 11.

^{15/} British Aircraft Corp., BAC-111.

^{16/} Convair CV-580.

^{17/} DeHavilland DHC-6.

^{18/} Fairchild F-27.

^{19/} Nikon YS-11.

^{20/} Convair CV-600.

^{21/} Fairchild F-27, 2; FH-227, 4.

Table 5-13. Piston-Powered Aircraft in Certificated Route Air Carrier Operations by Carrier and by Manufacturer and Model: December 31, 1976 ^{1/}

Carrier Group and Carrier	Total Piston Aircraft	4-Engine Douglas OC-6	Twin-Engine		Single-Engine	
			G-21/44 BE18	Other	Cessna 185/206/207	Other
Domestic passenger/cargo-- total ^{3/}	<u>43</u>	<u>2</u>	<u>7</u>	<u>24</u>	<u>8</u>	<u>2</u>
Local service carriers.	<u>10</u>	---	---	<u>10</u>	---	---
Air New England	4	---	---	4 ^{3/}	---	---
Southern.	6	---	---	6 ^{4/}	---	---
Intra-Alaska carriers	<u>28</u>	<u>2</u>	<u>7</u>	<u>9</u>	<u>8</u>	<u>2</u>
Kodiak Western Alaska Airlines.	15	---	6 ^{5/}	1 ^{6/}	6 ^{7/}	2 ^{8/}
Munz Northern	8	---	---	6 ^{9/}	2 ^{10/}	---
Reeve Aleutian.	5	2	1 ^{11/}	2 ^{12/}	---	---
Other	<u>5</u>	---	---	<u>5</u>	---	---
Aspen	4	---	---	4 ^{13/}	---	---
Wright.	1	---	---	1 ^{14/}	---	---

- ^{1/} All carriers constituting this group are listed in table 5-10.
- ^{2/} Domestic passenger/cargo was the only service to utilize piston-powered aircraft.
- ^{3/} Douglas OC-3,4.
- ^{4/} Martin M-404.
- ^{5/} Beech BE-18,2; Grumman G-21,3; G-44,1.
- ^{6/} Martin M-404,1.
- ^{7/} Cessna C-185,1; C-206,2; C-207,3.
- ^{8/} DeHavilland OHC-2,1; OHC-3,1.
- ^{9/} Aero Commander AC-680,3; Britten-Norman BN2,2; Dornier DO-28,1.
- ^{10/} Cessna C-206.
- ^{11/} Grumman G-21.
- ^{12/} Curtiss Wright CW-46.
- ^{13/} Convair CV-340.
- ^{14/} Convair CV-440.

Table 5-14. Helicopters in Certificated Route Air Carrier Operations
by Carrier and by Manufacturer and Model: December 31, 1976

Carrier	Total	Turbine Sikorsky S-61	Piston Hiller UH-12E
Total	<u>5</u>	<u>4</u>	<u>1</u>
New York Airway	4	4	---
Munz Northern	1	---	1

Table 5-15. Aircraft in Operation by Supplemental Carriers by Type of Aircraft
December 31, 1976

Aircraft Type	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total aircraft in operation . . .	<u>164</u>	<u>146</u>	<u>149</u>	<u>119</u>	<u>114</u>	<u>100</u>	<u>94</u>	<u>73</u>	<u>74</u>	<u>77</u>
Four-engine--total	<u>107</u>	<u>108</u>	<u>106</u>	<u>94</u>	<u>92</u>	<u>85</u>	<u>79</u>	<u>58</u>	<u>60</u>	<u>69</u>
Turbojet	26	37	44	40	42	42	37	32	33	42
Turboprop	10	31	37	48	47	43	41	26	27	27
Piston	71	40	25	6	3	---	1	---	---	---
Three-engine--total	<u>7</u>	<u>12</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>4</u>	<u>9</u>	<u>7</u>	<u>8</u>	<u>3</u>
Turbojet	7	12	9	9	9	4	9	7	8	3
Twin-engine--total	<u>50</u>	<u>26</u>	<u>34</u>	<u>16</u>	<u>13</u>	<u>11</u>	<u>6</u>	<u>8</u>	<u>6</u>	<u>5</u>
Turbojet	5	4	10	11	8	7	5	5	4	3
Turboprop	---	---	---	---	---	1	1	---	---	1
Piston	45	22	24	5	5	3	---	3	2	1

Table 5-16. Aircraft in Operation by Supplemental Carriers by Type of Aircraft: December 31, 1976

Name of Carrier	Total Aircraft	Turbojet				Turboprop		Piston
		Four-Engine		Three-Engine	Twin-Engine	Four-Engine	Twin-Engine	Twin-Engine
		B-720, B-747	OC-8	OC-10	OC-9	L-188, L-382	CV-580	CW-46
Total	<u>77</u>	<u>5</u>	<u>37</u>	<u>3</u>	<u>3</u>	<u>27</u>	<u>1</u>	<u>1</u>
Capitol International Airways	<u>10</u>	---	10	---	---	---	---	---
Evergreen International Airlines	<u>11</u>	---	3	---	3	3 <u>1/</u>	1	1
McCulloch International Airlines	<u>9</u>	4 <u>2/</u>	2	---	---	3 <u>1/</u>	---	---
Overseas National Airlines	<u>10</u>	---	10	---	---	---	---	---
Trans International Airlines	<u>31</u>	---	7	3	---	21 <u>3/</u>	---	---
World Airways	<u>6</u>	1 <u>4/</u>	5	---	---	---	---	---

1/ Lockheed L-188.

2/ Boeing 8-720.

3/ Lockheed L-188,9; L-382,12.

4/ Boeing 8-747.

Table 5-17. Aircraft in Operation by Commercial Carriers by Type of Aircraft: December 31, 1967 through 1976

Aircraft Type	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total aircraft in operation . . .	<u>94</u>	<u>123</u>	<u>118</u>	<u>123</u>	<u>139</u>	<u>122</u>	<u>144</u>	<u>155</u>	<u>154</u>	<u>144</u>
Four-engine--total	<u>29</u>	<u>29</u>	<u>36</u>	<u>30</u>	<u>39</u>	<u>39</u>	<u>52</u>	<u>60</u>	<u>69</u>	<u>63</u>
Turbojet	1	1	2	---	1	1	1	6	8	7
Turboprop	11	8	13	7	13	14	13	24	25	21
Piston	17	20	21	23	25	24	38	30	36	35
Three-engine--total	<u>9</u>	<u>15</u>	<u>14</u>	<u>19</u>	<u>18</u>	<u>17</u>	<u>26</u>	<u>23</u>	<u>25</u>	<u>27</u>
Turbojet	9	15	14	19	18	17	26	23	25	27
Twin-engine--total	<u>56</u>	<u>79</u>	<u>68</u>	<u>74</u>	<u>82</u>	<u>66</u>	<u>66</u>	<u>72</u>	<u>59</u>	<u>53</u>
Turbojet	4	12	16	16	26	19	11	17	14	14
Turboprop	3	3	3	3	3	4	11	15	15	16
Piston	49	64	49	55	53	43	44	40	30	23
Single-engine--total	---	---	---	---	---	---	---	---	<u>1</u>	<u>1</u>
Piston	---	---	---	---	---	---	---	---	1	1

Table 5-18. Aircraft in Operation by Commercial Air Carrier Operators by Carrier and by Manufacturer and Model: December 31, 1976

Name of Carrier	Total Aircraft	Turbojet		Turboprop		Piston				Single Engine
		4- and 3-Engine	Twin Engine	Four Engine	Twin Engine	Four Engine		Twin Engine		
		B-720 B-727 DC-8 L-1329	B-737	L-188 L-382	CV-580 CV-640 G-189 HS-748	DC-4 DC-6 DC-7	Other	CW-46 DC-3	Other	
Total	144	34	14	21	16	34	1	17	6	1
Aeroamerica, Inc.	3	3 1/	---	---	---	---	---	---	---	---
Air California	10	---	8	2 2/	---	---	---	---	---	---
Air Cargo Enterprises, Inc.	1	---	---	---	---	1 3/	---	---	---	---
Air Florida, Inc.	4	1 4/	---	3 2/	---	---	---	---	---	---
Air Illinois, Inc.	1	---	---	---	1 5/	---	---	---	---	---
Air Cardinal International, Inc.	2	2 6/	---	---	---	---	---	---	---	---
Alaska International Air, Inc.	6	---	---	6 7/	---	---	---	---	---	---
Central American International, Inc.	2	---	---	---	---	---	1 8/	1 9/	---	---
Cryderman Air Service, Inc.	2	---	---	---	---	---	---	2 9/	---	---
Fairways Corporation	1	---	---	---	1 10/	---	---	---	---	---
Fleming International Airways, Inc.	3	---	---	1 2/	---	2 11/	---	---	---	---
General Mills, Inc.	1	1 12/	---	---	---	---	---	---	---	---
Great Northern Airlines, Inc.	4	---	---	2 2/	---	---	---	2 13/	---	---
Mountainwest Aviation, Inc.	1	---	---	---	1 14/	---	---	---	---	---
Music City International Airways, Inc.	2	---	---	---	---	---	---	---	2 15/	---
Northern Air Cargo, Inc.	4	---	---	---	---	2 16/	---	---	2 17/	---
Pacific Alaska Airlines	4	---	---	---	---	4 16/	---	---	---	---
Pacific American Airlines, Inc.	4	---	---	---	---	4 16/	---	---	---	---
Pacific Southwest Airlines	28	26 4/	---	2 2/	---	---	---	---	---	---
Petroleum Air Transport, Inc.	2	---	---	---	---	---	---	---	2 18/	---
Rosenbalm Aviation, Inc.	12	1 6/	---	---	---	8 16/	---	3 13/	---	---
Shaw Flight Service, Inc.	2	---	---	---	---	---	---	1 9/	---	1 19/
Southern Air Transport, Inc.	2	---	---	2 7/	---	---	---	---	---	---
Southwest Airlines	6	---	6	---	---	---	---	---	---	---
Transcontinental Airlines, Inc.	8	---	---	---	---	---	---	8 13/	---	---
Zantop International Airlines, Inc.	29	---	---	3 2/	13 20/	13 16/	---	---	---	---

1/ Boeing B-720.
 2/ Lockheed L-188.
 3/ Douglas DC-4.
 4/ Boeing B-727.
 5/ Hawker Siddeley HS-748.
 6/ Douglas DC-8.
 7/ Lockheed L-382.
 8/ Lockheed L-1049.
 9/ Douglas DC-3.
 10/ Grumman G-159.

11/ Douglas DC-7.
 12/ Lockheed L-1329.
 13/ Cessna-Wright CW-46.
 14/ Convair CV-580.
 15/ Convair CV-440.
 16/ Douglas DC-6.
 17/ Fairchild C-82.
 18/ Martin M-404.
 19/ Cessna C-185.
 20/ Convair CV-640.

Table 5-19. Aircraft in Operation by Air Taxi Operators 1/: December 31, 1976

Name of Carrier	Total Engine	Turbojet			Turboprop Twin-Engine CV-580,G-159 ND-262,50-330	Piston				
		Four Engine L-1329	Twin-Engine			Four Engine DC-6	Twin-Engine		BE-18	Rotor-craft 5-61
			G-1159,DH-125 HF-320,NA-265	LR-23,LR-25 LR-35,MD-20	DC-3		CW-46,M-404 CV-440			
Total	215	1	9	56	15	3	104	23	2	2
Academy Airlines	3	---	---	---	---	---	3	---	---	---
Aerie Airlines	1	---	---	---	---	---	1	---	---	---
Aero-Dyne Airlines	4	---	---	---	---	---	4	---	---	---
Air North	1	---	---	---	---	---	1	---	---	---
Air Pacific International, Inc.	1	---	---	---	---	---	1	---	---	---
Altair Airlines, Inc.	4	---	---	---	4 2/	---	---	---	---	---
American Cyanamid Co.	2	---	1 3/	1 4/	---	---	---	---	---	---
Argosy Airlines, Inc.	4	---	---	---	---	---	3	---	1	---
Atlantic Jet Charter, Inc.	1	---	---	1 5/	---	---	---	---	---	---
ATT Airlines, Inc.	5	---	---	---	---	---	4	---	1	---
Barton Aviation Services, Inc.	2	---	---	---	---	---	2	---	---	---
Basler Flight Service, Inc.	2	---	---	---	---	---	2	---	---	---
Boise Cascade Corp.	2	---	---	2 6/	---	---	---	---	---	---
BO-5-Aire Corp.	2	---	---	---	---	---	2	---	---	---
Central American Airtaxi, Inc.	1	---	---	---	---	---	1	---	---	---
Caribbean Air Service	5	---	---	---	---	---	---	5 7/	---	---
Christler Flying Service, Inc.	1	---	---	---	---	---	1	---	---	---
Chrysler Corporation Air Transportation	1	---	1 3/	---	---	---	---	---	---	---
Command Airways, Inc.	1	---	---	---	1 8/	---	---	---	---	---
Commuter Express	11	---	---	---	---	---	11	---	---	---
Crystal Shamrock, Inc.	2	---	---	---	---	---	2	---	---	---
Eva Helicopters, Inc.	2	---	2 9/	---	---	---	---	---	---	---
Escort Air Taxi, Inc.	2	---	---	---	---	---	2	---	---	---
Evergreen Helicopter of Alaska, Inc.	2	---	---	---	---	---	---	---	---	2
Executive Air Fleet Corp.	5	---	2 3/	3 10/	---	---	---	---	---	---
Falcon Airways, Inc.	5	---	---	---	---	---	5	---	---	---
Federal Express Corp.	32	---	---	32 10/	---	---	---	---	---	---
Florida Airlines, Inc.	9	---	---	---	---	---	9	---	---	---
Hansa Jet Corp.	1	---	---	1 10/	---	---	---	---	---	---
Jimsair Aviation Services, Inc.	1	---	---	---	---	---	1	---	---	---
Jet Fleet Corp.	12	1	2 11/	9 12/	---	---	---	---	---	---
Key Airlines, Inc.	3	---	---	---	---	---	---	3 13/	---	---
Mackey International Airlines.	8	---	---	---	---	3	---	5 13/	---	---
Marco Island Airways, Inc.	4	---	---	---	---	---	---	4 14/	---	---
Meridian Air Cargo, Inc.	6	---	---	---	---	---	6	---	---	---
Metrolina Air Service, Inc.	1	---	---	---	---	---	1	---	---	---

Table 5-19. Aircraft in Operation by Air Taxi Operators 1/: December 31, 1976 (Continued)

Name of Carrier	Total Engine	Turbojet			Turboprop Twin-Engine	Piston				
		Four Engine L-1329	Twin-Engine			Four Engine DC-6	Twin-Engine		BE-18	Rotor- craft S-61
			G-1159,DH-125 HF-32D,NA-265	LR-23,LR-25 LR-35,MD-2D	CV-58D,G-159 ND-262,SD-33D		DC-3	CW-46,M-4D4 CV-44D		
National Jet Service, Inc.	1	---	---	---	---	---	1	---	---	---
Nevada Airlines, Inc.	3	---	---	---	---	---	3	---	---	---
Old South Air Service, Inc.	3	---	---	---	---	---	3	---	---	---
Philadelphia Aviation, Inc.	2	---	---	---	---	---	2	---	---	---
Pinehurst Airlines, Inc.	4	---	---	---	---	---	4	---	---	---
Professional Air Charter, Inc.	1	---	---	---	---	---	1	---	---	---
Provincetown-Boston Airline.	13	---	---	---	---	---	9	4 <u>14/</u>	---	---
Raleigh-Durham Aviation, Inc.	1	---	---	1 <u>4/</u>	---	---	---	---	---	---
Ransome Airlines	8	---	---	---	8 <u>2/</u>	---	---	---	---	---
Red Carpet Flying Service, Inc.	2	---	---	---	---	---	2	---	---	---
Royal Industries	1	---	---	1 <u>1D/</u>	---	---	---	---	---	---
Sedalia, Marshall, Boonville Stage Lines, Inc.	6	---	---	---	---	---	6	---	---	---
Shawnee Airlines	3	---	---	---	---	---	1	2 <u>14/</u>	---	---
Shorter Airlines, Inc.	1	---	---	---	---	---	1	---	---	---
Sierra Pacific Airlines, Inc.	2	---	---	---	2 <u>15/</u>	---	---	---	---	---
Skyfreight	1	---	---	---	---	---	1	---	---	---
Skyway Aviation, Inc.	1	---	---	---	---	---	1	---	---	---
Southern Flyer, Inc.	2	---	---	---	---	---	2	---	---	---
Stevens Beechcraft, Inc.	2	---	---	2 <u>1D/</u>	---	---	---	---	---	---
Thunderbird Airways, Inc.	1	---	---	1 <u>6/</u>	---	---	---	---	---	---
Vero Monmouth Airlines, Inc.	1	---	---	---	---	---	1	---	---	---
Windstar Aviation Corp.	1	---	---	1 <u>6/</u>	---	---	---	---	---	---
Winship Air Service, Inc.	1	---	---	1 <u>1D/</u>	---	---	---	---	---	---
Zantop Airways, Inc.	1	---	1 <u>16/</u>	---	---	---	---	---	---	---
Zoom Zoom Air, Inc.	4	---	---	---	---	---	4	---	---	---

1/ Aircraft operated by air taxi operators who hold authority to operate aircraft over 12,500 lbs., or turbojet aircraft exempted under blanket authority.

2/ Nord ND-262.

3/ Grumman G-1159.

4/ Lear Jet LR-25.

5/ Lear Jet LR-23.

6/ Lear Jet LR-35.

7/ Curtiss-Wright CW-46.

8/ Short SD-330.

9/ DeHavilland DH-125.

10/ Dassault MD-2D.

11/ DeHavilland DH-125,1; Rockwell International NA-265,1.

12/ Dassault MD-2D,3; Lear Jet LR-25,6.

13/ Convair CV-44D.

14/ Martin M-4D4.

15/ Convair CV-580.

16/ Hamburger Flugzeugbau HF-32D.

Table 5-20. Aircraft in Operation by Air Travel Clubs: December 31, 1976

Name of Carrier	Total Aircraft	Turbojet	Turboprop	Piston	
		4-Engine	4-Engine	4-Engine	Twin Engine
		B-720, DC-8, CV-880, CV-990	L-188	DC-6 DC-3 OC-7	CV-240 DC-3 M-404
Total	<u>20</u>	<u>11</u>	<u>3</u>	<u>1</u>	<u>5</u>
Air Vulcan Travel Club	1	---	---	---	1 <u>4/</u>
Ambassadair, Inc.	1	1 <u>1/</u>	---	---	---
Atlanta Skylarks	1	1 <u>1/</u>	---	---	---
Bird of the Sun Air Travel Club	1	---	---	---	1 <u>7/</u>
Clubair Caribe	1	---	---	---	1 <u>8/</u>
Emerald Shillelagh Chowder and Marching Society, Inc.	1	---	1	---	---
Four Winds, Inc.	1	1 <u>3/</u>	---	---	---
Global Air Travel Club; Inc.	1	---	---	---	1 <u>8/</u>
Jet Set Travel Club, Inc.	1	1 <u>1/</u>	---	---	---
Linebacker Sportsliner, Inc.	1	---	---	1 <u>6/</u>	---
Nomads, Inc.	2	1 <u>2/</u>	1	---	---
Pegasus Int'l Travel Club	1	1 <u>5/</u>	---	---	---
Ports of Call Travel Club	5	4 <u>2/</u>	1	---	---
Stardusters II Air Travel Club	1	---	---	---	1 <u>8/</u>
Travel-A-Go-Go	1	1 <u>3/</u>	---	---	---

- 1/ Boeing B-720
- 2/ Convair CV-990
- 3/ Convair CV-880
- 4/ Convair CV-240
- 5/ Douglas DC-8
- 6/ Douglas DC-6
- 7/ Douglas DC-3
- 8/ Martin M-404

VI. U.S. CIVIL AIR CARRIER OPERATING DATA

The air carrier data contained in this chapter were obtained from the following CAB sources:

Employment and Payroll--CAB Form 41, Schedule P-10.

Financial Data--Air Carrier Financial Statistics, published quarterly.

Traffic Data--Air Carrier Traffic Statistics, published monthly.

Supplemental Carrier Data--Air Carrier Analytical Charts and Supplemental Carrier Statistics, published quarterly.

Starting with the year 1970, data contained herein for domestic operations are compiled on a 50-states basis.

Table 6-1. Number of Certificated Route Air Carriers and Weighted Average Route Miles Operated by Type of Carrier: December 31, 1975 and 1976

Carrier Group	1976		1975	
	Number of Operators	Weighted Average Route Miles Operated	Number of Operators	Weighted Average Route Miles Operated
Total	<u>38</u>	<u>371,404</u>	<u>35</u>	<u>370,826</u> r/
Domestic Operations	<u>35</u>	<u>175,105</u>	<u>32</u>	<u>172,076</u> r/
Passenger/cargo carriers	33	166,379	30	163,363 r/
Trunk carriers, domestic operations	11	114,873	10	112,136 r/
Local service carriers	8	49,491	9	49,348 r/
Helicopter carriers	3	42	3	101 r/
Intra-Alaska carriers	5	N/A	4	N/A
Intra-Hawaii carriers	2	747	2	747 r/
Other carriers/Regional carriers	4	1,226	2	1,031 r/
All-cargo carriers, domestic operations	2	8,726	2	8,713 r/
International/territorial operations ^{1/}	<u>14</u>	<u>196,299</u>	<u>14</u>	<u>198,750</u> r/
Passenger/cargo carriers	11	172,166	11	173,295 r/
All cargo carriers	3	24,133	3	25,455 r/

^{1/} Number of carriers includes 9 domestic trunk carriers and 2 all-cargo carriers engaged in both domestic and international/territorial operations. These carriers are included only once in the total number of operators.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-2. Traffic Data, Scheduled Service of Certificated Route Air Carriers: 1975 and 1976

Traffic Category	Total Scheduled Service		Scheduled Domestic Service		Scheduled International/ Territorial Service	
	1976	1975	1976	1975	1976	1975
Revenue passenger-miles flown (000) <u>1/</u>	178,987,543	162,810,160 <u>r/</u>	145,270,800	131,728,492 <u>r/</u>	33,716,743	31,081,668
First class	26,794,902	25,947,665 <u>r/</u>	24,399,516	23,622,203 <u>r/</u>	2,395,386	2,325,462
Coach and economy	152,192,640	136,862,502	120,871,281	108,106,295	31,321,359	28,756,207
Available seat miles (000) . .	322,820,561	303,006,243	261,246,708	241,282,125	61,573,853	61,724,118
Revenue passenger load factor <u>2/</u>	55.4	53.7	55.6	54.6	54.8	50.4
Revenue passenger enplanements (000)	223,313	205,062	206,274	188,746	17,039	16,316
Revenue ten-miles flown (000) <u>1/</u>	24,120,868	22,185,546 <u>r/</u>	18,154,899	16,602,980 <u>r/</u>	5,965,969	5,582,566
Passenger	17,898,762	16,281,046	14,527,086	13,172,873	3,371,676	3,108,173
Freight	5,074,175	4,766,119 <u>r/</u>	2,887,747	2,718,088 <u>r/</u>	2,186,428	2,048,031
Express	22,003	29,190	21,510	28,746	493	444
Priority U.S. mail	745,972	707,603	577,288	533,325	168,684	174,278
Non-priority U.S. mail . . .	368,271	389,694	140,089	148,829	228,182	240,865
Foreign mail	11,682	11,894	1,178	1,119	10,504	10,775
Revenue aircraft miles flown (000) <u>1/</u>	2,319,967	2,240,506 <u>r/</u>	2,001,357	1,909,486 <u>r/</u>	318,610	331,020
All first class service . .	302,309	284,520 <u>r/</u>	302,309	284,520 <u>r/</u>	---	---
All coach and economy service	79,735	80,614	68,576	69,602	11,159	11,012
Mixed class service	1,833,010	1,758,571 <u>r/</u>	1,576,512	1,495,020 <u>r/</u>	256,498	263,551
All cargo service	104,913	116,799 <u>r/</u>	53,960	60,343 <u>r/</u>	50,953	56,456

r/ Revised.

1/ Details may not add to total due to rounding.

2/ Percent revenue passenger-miles flown of available seat-miles in revenue passenger service representing the proportion of aircraft seating capacity that is actually sold and utilized.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-3. Traffic Data, Nonscheduled Service of Certificated Route Air Carriers: 1975 and 1976

Traffic Category	Total Nonscheduled Service (000)		Nonscheduled Domestic Service (000)		Nonscheduled International/Territorial Service (000)	
	1976	1975	1976	1975	1976	1975
Revenue passenger-miles	12,853,942	10,513,948 r/	6,107,907	4,271,013 r/	6,746,035	6,242,935
Available seat-miles	15,526,068	12,816,993 r/	7,994,913	5,962,390 r/	7,531,155	6,854,603
Revenue ton-miles flown 1/.	1,588,119	1,348,205 r/	646,825	466,497 r/	941,294	881,708 r/
Passenger	1,285,478	1,051,392 r/	610,798	427,099 r/	674,680	624,293
Freight	302,536	296,289 r/	35,951	39,398 r/	266,585	256,891 r/
Other	103	519	75	---	28	519
Available ton-miles	2,383,959	2,034,260 r/	1,056,782	816,700 r/	1,327,177	1,217,560 r/
Revenue aircraft miles flown.	99,192	84,187 r/	50,125	38,174 r/	49,067	46,013 r/
Revenue passenger enplanements.	5,158	4,029 r/	3,304	2,304 r/	1,854	1,725 r/

r/ Revised.

1/ Details may not add to total due to rounding.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-4. Revenue Aircraft Departures, Miles and Hours Flown, and Average Speed in Scheduled Domestic Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1976

Year	Revenue Aircraft Departures	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1967	4,624,037	1,462,240	4,136,347	354
1968	4,956,741	1,715,857	4,604,160	373
1969	5,058,371	2,000,269	5,082,555	390
1970	4,776,584	2,013,484	5,746,058	350
1971	4,680,612	1,992,807	4,925,995	405
1972	4,726,047	1,986,758	4,917,997	404
1973	4,805,141	2,040,407	5,051,158	404
1974	4,433,705	1,883,265	4,693,521	401
1975	4,456,146 r/	1,909,486 r/	4,735,970 r/	403
1976	4,600,626	2,001,357	4,929,065	406

r/ Revised.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-5. Revenue Aircraft Departures, Miles and Hours Flown, and Average Speed in Scheduled International/Territorial Service of Passenger/Cargo Certificated Route Air Carriers: 1967 through 1976

Year	Revenue Aircraft Departures	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1967.	298,573	350,719	727,445	482
1968.	367,960	408,136	858,123	476
1969.	295,489	359,476	753,347	477
1970.	299,529	369,870	767,440	482
1971.	292,515	350,744	728,331	482
1972.	292,995	350,112	729,613	480
1973.	297,153	361,481	751,773	481
1974.	260,932	330,248	686,704	481
1975.	248,564 r/	331,020 r/	686,450 r/	482
1976.	234,512	318,610	658,536	484

r/ Revised.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-6. Total Ton-Miles Available in All Services of the United States Air Carriers: 1967 through 1976
(Thousands of Ton-Miles)

Year	Total Available Ton-Miles	Certificated Route Air Carriers			Supplemental Air Carriers
		Total	Domestic Operations	International and Territorial Operations	
1967.	32,372,281	30,785,135	20,611,709	10,173,426	1,587,146
1968.	39,394,041	37,223,332	25,375,666	11,847,666	2,170,709
1969.	45,246,411	42,770,192	32,020,042	10,750,150	2,476,219
1970.	46,273,427	44,298,170	32,580,842	11,717,328	1,975,257
1971.	49,584,516	47,255,550	33,994,418	13,261,132	2,328,966
1972.	50,867,516	48,680,473	34,877,554	13,802,919	2,187,043
1973.	53,966,736	51,443,758	37,371,558	14,072,200	2,522,978
1974.	51,153,441	48,941,526	35,565,908	13,375,618	2,211,915
1975.	51,215,945 r/	49,288,695 r/	36,511,214 r/	12,777,481 r/	1,927,250 r/
1976.	53,521,393	51,708,666	38,818,923	12,889,743	1,812,727

r/ Revised.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-7. Revenue Ton-Miles Flown in All Services by Certificated Route Air Carriers of the United States: 1967 through 1976

(Thousands of Ton-Miles)

Year	Certificated Route Air Carriers		
	Total <u>1/</u>	Domestic Operations	International and Territorial Operations
1967	15,684,289	9,982,438	5,701,851
1968	18,114,334	11,461,603	6,652,731
1969	19,989,409	13,942,994	6,046,417
1970	20,185,500	13,876,803	6,308,694
1971	20,905,968	14,141,786	6,764,182
1972	22,805,371	15,584,558	7,220,813
1973	23,927,657	16,707,015	7,220,642
1974	23,900,208	16,999,202	6,901,006
1975	23,533,743 <u>r/</u>	17,069,474 <u>r/</u>	6,464,269 <u>r/</u>
1976	25,708,984	18,801,723	6,907,261

r/ Revised.

1/ Categories may not add to total due to rounding.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-8. Total Ton-Miles Available in Scheduled Service of the Certificated Route Air Carriers: 1967 through 1976
(Thousands of Ton-Miles)

Year	Total Available Ton-Miles	Domestic Operations			International and Territorial Operations		
		Total	Passenger/Cargo Carriers	All Cargo Carriers	Total	Passenger/Cargo Carriers	All Cargo Carriers
1967 . . .	26,968,370	19,499,556	19,206,190	293,366	7,468,814	7,179,147	289,667
1968 . . .	33,221,260	24,400,004	24,055,733	344,271	8,821,256	8,490,489	330,767
1969 . . .	38,663,697	30,544,280	30,125,957	418,323	8,119,417	7,534,997	584,420
1970 . . .	41,692,872	31,832,719	31,340,228	492,491	9,860,153	8,952,755	907,398
1971 . . .	44,138,742	33,210,930	32,688,215	522,715	10,927,812	9,934,594	993,218
1972 . . .	45,583,056	34,037,816	33,447,467	590,349	11,545,240	10,417,800	1,127,440
1973 . . .	49,019,300	36,622,737	35,796,002	826,735	12,396,563	11,148,088	1,248,475
1974 . . .	46,848,194	34,852,546	34,030,377	822,169	11,995,648	10,713,196	1,282,452
1975 . . .	47,254,436 <u>r/</u>	35,694,516 <u>r/</u>	34,978,118 <u>r/</u>	716,398 <u>r/</u>	11,559,920	10,149,968	1,409,952
1976 . . .	49,324,707	37,762,143	37,024,478	737,665	11,562,564	10,128,805	1,433,759

r/ Revised.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-9. Revenue Ton-Miles Flown in Scheduled Service of the Certificated Route Air Carriers: 1967 through 1976
(Thousands of Ton-Miles)

Year	Total Revenue Ton-Miles Scheduled	Domestic Operations			International and Territorial Operations		
		Total	Passenger/Cargo Carriers	All Cargo Carriers	Total	Passenger/Cargo Carriers	All Cargo Carriers
1967	13,036,284	9,137,825	8,951,709	186,116	3,898,459	3,725,872	172,587
1968	15,249,312	10,725,703	10,526,928	198,775	4,523,609	4,294,499	229,110
1969	16,898,218	12,830,573	12,615,450	215,123	4,067,645	3,699,324	368,321
1970	18,165,661	13,345,048	13,086,322	258,726	4,820,613	4,247,362	573,251
1971	18,685,307	13,628,704	13,353,000	275,704	5,056,603	4,388,559	668,044
1972	20,746,190	15,065,840	14,729,594	336,246	5,680,350	4,912,784	767,566
1973	22,241,875	16,239,873	15,743,457	496,416	6,002,002	5,164,020	837,982
1974	22,425,208	16,553,354	16,062,715 r/	490,639	5,871,854	5,005,447	866,407
1975	22,185,546 r/	16,602,980 r/	16,169,542	433,438 r/	5,582,566	4,679,319	903,247
1976	24,120,868	18,154,899	17,709,631	445,268	5,965,969	5,043,985	921,984

r/ Revised.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-10. Revenue Ton-Miles Flown in Scheduled Domestic Passenger/Cargo Service of the Certificated Route Air Carriers: 1967 through 1976

(Thousands of Ton-Miles)

Year	Total		Passenger	Excess Baggage 3/	Mail	Express and Freight
	Number 1/	Load Factor 2/				
1967	8,951,709	46.6	7,215,470	16,478	405,350	1,314,409
1968	10,526,928	43.8	8,362,488	21,163	564,186	1,579,091
1969	12,615,450	41.9	9,897,465	23,358	800,814	1,916,472
1970	13,086,332	41.8	10,414,764	-----	705,666	1,965,904
1971	13,353,000	40.8	10,643,399	-----	696,780	2,012,818
1972	14,729,594	44.0	11,813,493	-----	676,062	2,240,039
1973	15,743,457	44.0	12,631,705	-----	658,237	2,453,517
1974	16,062,715	47.2	12,973,216	-----	667,577	2,421,926
1975	16,169,542	46.2	13,172,873	-----	665,493	2,331,176
1976	17,709,631	47.8	14,527,086	-----	707,660	2,474,884

1/ Categories may not add to total due to rounding.

2/ Percent total revenue ton-miles flown of available ton-miles in revenue services.

3/ Effective January 1, 1970, the certificated carriers no longer reported excess baggage separately.

Excess baggage is now combined with passenger ton-miles and passenger weight standardized at 200 lbs.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-11. Revenue Ton-Miles Flown in Scheduled International/Territorial Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1976

(Thousands of Ton-Miles)

Year	Total		Passenger	Excess Baggage <u>3/</u>	Mail	Express and Freight
	Number <u>1/</u>	Load Factor <u>2/</u>				
1967	3,725,872	51.9	2,345,565	22,941	560,402	796,964
1968	4,294,499	50.6	2,660,995	26,897	679,357	927,250
1969	3,699,324	49.1	2,299,767	26,824	463,009	936,554
1970	4,247,363	47.4	2,756,510	-----	548,845	942,008
1971	4,388,559	44.2	2,922,094	-----	456,683	1,009,785
1972	4,912,784	47.2	3,427,026	-----	371,656	1,114,104
1973	5,164,020	46.3	3,563,995	-----	361,440	1,238,584
1974	5,005,447	46.7	3,318,630	-----	347,762	1,339,056
1975	4,679,319	46.1	3,108,173	-----	311,707	1,259,439
1976	5,043,985	49.8	3,371,676	-----	291,682	1,380,625

r/ Revised.

1/ Categories may not add to total due to rounding.

2/ Percent total revenue ton-miles flown of available ton-miles in revenue services.

3/ Effective January 1, 1970, the certificated carriers no longer reported excess baggage separately.

Excess baggage is now combined with passenger ton-miles and passenger weight standardized at 200 lbs.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-12. Revenue Ton-Miles Flown in Scheduled Domestic Service of the All-Cargo Certificated Route Air Carriers: 1967 through 1976

(Thousands of Ton-Miles)

Year	Total		Freight	Express	Mail
	Number <u>1/</u>	Load Factor <u>2/</u>			
1967	186,116	63.4	181,876	1,943	2,297
1968	198,775	57.7	194,011 <u>3/</u>	1,576	3,187
1969	215,123	51.4	208,058	1,530	5,535
1970	258,726	52.5	247,877	1,713	9,136
1971	275,704	52.7	263,075	1,838	10,792
1972	336,246	57.0	324,666	2,056	9,526
1973	496,416	60.0	466,053	2,023	28,340 <u>4/</u>
1974	490,639	59.7	464,584	1,650	24,405
1975	433,438 <u>r/</u>	60.5	414,700 <u>r/</u>	958 <u>5/</u>	17,780
1976	445,268	60.4	434,307	66	10,895

r/ Revised.

1/ Details may not add to total due to rounding.

2/ Percent total revenue ton-miles flown of available ton-miles in revenue services.

3/ Includes 6,000 revenue passenger ton-miles.

4/ Increase between CY 1972 and CY 1973 resulted primarily from inauguration of mail container service by Flying Tiger on 3/28/73.

5/ Express revenue ton-miles have been affected drastically as a result of the dissolution of REA Express during the month of November 1975.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-13. Revenue Ton-Miles Flown in Scheduled International/Territorial Service of the All Cargo Certificated Route Air Carriers: 1967 through 1976

(Thousands of Ton-Miles)

Year	Total		Freight	Express	Mail
	Number <u>1/</u>	Load Factor <u>2/</u>			
1967	172,587	59.6	154,790	9	17,788
1968	229,111	69.3	208,097	12	21,002
1969	368,320	63.0	287,810	8	80,502
1970	573,251	63.2	356,502	62	216,687
1971	668,044	67.3	507,716	51	160,278
1972	767,566	68.1	623,981	28	143,557
1973	837,982	67.1	676,959	90	160,933
1974	866,407	67.6	743,420	235	122,754
1975	903,247	64.1	788,966	70 <u>3/</u>	114,211
1976	921,984	64.3	806,296	--- <u>3/</u>	115,688

1/ Categories may not add to total due to rounding.

2/ Percent total revenue ton-miles flown of available ton-miles in revenue services.

3/ Express revenue ton-miles have been affected drastically as a result of the dissolution of REA Express during the month of November 1975.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-14. Domestic Air Cargo Revenue Ton-Miles Flown, by Type of Carrier: 1967 through 1976

(Thousands of Ton-Miles)

Year	Total All Carrier <u>1/</u>	Scheduled Passenger/Cargo Carriers			Scheduled All-Cargo Carriers			Supplemental Carriers
		Total <u>1/</u>	Scheduled	Nonscheduled	Total <u>1/</u>	Scheduled	Nonscheduled	
1967	2,166,613	1,398,763	1,314,409	84,354	503,533	183,819	319,714	264,317
1968	2,325,358	1,643,748	1,579,091	64,657	376,559	195,581	180,978	305,057
1969	2,519,811	2,097,201	1,916,472	180,729	394,112	209,588	184,524	256,202
1970	2,580,757	2,003,193	1,965,904	37,289	292,145	249,590	42,555	285,419
1971	2,747,227	2,141,650	2,012,818	128,832	299,972	264,913	35,059	305,605
1972	2,972,708	2,344,840	2,240,039	104,800	369,022	326,722	42,300	258,846
1973	3,267,003	2,470,232	2,453,517	16,717	505,187	468,076	37,111	291,584
1974	3,221,250	2,431,660	2,421,926	9,733	508,415	466,234	42,182	279,986
1975	3,020,247 <u>r/</u>	2,312,235 <u>r/</u>	2,303,388 <u>r/</u>	8,847	445,251 <u>r/</u>	414,700 <u>r/</u>	30,551 <u>r/</u>	262,761 <u>r/</u>
1976	3,161,186	2,471,392	2,453,440	17,952	452,306	434,307	17,999	237,488

r/ Revised.

1/ Categories may not add to totals due to rounding.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-15. U.S. Mail and Air Cargo Revenue Ton-Miles Flown in Scheduled Domestic Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1977

(Thousands of Ton-Miles)

Year	U.S. Mail			Air Cargo		
	Total	Priority	Nonpriority	Total	Freight	Express
1967	405,349	278,949	126,400	1,314,409	1,218,584	95,825
1968	564,173	300,524	263,649	1,579,091	1,476,686	102,405
1969	800,814	365,221	435,593	1,916,472	1,808,987	107,485
1970	705,241	364,252	340,989	1,965,904	1,861,610	104,294
1971	696,331	362,199	334,132	2,012,818	1,932,243	80,575
1972	675,524	363,527	311,997	2,240,039	2,155,432	84,607
1973	657,429	410,024	247,405	2,453,517	2,355,856	97,661
1974	666,663	539,488	127,174	2,421,926	2,343,823	78,103
1975	664,374	529,095	135,279	2,331,176	2,303,388	27,788 ^{1/}
1976	706,482	572,319	134,163	2,474,884	2,453,440	21,444 ^{1/}

^{1/} Express revenue ton-miles have been affected drastically as a result of the dissolution of REA Express during the month of November 1975.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-16. U.S. and Foreign Mail and Air Cargo Revenue Ton-Miles Flown in Scheduled International/Territorial Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1977

(Thousands of Ton-Miles)

Year	Mail			Air Cargo		
	Total	U.S. Priority and Foreign	U.S. Nonpriority	Total	Freight	Express
1967	560,401	287,511	272,890	796,964	795,858	1,106
1968	679,357	283,817	395,540	927,250	926,091	1,159
1969	463,099	205,419	257,680	936,554	936,110	444
1970	548,845	210,157	338,688	942,008	941,563	445
1971	456,683	200,091	256,592	1,009,785	1,009,254	531
1972	371,656	181,689	189,967	1,114,104	1,113,373	731
1973	361,440	165,513	195,927	1,238,584	1,237,861	723
1974	347,762	163,947	183,815	1,339,056	1,338,199	857
1975	311,707	158,399	153,308	1,259,439	1,259,065	374 ^{1/}
1976	291,682	151,552	140,130	1,380,625	1,380,132	493 ^{1/}

^{1/} Express revenue ton-miles have been affected drastically as a result of the dissolution of REA Express during the month of November 1975.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-17. Revenue Passenger Enplanements in Scheduled Service of the Certificated Route Air Carriers: 1972 through 1976

(Thousands of Enplanements)

Type of Carrier	1972	1973	1974	1975	1976
Total	191,349	202,208	207,458	205,062	223,313
Domestic passenger/cargo	172,452 ^{1/}	183,272 ^{2/}	189,733 ^{3/}	188,746 ^{4/}	206,274
Trunk Lines	136,590	144,753	147,999	147,428	160,451
Local Service	30,501	32,450	35,200	34,436	38,862
Helicopter	587	613	592	505	444
Intra-Alaska	991 ^{5/}	933	1,110	1,442	1,562
Intra-Hawaii	3,676	4,373	4,675	4,767	5,262
Other	107	150	157	168	193
International and territorial passenger/cargo	18,897	18,936	17,725	16,316	17,039

^{1/} Includes 584 enplanements for Alaska Airlines, 78 for Aspen Airways, and 29 for Wright Air Lines, Inc., which began operations as a certificated route air carrier July 1972.

^{2/} Includes 90 enplanements for Aspen Airways, and 60 for Wright Air Lines, Inc.

^{3/} Includes 95 enplanements for Aspen Airways, and 62 for Wright Air Lines, Inc.

^{4/} Includes 114 enplanements for Aspen Airways, and 54 for Wright Air Lines, Inc.

^{5/} Data for Alaska Airlines are now included in Intra-Alaska effective 1972.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-18. Passenger Operations in Scheduled Domestic Service of Certificated Route Air Carriers: 1967 through 1976

Year	Revenue Passenger Enplanements ^{1/} (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor ^{2/}	Average On-Line Passenger Trip-Length (Miles)	Average Passenger Revenue Per Passenger-Miles (Cents)
1967	118,666	75,487,327	133,699,795	56.5	636	5.64
1968	134,423	87,507,677	166,870,750	52.4	651	5.61
1969	142,340	102,717,425	206,434,270	49.8	722	5.90
1970	153,662	104,155,983	212,943,866	48.9	678	6.00
1971	156,195	106,438,408	221,503,165	48.1	681	6.33
1972	172,452	118,137,978	226,614,145	52.1	685	6.40
1973	183,272	126,317,334	244,699,119	51.6	689	6.63
1974	189,733	129,732,395	233,880,101	55.5	684	7.52
1975	188,746	131,728,492 ^{r/}	241,282,125	54.6	698 ^{r/}	7.69
1976	206,274	145,270,800	261,246,708	55.6	704	8.16

^{r/} Revised.

^{1/} Prior to 1970 data were shown as revenue passenger originations.

^{2/} Percent revenue passenger-miles of available seat-miles.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-19. Passenger Operations in Scheduled International and Territorial Service of the Certificated Route Air Carriers: 1967 through 1976

Year	Revenue Passenger Enplanements <u>1/</u> (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor (Percent) <u>2/</u>	Average On-Line Passenger Trip-Length (Miles)	Average Passenger Revenue Per Passenger-Miles (Cents)
1967	13,424	23,259,314	41,118,729	56.6	1,733	5.01
1968	15,728	26,450,644	49,575,001	53.4	1,682	4.95
1969	18,603	22,702,695	44,411,659	51.1	1,220	4.95
1970	16,260	27,563,211	51,959,992	53.0	1,695	5.01
1971	17,474	29,219,294	58,320,186	50.1	1,672	5.08
1972	18,897	34,268,298	60,797,069	56.4	1,813	4.98
1973	18,936	35,639,973	65,897,988	54.1	1,882	5.32
1974	17,725	33,186,199	63,125,961	52.6	1,872	6.39
1975	16,316	31,081,668	61,724,118	50.4	1,905 <u>r/</u>	7.17
1976	17,039	33,716,743	61,573,853	54.8	1,979	7.15

1/ Prior to 1970, data were shown as revenue passenger originations.

2/ Percent revenue passenger-miles of available seat-miles.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-20. Coach Plus Economy Passenger Operations in Scheduled Domestic Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1976 1/

Year	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor (Percent) <u>2/</u>	Coach Plus Economy Passenger-Miles as Percent of Total
1967	57,050,746	94,592,565	60.3	75.6
1968	67,745,943	121,491,751	55.8	77.4
1969	81,732,619	155,247,875	52.6	79.6
1970	84,349,480	160,354,405	52.6	81.0
1971	87,068,135	166,419,971	52.3	81.8
1972	96,181,995	171,712,976	56.0	81.4
1973	102,753,267	186,879,821	55.0	81.3
1974	104,245,352	177,011,547	58.9	80.4
1975	108,106,295	184,483,964	58.6	82.1 <u>r/</u>
1976	120,871,281	203,749,632	59.3	83.2

r/ Revised.

1/ Economy service inaugurated July 1959. Intra-Alaska and Intra-Hawaii carriers have no coach or economy service. Data in this table are included in table 6-18.

2/ Percent revenue passenger-miles of available seat-miles.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-21. Coach Plus Economy Passenger Operations in Scheduled International/Territorial Service of the Passenger/Cargo Certificated Route Air Carriers: 1967 through 1976 1/

Year	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor (Percent) <u>2/</u>	Coach Plus Economy Passenger-Miles as Percent of Total
1967	20,789,986	35,215,634	59.0	89.4
1968	23,585,131	42,297,809	55.8	89.1
1969	20,202,474	37,897,380	53.3	89.0
1970	24,777,086	44,232,302	56.0	89.9
1971	26,582,499	50,225,661	52.9	91.0
1972	31,383,908	53,359,631	58.8	91.6
1973	32,758,604	58,223,313	56.3	91.9
1974	30,495,916	56,100,020	54.4	91.9
1975	28,756,207	55,034,477	52.3	92.5
1976	31,321,359	55,296,351	56.6	92.9

1/ Data in this table are included in table 6-19.

2/ Percent revenue passenger-miles of available seat-miles.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-22. Revenue Aircraft Miles Flown in All Services of the Certificated Route Air Carriers: 1967 through 1976

(Thousands of Aircraft Miles)

Year	Scheduled Service					Nonscheduled Service
	Total <u>1/</u>	Passenger/Cargo			All-Cargo <u>2/</u>	
		First Class	Coach and Economy	Mixed Class		
1967	1,833,563	253,022	153,440	1,321,479	105,662	175,469
1968	2,145,973	243,924	169,810	1,607,281	124,958	174,421
1969	2,384,888	225,161	181,677	1,836,679	141,350	169,858
1970	2,418,169	208,725	164,494	1,892,736	152,214	124,095
1971	2,377,858	233,212	144,078	1,859,886	140,682	131,589
1972	2,375,876	250,515	156,090	1,829,460	139,813	124,000
1973	2,448,114	283,505	179,259	1,839,991	145,358	107,609
1974	2,258,188	284,280	93,849	1,748,288	131,768	92,680
1975	2,240,506 <u>r/</u>	284,520 <u>r/</u>	80,614	1,758,571 <u>r/</u>	116,799 <u>r/</u>	84,187 <u>r/</u>
1976	2,319,967	302,309	79,735	1,833,010	104,913	99,192

r/ Revised.

1/ Details may not add to total due to rounding.

2/ Includes operations of the all-cargo carriers and all-cargo operations of the passenger/cargo carriers.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-23. Revenue Aircraft Miles Flown in Domestic Operations of the Certificated Route Air Carriers: 1967 through 1976

(Thousands of Aircraft Miles)

Year	Scheduled Service					Nonscheduled* Service
	Total <u>1/</u>	Passenger/Cargo			All Cargo <u>2/</u>	
		First Class	Coach and Economy	Mixed Class		
1967	1,473,414	247,759	119,078	1,049,997	56,580	49,086
1968	1,727,409	237,796	135,226	1,282,268	72,119	60,963
1969	1,963,367	222,243	159,855	1,497,291	83,978	69,510
1970	2,109,417	206,107	152,315	1,572,189	88,806	40,059
1971	2,003,878	230,252	127,391	1,562,674	83,562	40,733
1972	1,999,530	247,178	136,155	1,534,138	82,059	42,224
1973	2,057,745	282,392	157,252	1,536,110	81,990	40,138
1974	1,900,584	284,280	77,991	1,468,763	69,549	37,457
1975	1,909,486 <u>r/</u>	284,520 <u>r/</u>	69,602	1,495,020 <u>r/</u>	60,343 <u>r/</u>	38,174 <u>r/</u>
1976	2,001,357	302,309	68,576	1,576,512	53,960	50,125

r/ Revised.

1/ Details may not add to total due to rounding.

2/ Includes operations of the all-cargo carriers and all-cargo operations of the passenger/cargo carriers.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-24. Revenue Aircraft Miles Flown in International and Territorial Operations by Certificated Route Air Carriers: 1967 through 1976

(Thousands of Aircraft Miles)

Year	Scheduled Service					Nonscheduled Service
	Total <u>1/</u>	Passenger/Cargo			All-Cargo <u>2/</u>	
		First Class	Coach and Economy	Mixed Class		
1967	360,149	5,263	34,362	271,482	49,042	116,383
1968	418,564	6,127	34,584	325,014	52,839	123,159
1969	374,141	2,918	21,822	339,388	57,372	100,348
1970	390,630	2,618	12,179	320,547	63,408	84,036
1971	373,980	2,960	16,687	297,212	57,120	90,856
1972	376,346	3,337	19,935	295,322	57,754	81,776
1973	390,369	1,113	22,007	303,881	63,368	67,471
1974	357,604	---	15,858	279,525	62,219	55,223
1975	331,020	---	11,012	263,551	56,456	46,013 <u>r/</u>
1976	318,610	---	11,159	256,498	50,953	49,067

r/ Revised.

1/ Details may not add to total due to rounding.

2/ Includes operations of the all-cargo carriers and all-cargo operations of the passenger/cargo carriers.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-25. Revenue Aircraft Miles Flown in Scheduled Domestic Service of the Certificated Route Air Carriers by Type of Carrier: 1967 through 1976

(Thousands of Aircraft Miles)

Year	Trunk	Local Service	Helicopter	Intra-Alaska <u>1/</u>	Intra-Hawaii	All-Cargo	Other
1967	1,258,265	185,041	2,660	8,542	7,665	11,174	67
1968	1,486,460	211,203	2,547	7,155	8,131	11,552	686
1969	1,747,185	227,603	1,910	7,438	8,697	10,456	7,436
1970	1,748,728	242,471	1,427	7,603	8,147	11,219	7,944
1971	1,727,414	241,911	1,048	7,823	7,276	11,071	7,335
1972	1,711,465	249,561	1,022	15,980	8,115	12,771	615
1973	1,743,427	270,677	1,085	15,487	8,965	17,338	766
1974	1,589,077	264,522	1,029	18,712	9,192	17,319	733
1975	1,599,008 <u>r/</u>	262,807	873	22,678	9,154	14,128 <u>r/</u>	838
1976	1,673,216	280,093	709	22,947	9,364	14,089	939

r/ Revised.

1/ Commencing December 1972, data for Alaska Airlines are included in Intra-Alaska.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-26. U.S. Supplemental Air Carrier Operations: 1974, 1975 and 1976

Item	1976	1975	1974
Revenue aircraft miles (000)	62,640	65,546 <u>r/</u>	80,733
Commercial	38,176	37,412 <u>r/</u>	50,954
Military	24,464	28,134 <u>r/</u>	29,779
Revenue passenger originations (000)	2,192	2,352	3,201
Revenue passenger miles (000)	8,199,053	8,745,849 <u>r/</u>	10,864,992
Commercial	6,647,466	6,884,588 <u>r/</u>	9,015,555
Military	1,551,587	1,861,261 <u>r/</u>	1,849,437
Available seat-miles (000)	9,264,160	9,955,995 <u>r/</u>	12,425,783
Revenue cargo ton-miles (000)	384,133	361,756 <u>r/</u>	365,786
Commercial	159,242	115,288 <u>r/</u>	99,637
Military	224,891	246,468 <u>r/</u>	266,149
Available ton miles (000)	1,812,727	1,927,250 <u>r/</u>	2,211,915
Operating revenue (\$000)	417,480	433,160	428,800
Transport	398,656	410,674	411,771
Contract and charter:			
Commercial	291,181	287,257 <u>r/</u>	312,077
Military	107,237	123,264	98,481
Other	239	150	1,209
Other than transport <u>1/</u>	18,827	22,488	17,028
Operating expenses (\$000)	418,086	405,791 <u>r/</u>	431,857
Operating profit or loss (\$000)	-599	27,373 <u>r/</u>	-3,058
Number of operators	7	9	8

r/ Revised.

1/ Details of transport revenue are at variance with reported total by \$4,000 in 1974, \$4,000 in 1975, and \$5,000 in 1976.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-27. Personnel Employed in Certificated Route Air Carrier Scheduled Domestic Operations: 1967 through 1976

Year	Total	Pilots and Copilots	Other Flight Personnel	Flight Attendants	Communications Personnel	Mechanics <u>1/</u>	Aircraft and Traffic Servicing Personnel	Office Employees	All Other
1967 . . .	223,380	20,086	6,019	20,457	2,119	42,316	59,363	47,562	25,458
1968 . . .	224,742	21,171	6,988	24,291	2,261	43,945	66,353	51,028	28,705
1969 . . .	255,537	23,062	6,839	28,163	2,186	44,793	69,487	51,798	29,209
1970 . . .	242,206	22,830	5,895	28,700	1,718	41,464	66,412	46,970	28,217
1971 . . .	240,256	23,422	5,238	30,125	1,377	40,144	68,265	46,198	25,487
1972 . . .	252,999	24,227	5,451	33,846	1,332	40,013	73,015	48,011	27,104
1973 . . .	261,453	24,639	6,193	36,467	1,200	41,471	75,106	48,881	27,496
1974 . . .	260,453	23,580	6,075	36,209	1,094	41,044	75,280	49,781	27,390
1975 <u>2/</u> . . .	253,634	23,267	5,816	35,020	930	40,615	72,467	48,467	27,052
1976 . . .	266,701	24,412	6,121	38,280	830	41,549	73,780	54,013	27,716

1/ Includes mechanics and other maintenance personnel.

2/ Airlift and Flying Tiger all-cargo carriers included in domestic operations.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-28. Personnel Employed in Certificated Route Air Carrier Scheduled International/Territorial Operations: 1967 through 1976

Year	Total	Pilots and Copilots	Other Flight Personnel	Flight Attendants	Communications Personnel	Mechanics <u>1/</u>	Aircraft and Traffic Servicing Personnel	Office Employees	All Other
1967 . . .	46,510	2,636	1,190	4,107	1,161	6,547	13,878	10,686	6,305
1968 . . .	50,283	2,802	1,207	4,611	1,123	6,921	15,193	11,656	6,770
1969 . . .	59,414	3,229	1,767	5,138	1,084	8,161	17,136	12,656	10,243
1970 . . .	48,520	2,344	1,013	4,891	998	6,072	14,890	11,850	6,462
1971 . . .	44,523	2,166	1,011	5,097	847	4,645	14,339	10,450	5,968
1972 . . .	50,368	2,653	1,380	5,797	799	5,557	16,360	10,899	6,923
1973 . . .	50,366	2,550	1,356	6,289	748	5,576	14,966	10,761	8,120
1974 . . .	44,692	2,446	1,345	5,217	617	5,506	12,762	9,791	7,008
1975 <u>2/</u> . . .	38,586	1,982	1,082	4,567	535	4,554	10,921	8,684	6,261
1976 . . .	36,176	1,750	883	4,208	551	4,153	10,601	8,537	5,493

1/ Includes mechanics and other maintenance personnel.

2/ Airlift and Flying Tiger all-cargo carriers included in domestic operations.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-29. Personnel, Payroll, and Average Salary of Certificated Route Air Carriers by Type of Service and Carrier Group: 1976 1/

Personnel									
Type of Service and Carrier Group	Total	Pilots and Copilots	Other Flight Personnel	Flight Attendants	Communications Personnel	Mechanics 2/	Aircraft and Traffic Servicing Personnel	Office Employees	All Others
Domestic passenger/cargo--total	<u>302,877</u>	<u>26,162</u>	<u>7,004</u>	<u>42,392</u>	<u>1,381</u>	<u>45,702</u>	<u>84,381</u>	<u>62,565</u>	<u>33,290</u>
Trunk carriers	226,074	19,690	5,823	34,155	679	36,035	59,787	45,696	24,209
Local carriers	30,688	3,755	17	3,568	95	4,137	10,570	6,278	2,268
Alaskan carriers	2,547	233	59	127	20	319	901	425	463
Hawaiian carriers	2,385	210	---	262	8	276	850	548	231
Helicopter carriers	209	27	---	13	1	34	85	48	1
Other carriers	719	139	---	20	5	107	273	148	27
International and territorial passenger/cargo carriers	<u>34,541</u>	<u>1,631</u>	<u>825</u>	<u>4,208</u>	<u>545</u>	<u>3,942</u>	<u>9,957</u>	<u>8,198</u>	<u>5,235</u>
All-cargo carriers	5,714	477	280	39	28	852	1,958	1,224	856
Total	<u>5,851,960</u>	<u>1,201,520</u>	<u>229,532</u>	<u>530,286</u>	<u>19,119</u>	<u>894,226</u>	<u>1,410,503</u>	<u>976,365</u>	<u>590,425</u>
Domestic passenger/cargo--total	<u>5,159,774</u>	<u>1,086,602</u>	<u>188,740</u>	<u>472,827</u>	<u>12,495</u>	<u>803,829</u>	<u>1,254,491</u>	<u>845,877</u>	<u>494,909</u>
Trunk carriers	4,452,618	911,954	186,960	427,254	10,664	706,664	1,034,144	730,616	444,358
Local carriers	598,790	154,251	133	40,550	1,361	81,980	184,073	96,390	40,052
Alaskan carriers	50,036	8,470	1,647	1,600	286	7,384	17,312	6,884	6,453
Hawaiian carriers	45,455	8,947	---	3,180	118	5,425	14,890	9,187	3,708
Helicopter carriers	3,480	667	---	132	11	568	1,310	771	21
Other carriers	9,395	2,313	---	111	55	1,808	2,762	2,029	317
International and territorial passenger/cargo carriers	<u>584,149</u>	<u>92,444</u>	<u>32,578</u>	<u>56,982</u>	<u>6,296</u>	<u>75,508</u>	<u>126,597</u>	<u>109,661</u>	<u>84,083</u>
All-cargo carriers	108,037	22,474	8,214	477	328	14,889	29,415	20,807	11,433

Payroll (\$,000)

Table 6-29. Personnel, Payroll, and Average Salary of Certificated Route Air Carriers
by Type of Service and Carrier Group: 1976 ^{1/} (Continued)

Average Annual Salary									
Type of Service and Carrier Group	Total	Pilots and Copilots	Other Flight Personnel	Flight Attendants	Communi- cations Personnel	Mechanics ^{2/}	Aircraft and Traffic Serv- icing Personnel	Office Employees	All Others
Total	<u>19,321</u>	<u>45,926</u>	<u>32,772</u>	<u>12,509</u>	<u>13,844</u>	<u>19,566</u>	<u>16,716</u>	<u>15,609</u>	<u>17,779</u>
Domestic passenger/cargo--total . . .	<u>19,647</u>	<u>45,173</u>	<u>31,995</u>	<u>12,396</u>	<u>15,464</u>	<u>19,650</u>	<u>17,311</u>	<u>15,921</u>	<u>18,250</u>
Trunk carriers	19,695	46,316	32,107	12,509	15,705	19,610	17,297	15,989	18,385
Local carriers	19,512	41,079	7,824	11,365	14,326	19,816	17,415	15,354	17,660
Alaskan carriers	19,645	36,352	27,915	12,598	14,300	23,147	19,214	16,198	13,937
Hawaiian carriers	19,059	42,605	---	12,137	14,750	19,656	17,518	16,765	16,082
Helicopter carriers	16,651	24,704	---	10,154	11,000	16,706	15,412	16,063	21,000
Other carriers	13,067	16,640	---	5,550	11,000	16,897	10,117	13,709	11,741
International and territorial passenger/cargo carriers	<u>16,912</u>	<u>56,679</u>	<u>39,488</u>	<u>13,541</u>	<u>11,552</u>	<u>19,155</u>	<u>12,714</u>	<u>13,377</u>	<u>16,062</u>
All-cargo carriers	<u>18,907</u>	<u>47,115</u>	<u>29,336</u>	<u>12,231</u>	<u>11,714</u>	<u>17,475</u>	<u>15,023</u>	<u>16,999</u>	<u>13,356</u>

^{1/} Based on average number of employees at the end of the last quarter, December 1976.

^{2/} Includes mechanics and other maintenance personnel.

Table 6-30. Operating Revenue of Scheduled Domestic Passenger/Cargo Operators,
 Certificated Route Air Carriers: 1967 through 1976
 (Thousands of Dollars)

Year	Total Operating Revenues ^{1/}		Passenger		U.S. Mail (including subsidy)		Express and Freight		Excess Baggage		Other	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1967.	4,886,572	100.0	4,260,000	87.2	170,180	3.5	287,254	5.9	7,236	0.1	161,902	3.3
1968.	5,606,144	100.0	4,912,679	87.6	185,575	3.3	343,371	6.1	8,943	0.2	155,576	2.8
1969.	6,856,964	100.0	5,943,446	86.7	221,773	3.2	432,292	6.3	11,699	0.2	247,754	3.6
1970.	7,130,716	100.0	6,246,426	87.6	204,639	2.9	460,714	6.5	12,134	0.1	206,801	2.9
1971.	7,701,402	100.0	6,736,350	87.5	224,283	2.9	485,182	6.3	13,562	0.2	242,027	3.1
1972.	8,587,996	100.0	7,564,841	88.1	228,031	2.7	541,346	6.3	12,842	0.1	240,936	2.8
1973.	9,604,652	100.0	8,379,396	87.3	257,745	2.7	615,099	6.4	14,289	0.1	338,124	3.5
1974.	11,448,289	100.0	9,757,503	85.2	259,419	2.3	672,957	5.9	16,581	0.1	741,829	6.5
1975 ^{f/} . . .	11,910,894	100.0	10,113,091	84.9	185,336	1.6	696,135	5.8	18,863	0.2	897,469	7.5
1976	13,776,117	100.0	11,844,769	86.0	214,001	1.6	829,711	6.0	21,979	0.2	865,657	6.3

^{f/} Revised.
^{1/} Details may not add to total due to rounding.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-31. Operating Expenses of Scheduled Domestic Passenger/Cargo Operators,
Certificated Route Air Carriers: 1967 through 1976

(Thousands of Dollars)

Year	Total Operating Expense		Aircraft Operating Expenses						Ground and Indirect Expense		Net Operating Income or Loss
			Flying Operations		Maintenance Flight Equipment		Depreciation and Amortization Flight Equipment and Other		Amount	Percent	
	Amount ^{1/}	Percent	Amount	Percent	Amount	Percent	Amount	Percent			Amount
1967	4,475,594	100.0	1,229,479	27.5	831,715	18.6	440,757	9.8	1,973,643	44.1	411,152
1968	5,298,033	100.0	1,505,374	28.4	911,528	17.2	532,193	10.0	2,348,938	44.4	308,111
1969	6,533,214	100.0	1,917,591	29.4	1,041,497	15.9	688,091	10.5	2,886,035	44.2	323,749
1970	7,127,747	100.0	2,098,250	29.4	1,127,161	15.8	745,279	10.5	3,157,056	44.3	2,970
1971	7,443,222	100.0	2,235,004	30.0	1,124,526	15.2	749,077	10.1	3,334,614	44.7	258,181
1972	8,096,695	100.0	2,324,560	28.7	1,239,456	15.3	773,823	9.6	3,758,854	46.4	491,300
1973	9,116,173	100.0	2,605,723	28.6	1,397,007	15.3	834,607	9.2	4,278,836	46.9	488,479
1974	10,648,991	100.0	3,297,164	31.0	1,499,920	14.1	865,229	8.1	4,986,680	46.8	799,298
1975 ^{r/} . . .	11,781,406	100.0	3,869,405	32.8	1,595,358	13.6	882,569	7.5	5,434,073	46.1	129,488
1976	13,198,761	100.0	4,397,364	33.3	1,798,048	13.6	918,905	7.0	6,084,394	46.1	577,356

^{r/} Revised.

^{1/} Details may not add to total due to rounding.

Source: Bureau of Accounts and Statistics, CAB.

Table 6-32. Operating Revenues of Scheduled International/Territorial Passenger/Cargo Operators,
 Certificated Route Air Carriers: 1967 through 1976
 (Thousands of Dollars)

Year	Total Operating Revenues		Passenger		U.S. Mail (including subsidy)		Express and Freight		Excess Baggage		Other	
	Amount 1/	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1967	1,769,682	100.0	1,165,862	65.9	145,051	8.2	163,558	9.2	13,419	0.8	281,792	15.9
1968	1,949,766	100.0	1,309,173	67.2	127,321	6.5	185,856	9.5	15,823	0.8	311,593	16.0
1969	1,689,397	100.0	1,176,349	69.6	91,769	5.4	185,502	11.0	14,232	0.9	221,536	13.1
1970	1,913,592	100.0	1,380,388	72.1	103,303	5.4	197,031	10.3	15,109	0.8	217,760	11.4
1971	2,080,262	100.0	1,483,973	71.4	90,188	4.3	220,553	10.6	15,672	0.8	269,874	12.9
1972	2,284,300	100.0	1,706,512	74.7	77,378	3.4	242,354	10.6	14,459	0.6	243,599	10.7
1973	2,526,878	100.0	1,894,914	75.0	71,366	2.8	268,055	10.6	15,231	0.6	277,314	11.0
1974	2,921,607	100.0	2,121,651	72.6	83,595	2.9	335,704	11.5	20,965	0.7	359,693	12.3
1975	3,063,399	100.0	2,230,081	72.9	89,793	2.9	355,805	11.6	25,476	0.8	362,245	11.8
1976	3,316,136	100.0	2,410,987	72.8	77,620	2.3	382,053	11.5	27,259	0.8	418,217	12.6

1/ Details may not add to total due to rounding.

Source: Bureau of Carrier Accounts and Statistics, CAB.

Table 6-33. Operating Expenses of Scheduled International/Territorial Passenger/Cargo Operations,
Certificated Route Air Carriers: 1967 through 1976

(Thousands of Dollars)

Year	Total Operating Expense		Aircraft Operating Expenses						Ground and Indirect Expense		Net Operating Income or Loss
			Flying Operations		Maintenance Flight Equipment		Depreciation and Amortization Flight Equipment and Other		Amount	Percent	
	Amount ^{1/}	Percent	Amount	Percent	Amount	Percent	Amount	Percent			Amount
1967	1,496,540	100.0	424,135	28.3	211,874	14.2	156,017	10.4	704,514	47.1	273,142
1968	1,747,946	100.0	495,025	28.3	244,316	14.0	180,881	10.3	827,723	47.4	201,820
1969	1,638,275	100.0	456,431	27.9	219,053	13.4	157,019	9.6	805,770	49.2	51,113
1970	1,894,398	100.0	515,182	27.2	241,077	12.7	187,889	10.0	950,241	50.2	19,202
1971	2,050,095	100.0	573,008	28.2	269,031	12.7	190,220	9.6	1,017,834	50.0	30,167
1972	2,233,879	100.0	595,859	26.7	300,476	13.4	211,908	9.5	1,125,635	50.4	50,421
1973	2,458,971	100.0	680,521	27.6	316,597	12.9	213,772	8.8	1,248,081	50.7	67,907
1974	2,994,713	100.0	1,037,441	34.6	356,187	12.0	213,966	7.1	1,387,119	46.3	-73,104
1975	3,059,348	100.0	1,050,250	34.3	363,869	11.9	212,456	7.0	1,432,774	46.8	4,051
1976	3,182,236	100.0	1,089,387	34.2	368,190	11.6	192,879	6.1	1,531,780	48.1	133,900

^{1/} Details may not add to total due to rounding.

Source: Bureau of Carrier Accounts and Statistics, CAB.

VII. AIRMEN

Statistics pertaining to airmen, both pilot and nonpilot, were obtained from the official airmen certification records maintained by the Data Services Division, of the FAA Aeronautical Center, at Oklahoma City, Oklahoma.

Table 7-1. Active Pilot Certificates Held: December 31, 1967
through 1976

Category	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Pilot--total	617,931	691,695	720,028	732,729	741,009	750,869	714,607	733,728	728,187	744,246
Student	181,287	209,406	203,520	195,861	186,428	181,477	181,905	180,795	176,978	188,801
Private	253,312	281,728	299,491	303,779	312,656	321,413	298,921	305,848	305,863	309,005
Commercial	150,135	164,458	176,585	186,821	192,409	196,228	182,444	192,425	189,342	187,801
Airline transport. .	25,817	28,607	31,442	34,430	35,949	37,714	38,139	41,002	42,592	45,072
Helicopter (only) . .	2,573	3,166	4,286	6,677	7,992	7,987	5,968	5,647	4,932	4,804
Glider (only) 1/* . .	1,866	2,193	2,627	3,114	3,571	4,080	4,288	4,824	5,348	5,789
Lighter-than-air 1/*	2,941 1/	2,137	2,077	2,047	2,004	1,970	2,942	3,187	3,132	2,974
Non-pilot--total . . .	231,801	250,151	269,775	289,681	307,057	315,348 r/	304,747	314,394	323,934	334,681
Mechanic 1/.	146,572	158,211	170,716	184,647	193,295	201,700	193,337	198,863	205,436	212,303
Parachute rigger 1/. .	5,347	5,700	6,070	6,424	6,839	7,287	6,941	7,900	8,327	8,718
Ground instructor 1/	34,262	37,889	41,234	44,176	46,145	48,450	46,827	49,249	51,365	53,464
Dispatcher 1/. . . .	4,441	4,766	5,026	5,293	5,480	5,637	5,527	5,576	5,741	5,838
Control tower operator	17,425	18,610	19,851	21,032	26,450	23,353 r/	23,250	23,342	23,956	24,584
Flight navigator . . .	2,891	2,966	3,011	2,950	3,052	2,957	2,636	2,509	2,321	2,214
Flight engineer. . . .	20,863	22,009	23,867	25,159	25,796	25,964	26,229	26,955	26,788	27,560
Flight instructor certificates	44,421	30,361	33,992	37,822	37,760	37,858	36,795	42,418	44,777	46,236
Instrument ratings 2/	122,573	139,346	155,879	169,848	179,261	187,909	185,969	199,323	203,954	211,364

r/ Revised.

1/ Numbers represent all certificates on record. No medical examination required; no determination as to activity can be made.

2/ Special ratings shown on pilot certificates, i.e., do not indicate additional certificates.

3/ The decrease in the number of airmen resulted from a purging of the airmen certification files. During this process approximately 26 thousand duplicates or faulty records were eliminated.

*Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above are the pilots who received a medical.

Table 7-2. Active Women Certificates Held: December 31, 1967 through 1976

Category of Certificates Held	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Pilot--total	23,659	28,401	29,419	29,472	31,216	33,001	34,356	36,943	37,934	41,643
Student	13,173	16,234	16,055	15,787	16,417	17,053	18,593	19,298	19,600	22,254
Private	8,775	10,164	11,174	11,409	12,332	13,391	13,232	14,465	14,952	15,838
Commercial	1,479	1,691	1,824	1,897	2,032	2,196	2,083	2,596	2,733	2,857
Airline transport . .	57	71	76	79	88	101	95	116	137	160
Helicopter (only) . .	16	16	14	6	9	10	7	5	11	17
Glider (only) 1/* . .	77	91	111	141	169	201	216	271	301	352
Lighter-than-air 1/*.	82	134	165	153	169	49	130	192	200	165
Nonpilot--total	2,477	2,707	2,912	3,078	3,413	3,594	3,074	3,471	3,809	4,252
Mechanic 1/	196	229	269	302	322	349	284	315	360	422
Parachute rigger 1/ .	434	445	449	461	470	483	336	495	504	516
Ground instructor 1/.	1,637	1,769	1,917	2,006	2,081	2,166	1,960	2,139	2,249	2,369
Dispatcher 1/	28	30	36	38	39	40	39	42	50	55
Control tower operator	165	205	222	271	501	556	453	473	638	874
Flight engineer	16	28	18	0	0	0	2	7	8	16
Flight navigator . . .	1	1	1	0	0	0	0	0	0	0
Flight instructor . . .	635	531	560	589	646	664	618	834	945	1,054

1/ No medical examination required; therefore, no determination as to activity can be made.

NOTE: Instrument ratings not reported.

*Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above are the pilots who received a medical.

Table 7-3. Pilot Certificates Issued, by Category: Calendar Years 1972 through 1976

Category of Certificates	1972		1973		1974		1975		1976	
	Original Issuances	Additional Ratings	Original Issuances	Additional Ratings	Original Issuances	Additional Ratings	Original Issuances	Additional Ratings	Original Issuances	Additional Ratings
Pilot-total	193,896	34,295	207,305	39,656	185,914	38,700	193,888	35,395	204,489	39,112
Student	121,543	0	131,384	0	113,997	0	127,424	0	129,280	0
Private	50,523	8,371	53,140	9,797	48,501	9,866	49,733	9,734	55,583	12,618
Commercial	16,043	22,236	16,769	24,823	17,693	24,638	12,620	21,860	13,577	22,059
Airline transport . .	2,604	3,410	3,224	4,391	3,219	3,557	2,765	3,370	3,869	3,901
Helicopter (only) . .	2,421	263	1,719	507	1,298	387	866	251	1,064	276
Glider (only)	713	14	892	131	832	244	230	158	848	238
Lighter-than-air . . .	49	1	177	7	374	8	250	22	268	20
Non-pilot--total	13,710	8,164	15,857	8,514	12,210	7,837	12,491	7,137	15,069	7,751
Mechanic	8,138	3,215	8,355	3,329	6,618	2,748	6,930	2,606	8,501	3,149
Parachute rigger . . .	457	60	418	63	468	83	414	62	454	76
Ground instructor . .	2,223	670	2,506	732	2,416	852	2,193	714	2,390	707
Dispatcher	151	0	135	0	152	0	140	1	106	0
Control tower operator	2,004	3,966	1,863	4,227	1,733	3,979	2,164	3,657	2,382	3,686
Flight navigator	35	0	70	0	7	1	4	0	2	0
Flight engineer	702	253	2,510	163	816	174	646	97	1,234	133
Flight instructor certificates <u>1/</u> . .	5,292	2,809	6,199	3,102	6,312	3,399	5,233	3,427	6,137	4,718
Instrument ratings* . . .	0	17,311	0	19,649	0	19,012	0	16,495	18,155	0

1/ Not included in total.

*Special ratings shown on pilot certificates represented above; not to be added to total.

NOTE: Additional ratings are entered on current airman certificates as follows:

- Private, commercial, and airline transport pilot--aircraft category, class, and type instrument rating.
- Helicopter pilot--Instrument and type ratings.
- Flight instructor--ratings for each aircraft category in which the holder is qualified and for instrument flying instruction.
- Mechanic--airframe and powerplant ratings.
- Parachute rigger--senior or master rigger ratings.
- Ground instructor--ratings for each subject in which the holder is qualified to give instruction.
- Air traffic control tower operator--junior/senior ratings for airports where holder may control air traffic.

Table 7-4. Instrument Ratings Issued: 1976, 1975, 1972

Class of Certificate	1976	1975	1972	Percent Change 1975-1976
Total--all groups	18,155	16,495	17,311	+10
Private pilots--total	<u>6,686</u>	<u>4,670</u>	<u>3,853</u>	<u>+43</u>
Private airplane (only)	6,135	4,249	3,380	+44
Private airplane, private glider	92	47	61	+96
Private airplane, commercial glider	4	0	4	0
Private airplane, private helicopter	12	19	8	-37
Private airplane, commercial helicopter	194	167	288	+16
Private airplane, private glider, private helicopter	0	1	1	0
Private airplane, other	249	187	111	+33
Commercial pilots--total	<u>10,793</u>	<u>11,222</u>	<u>12,234</u>	<u>- 4</u>
Commercial airplane (only)	9,624	10,074	10,385	- 4
Commercial airplane, private glider	125	15	78	+733
Commercial airplane, commercial glider	99	69	72	+43
Commercial airplane, private helicopter	1	6	4	-83
Commercial airplane, commercial helicopter Commercial airplane, private glider commercial helicopter	920	1,042	1,684	-12
Commercial airplane, commercial glider commercial helicopter	6	2	4	+200
Commercial airplane, commercial glider commercial helicopter	12	8	7	+50
Commercial airplane, other	6	6	0	0
Rotorcraft pilots--total	<u>676</u>	<u>603</u>	<u>1,224</u>	<u>+12</u>
Commercial helicopter	671	598	1,220	+12
Airline transport helicopter	3	4	0	-25
Commercial helicopter, private glider	1	0	1	0
Commercial helicopter, commercial glider	1	1	0	0
Commercial helicopter, other	0	0	3	0

Table 7-5. Instrument Ratings Held, by Class of Certificates: December 31, 1975 and 1976

Class of Certificates	1975	1976	Percent Change 1975-1976
Total--all groups	203,954	211,364	+4
Private pilots--total	<u>22,922</u>	<u>25,393</u>	<u>+19</u>
Private airplane (only)	21,201	23,462	+11
Private airplane, private glider	573	619	+8
Private airplane, commercial glider	36	50	+39
Private airplane, private helicopter	138	153	+11
Private airplane, private glider, private helicopter	7	8	+14
Private airplane, commercial helicopter	953	1,088	+14
Private airplane, private gyroplane	0	1	0
Private airplane, private glider, commercial helicopter	8	6	-25
Private airplane, commercial glider, commercial helicopter	5	5	0
Private airplane, other	1	1	0
Commercial pilots--total	<u>136,022</u>	<u>138,433</u>	<u>+2</u>
Commercial airplane (only)	115,446	117,490	-14
Commercial airplane, private glider	1,239	1,393	+12
Commercial airplane, commercial glider	3,019	3,157	+5
Commercial airplane, private helicopter	64	77	+20
Commercial airplane, commercial helicopter	15,604	15,630	0
Commercial airplane, private glider, commercial helicopter	95	103	+8
Commercial airplane, commercial glider, commercial helicopter	479	512	+7
Commercial airplane, commercial gyroplane	22	22	0
Commercial airplane, commercial helicopter, commercial gyroplane	26	24	-8
Commercial airplane, commercial gyroplane commercial glider	3	3	0
Commercial airplane, commercial glider, private helicopter	10	7	-30
Commercial airplane, commercial gyroplane, commercial helicopter, commercial glider	15	15	0

Table 7-5. Instrument Ratings Held, by Class of Certificates: December 31, 1975 and 1976 (Continued)

Class of Certificates	1975	1976	Percent Change 1975-1976
Airline transport pilots--total	<u>42,592</u>	<u>45,072</u>	+6
Airline transport airplane	42,270	42,704	+1
Airline transport airplane, airline transport helicopter	322	368	+14
Rotorcraft pilots--total	<u>2,417</u>	<u>2,466</u>	+2
Commercial helicopter	2,391	2,439	+2
Airline transport helicopter	16	17	+6
Rotorcraft, other	10	10	0
Glider pilots--total	<u>1</u>	<u>0</u>	<u>0</u>
Private glider.	1	0	0

Table 7-6. Active Helicopter Pilots by Class of
Certificates: December 31, 1976

Class of Certificates	Number of Certificates Held
Total	27,816
Private helicopter	308
Private gyroplane, private airplane	23
Private helicopter, private airplane	760
Private helicopter, private airplane, private glider	28
Commercial airplane, private helicopter	123
Commercial airplane, commercial gyroplane, commercial glider, commercial helicopter	16
Commercial airplane, commercial glider, private helicopter	8
Private gyroplane	4
Private airplane, commercial glider, commercial helicopter	9
Commercial helicopter	4,433
Private airplane, commercial helicopter	2,109
Commercial airplane, commercial helicopter	18,780
Private airplane, private glider, commercial helicopter	9
Commercial airplane, private glider, commercial helicopter	118
Commercial airplane, commercial glider, commercial helicopter	589
Commercial helicopter, private glider	1
Commercial helicopter, commercial glider	7
Commercial gyroplane, commercial airplane	34
Commercial airplane, commercial gyroplane, commercial glider	4
Commercial airplane, commercial gyroplane, commercial helicopter	33
Commercial gyroplane, commercial helicopter, private airplane	1
Commercial helicopter, commercial gyroplane	4
Airline transport helicopter	47
Airline transport airplane, airline transport helicopter	368

Table 7-7. Active Glider Pilots by Class of Certificates:
December 31, 1976

Class of Certificates	Number of Certificates Held
Total	16,866
Private glider	4,812
Private airplane, private glider	3,638
Private airplane, private glider, private helicopter	28
Private airplane, private glider, commercial helicopter	9
Commercial airplane, private glider	1,884
Commercial airplane, private glider, commercial helicopter	118
Commercial helicopter, private glider	1
Private airplane, commercial glider	470
Private airplane, commercial glider, commercial helicopter	9
Commercial glider	977
Commercial airplane, commercial glider	4,296
Commercial airplane, commercial glider, private helicopter	8
Commercial airplane, commercial glider, commercial helicopter	589
Commercial helicopter, commercial glider	7
Commercial airplane, commercial gyroplane, commercial glider and commercial helicopter	16
Commercial airplane, commercial gyroplane, commercial glider	4

Table 7-8. Active Helicopter and Glider
Pilots: December 31, 1972 through 1976

Calendar Year	Total Helicopter Pilots <u>1/</u>		Total Glider Pilots <u>2/</u>	
	Number	Percent Change	Number	Percent Change
1976	27,816	-1	16,866	+6
1975	27,872	-3	15,962	+6
1974	28,618	+18	15,013	+40
1973	24,352	-22	10,723	-20
1972	31,141	+5	13,482	+11

1/ Includes pilots with ratings to fly helicopters only.

2/ Includes pilots with ratings to fly gliders only.

Table 7-9. Total and Instrument Rated Pilots:
December 31, 1972 through 1976

Calendar Year	Total Pilots <u>1/</u>	Instrument Rated Pilots	
		Number	Percent Change
1976	555,625	211,364	38
1975	551,209	203,954	37
1974	552,933	199,323	36
1973	532,702	185,696	35
1972	569,392	187,909	33

1/ Excludes student pilots.

Table 7-10. Active Pilot Certificates Held, by Category and Age Group of Holder: 1976, 1975, 1971

Age Group	Type of Pilot Certificates														
	Total Active Pilots			Student			Private Airplane			Commercial Airplane			Airline Transport		
	1976	1975	1971	1976	1975	1971	1976	1975	1971	1976	1975	1971	1976	1975	1971
Total . . .	744,246	728,196	741,009	188,871	176,978	186,428	309,005	305,863	312,656	187,801	189,342	192,409	45,072	45,592	35,949
14-15	408	357	0	408	356	0	0	0	0	0	0	0	0	0	0
16-19	31,063	30,551	33,920	22,891	21,940	24,862	7,503	7,700	8,148	379	529	552	0	0	0
20-24	89,665	88,467	95,927	43,540	42,208	44,626	34,067	33,817	33,636	10,405	10,784	13,994	264	217	156
25-29	115,012	115,337	127,054	38,038	35,300	36,646	42,588	41,528	42,922	28,197	32,114	41,133	3,066	2,879	2,467
30-34	118,760	112,016	107,554	28,537	25,477	25,533	43,711	42,158	42,453	37,129	36,173	33,401	6,916	6,146	4,464
35-39	97,822	95,276	96,883	19,155	17,806	19,454	39,250	39,148	42,675	30,990	30,245	27,722	6,993	6,692	5,922
40-44	85,569	85,543	91,429	13,881	13,208	15,427	36,633	38,109	48,502	26,247	25,724	20,506	7,656	7,336	5,916
45-49	75,761	74,803	83,274	10,759	10,239	10,125	40,338	41,743	42,581	17,254	16,045	23,096	6,214	5,620	6,664
50-54	63,322	65,460	61,393	6,564	5,946	5,668	32,642	31,619	27,279	17,006	19,826	20,788	6,103	7,072	7,042
55-59	42,322	38,828	27,467	3,197	2,861	2,756	18,775	17,516	14,670	13,608	12,090	7,317	5,919	4,997	2,421
60 and over .	24,542	22,179	16,108	1,841	1,637	1,331	13,498	12,525	9,790	6,586	5,812	3,900	1,941	1,633	897
	Type of Pilot Certificates														
	Helicopter (only)			Glider (only)			Lighter-than-air			Flight Instructor 1/					
	1976	1975	1971	1976	1975	1971	1976	1975	1971	1976	1975	1971			
Total . . .	4,804	4,932	7,992	5,789	5,348	3,571	2,974	3,132	2,004	46,236	44,777	37,760			
14-15	0	1	0	0	0	0	0	0	0	0	0	0			
16-19	9	8	20	275	355	327	15	19	11	118	127	151			
20-24	297	395	2,793	1,017	941	549	82	105	173	4,044	3,839	3,646			
25-29	2,033	2,469	3,244	935	845	396	154	202	246	7,944	8,486	9,387			
30-34	1,500	1,183	1,008	751	619	354	216	260	341	9,444	8,888	7,033			
35-39	510	455	418	570	507	340	354	423	352	7,028	6,713	4,768			
40-44	243	231	280	459	444	481	450	491	317	5,581	5,185	3,745			
45-49	140	125	128	547	539	404	509	492	276	4,034	3,757	3,530			
50-54	44	45	62	495	450	377	468	502	177	3,436	3,750	3,109			
55-59	17	12	19	408	367	211	398	355	73	2,825	2,493	1,501			
60 and over .	11	8	20	337	281	132	328	283	38	1,782	1,539	890			

1/ Not included in total active pilots.

Table 7-11. Active Nonpilot Certificates Held, by Category and Age Group of Holder: 1976, 1975, 1971

Age Group	Type of Pilot Certificates											
	Total Nonpilots			Mechanic 1/			Parachute Rigger 1/			Ground Instructor 1/		
	1976	1975	1971	1976	1975	1971	1976	1975	1971	1976	1975	1971
Total . . .	334,681	323,934	307,057	212,303	205,436	193,295	8,718	8,327	6,839	53,464	51,365	46,145
14-15	10	13	0	3	2	0	0	0	0	7	11	0
16-19	609	579	478	459	371	320	10	11	10	63	65	53
20-24	13,845	12,869	18,354	7,732	7,334	9,927	442	481	557	1,979	1,806	1,598
25-29	33,064	35,343	35,207	19,763	21,486	21,143	1,360	1,343	1,021	4,680	4,952	4,858
30-34	45,468	42,690	38,304	26,201	24,141	19,488	1,372	1,235	1,134	7,165	6,626	4,136
35-39	41,157	39,982	38,476	21,581	20,672	22,005	1,275	1,317	1,199	5,231	4,659	2,930
40-44	39,084	38,489	35,330	23,442	23,950	23,971	1,268	1,146	771	3,773	3,484	3,382
45-49	34,773	33,808	43,440	24,598	24,228	30,636	808	760	693	3,829	3,996	6,727
50-54	41,020	44,317	44,087	29,728	31,601	29,940	732	727	530	6,536	7,477	8,636
55-59	40,101	35,819	25,000	28,283	24,949	16,783	557	507	379	7,886	7,301	6,027
60 and over . .	45,550	40,025	28,381	30,513	26,702	19,082	894	800	545	12,315	10,988	7,798
	Dispatcher 1/			Control Tower Operator			Flight Navigator			Flight Engineer		
	1976	1975	1971	1976	1975	1971	1976	1975	1971	1976	1975	1971
Total . . .	5,838	5,741	5,480	24,584	23,956	26,450	2,214	2,321	3,052	27,560	26,788	25,796
14-15	0	0	0	0	0	0	0	0	0	0	0	0
16-19	1	1	0	76	131	95	0	0	0	0	0	0
20-24	17	21	64	3,461	3,071	6,135	0	0	4	214	156	69
25-29	244	286	425	5,913	6,156	4,858	2	3	77	1,102	1,117	2,825
30-34	629	630	546	4,787	3,978	3,959	64	108	570	5,250	5,972	8,471
35-39	630	621	652	3,452	3,774	4,629	498	584	618	8,490	8,355	6,443
40-44	685	665	654	3,233	3,289	2,966	537	500	366	6,146	5,455	3,220
45-49	651	644	793	1,867	1,556	1,575	272	261	510	2,748	2,363	2,506
50-54	775	859	1,015	894	1,130	1,626	328	390	664	2,027	2,133	1,676
55-59	965	934	660	719	702	474	408	395	202	1,283	1,031	475
60 and over . .	1,241	1,080	671	182	169	133	105	80	41	300	206	111

1/ Numbers represent all certificates on record. No medical examination required; no determination as to activity can be made.

Table 7-12. Active Pilots and Flight Instructors by FAA Region and State: December 31, 1976

FAA Region and State	Total Pilots	Student	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Total	744,246 1/	188,801	309,005	187,801	45,072	13,567	46,236
United States--total .	<u>732,422</u>	<u>185,524</u>	<u>306,746</u>	<u>185,074</u>	<u>42,742</u>	<u>13,336</u>	<u>45,693</u>
New England--total	<u>32,189</u>	<u>8,622</u>	<u>12,647</u>	<u>7,672</u>	<u>2,602</u>	<u>646</u>	<u>1,956</u>
Maine	3,652	1,095	1,466	938	112	41	169
New Hampshire	3,446	785	1,164	969	453	75	197
Rhode Island	1,564	462	621	394	66	21	110
Massachusetts	12,746	3,731	5,308	2,735	678	294	756
Connecticut	9,270	2,146	3,432	2,286	1,221	185	623
Vermont	1,511	403	656	350	72	30	101
Eastern--total	<u>101,880</u>	<u>27,187</u>	<u>41,224</u>	<u>25,013</u>	<u>6,215</u>	<u>2,241</u>	<u>6,663</u>
New York	30,491	8,612	12,910	6,595	1,538	836	1,896
Pennsylvania	22,949	6,364	9,959	4,940	1,229	457	1,607
Virginia	15,413	3,650	5,073	5,317	1,069	304	921
Maryland	10,473	2,720	4,343	2,719	494	197	636
West Virginia	2,901	928	1,168	646	114	45	199
Delaware	1,766	376	745	476	143	26	143
New Jersey	17,057	4,318	6,710	4,089	1,599	341	1,216
District of Columbia . . .	830	219	316	231	29	35	45
Great Lakes--total	<u>132,492</u>	<u>34,864</u>	<u>62,212</u>	<u>27,883</u>	<u>5,685</u>	<u>1,848</u>	<u>8,135</u>
Illinois	33,343	8,662	14,920	7,174	2,020	567	2,114
Indiana	15,408	4,143	7,461	3,207	434	163	1,019
Minnesota	17,105	4,239	7,845	3,897	959	165	880
Michigan	24,262	6,549	11,774	4,709	866	364	1,427
Ohio	29,585	7,832	13,970	6,393	939	451	1,965
Wisconsin	12,789	3,439	6,242	2,503	467	138	730
Central--total	<u>48,751</u>	<u>12,675</u>	<u>22,998</u>	<u>10,732</u>	<u>1,799</u>	<u>547</u>	<u>2,713</u>
Kansas	13,641	3,429	6,447	3,090	530	145	730
Iowa	11,347	3,090	5,689	2,228	217	123	596
Missouri	15,828	3,954	7,082	3,675	892	225	965
Nebraska	7,935	2,202	3,780	1,739	160	54	422
Southern--total	<u>110,828</u>	<u>28,438</u>	<u>41,759</u>	<u>30,897</u>	<u>7,695</u>	<u>2,039</u>	<u>7,053</u>
North Carolina	13,100	3,603	5,296	3,412	509	280	733
South Carolina	6,515	1,849	2,391	1,940	241	94	383
Georgia	15,650	3,700	5,332	4,489	1,836	293	952
Florida	42,745	10,367	15,703	12,322	3,725	628	2,647
Mississippi	5,764	1,580	2,161	1,783	173	67	363
Alabama	9,350	2,370	3,565	2,874	292	249	811
Tennessee	11,322	3,029	4,658	2,660	745	230	771
Kentucky	6,382	1,940	2,653	1,417	174	198	393

Table 7-12. Active Pilots and Flight Instructors by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Total Pilots	Student	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Southwest--total	90,190	21,831	35,301	26,177	5,374	1,507	6,040
Louisiana	9,918	2,554	3,593	3,127	433	211	674
Oklahoma	13,756	3,558	6,162	3,359	504	173	876
Texas	53,574	12,195	20,263	16,102	4,068	946	3,655
New Mexico	6,020	1,573	2,567	1,561	196	123	409
Arkansas	6,922	1,951	2,716	2,028	173	54	426
Rocky Mountain--total	36,876	9,781	15,169	9,114	1,877	935	2,273
Colorado	16,200	3,762	6,076	4,292	1,355	715	1,121
Wyoming	2,526	773	1,080	571	79	23	169
Utah	5,167	1,408	2,286	1,152	233	88	295
Montana	5,293	1,488	2,401	1,236	125	43	297
North Dakota	4,004	1,227	1,667	1,057	34	19	205
South Dakota	3,686	1,123	1,659	806	51	47	186
Western--total	126,091	28,671	53,311	32,836	8,592	2,681	7,394
California	107,187	24,018	45,650	27,847	7,420	2,252	6,212
Arizona	13,828	3,473	5,667	3,682	644	362	832
Nevada	5,076	1,180	1,994	1,307	528	67	350
Northwest--total	40,290	10,100	17,286	10,220	2,035	649	2,664
Washington	22,251	5,111	8,932	6,184	1,583	441	1,559
Oregon	12,874	3,609	6,053	2,767	290	155	766
Idaho	5,165	1,380	2,301	1,269	162	53	339
Alaskan Region--total	9,798	2,681	3,930	2,527	569	91	607
Pacific Region--total	3,037	674	909	1,003	299	152	195
Outside U.S.--total	11,824	3,277	2,259	3,727	2,330	231	543

1/ Includes Outside U.S.

2/ Includes glider helicopter, and lighter-than-air.

3/ Not included in total.

Note: Puerto Rico and Virgin Islands are included in Outside U.S. total.

Table 7-13. Active Nonpilot Airmen Certificates Issued, by FAA Region and State:
December 31, 1976 1/

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Control Tower Operator	Flight Navigator	Flight Engineer
Total	<u>334,681</u>	<u>212,303</u>	<u>8,718</u>	<u>53,464</u>	<u>5,838</u>	<u>25,484</u>	<u>2,214</u>	<u>27,560</u>
United States--total	<u>324,184</u>	<u>205,888</u>	<u>8,607</u>	<u>52,589</u>	<u>4,612</u>	<u>23,784</u>	<u>2,063</u>	<u>26,641</u>
New England--total	<u>16,806</u>	<u>11,028</u>	<u>387</u>	<u>2,566</u>	<u>123</u>	<u>748</u>	<u>224</u>	<u>1,730</u>
Maine	1,072	609	42	223	11	122	8	57
New Hampshire	1,482	598	24	240	11	205	23	381
Rhode Island	887	575	47	186	4	30	3	42
Massachusetts	8,263	6,259	180	1,113	58	247	26	380
Connecticut	4,653	2,725	82	676	36	127	162	845
Vermont	449	262	12	128	3	17	2	25
Eastern--total	<u>58,806</u>	<u>39,957</u>	<u>1,434</u>	<u>8,588</u>	<u>1,366</u>	<u>3,460</u>	<u>442</u>	<u>3,559</u>
New York	25,155	18,055	351	3,186	1,052	1,361	163	987
Pennsylvania	12,930	9,658	300	1,905	81	544	64	378
Virginia	5,164	2,415	344	906	106	704	45	644
Maryland	3,000	1,683	126	647	19	237	15	273
West Virginia	938	528	46	214	2	126	3	19
Delaware	898	592	22	139	6	87	7	45
New Jersey	10,141	6,643	221	1,465	84	378	145	1,206
District of Columbia	580	383	24	126	16	23	0	8
Great Lakes--total	<u>42,601</u>	<u>26,135</u>	<u>1,175</u>	<u>8,427</u>	<u>417</u>	<u>3,066</u>	<u>62</u>	<u>3,319</u>
Illinois	13,206	7,938	262	2,409	212	687	24	1,674
Indiana	4,234	2,563	180	858	25	455	4	149
Minnesota	7,047	4,347	139	1,116	88	356	7	994
Michigan	6,690	4,172	192	1,513	35	613	12	153
Ohio	8,300	5,273	278	1,812	44	718	13	162
Wisconsin	3,124	1,842	124	719	13	237	2	187
Central--total	<u>18,030</u>	<u>12,074</u>	<u>408</u>	<u>3,429</u>	<u>133</u>	<u>1,195</u>	<u>16</u>	<u>775</u>
Kansas	5,323	3,607	99	960	34	344	3	276
Iowa	2,517	1,586	86	620	7	166	0	52
Missouri	8,539	5,918	162	1,428	86	518	8	419
Nebraska	1,651	963	61	421	6	167	5	28
Southern--total	<u>51,555</u>	<u>30,210</u>	<u>1,549</u>	<u>8,087</u>	<u>930</u>	<u>5,420</u>	<u>309</u>	<u>5,050</u>
North Carolina	3,727	1,946	326	712	38	594	16	95
South Carolina	1,827	830	80	413	6	411	2	85
Georgia	9,975	5,656	273	1,158	174	811	20	1,883
Florida	24,217	15,074	401	3,578	573	1,735	243	2,613
Mississippi	1,583	753	34	373	5	357	6	55
Alabama	5,366	3,475	114	823	101	792	4	57
Tennessee	3,325	1,724	157	702	30	480	13	219
Kentucky	1,535	752	164	328	3	240	5	43

Table 7-13. Active Nonpilot Airmen Certificates Issued, by FAA Region and State:
December 31, 1976 ^{1/} (Continued)

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Control Tower Operator	Flight Navigator	Flight Engineer
Southwest--total	<u>40,013</u>	<u>24,933</u>	<u>976</u>	<u>6,942</u>	<u>275</u>	<u>3,734</u>	<u>103</u>	<u>3,050</u>
Louisiana	3,300	1,999	90	610	22	367	3	209
Oklahoma	9,517	7,086	177	1,458	18	625	12	141
Texas	23,813	14,102	570	4,048	218	2,171	82	2,622
New Mexico	1,717	881	78	401	12	311	3	31
Arkansas	1,666	865	61	425	5	260	3	47
Rocky Mountain--total	<u>11,855</u>	<u>6,459</u>	<u>532</u>	<u>2,540</u>	<u>142</u>	<u>994</u>	<u>42</u>	<u>1,146</u>
Colorado	6,283	3,338	143	1,277	122	399	29	975
Wyoming	737	486	27	160	4	33	3	24
Utah	1,553	884	76	310	11	184	6	82
Montana	1,603	822	235	389	2	117	3	35
North Dakota	842	456	24	188	2	155	1	16
South Dakota	837	473	27	216	1	106	0	14
Western--total	<u>64,753</u>	<u>42,812</u>	<u>1,371</u>	<u>8,998</u>	<u>852</u>	<u>3,667</u>	<u>697</u>	<u>6,356</u>
California	58,092	38,718	1,173	7,785	811	3,017	607	5,981
Arizona	5,062	3,370	155	884	26	438	15	174
Nevada	1,599	724	43	329	15	212	75	201
Northwest--total	<u>14,180</u>	<u>8,479</u>	<u>628</u>	<u>2,261</u>	<u>168</u>	<u>1,029</u>	<u>142</u>	<u>1,473</u>
Washington	9,909	5,905	311	1,452	147	683	99	1,312
Oregon	2,872	1,761	194	539	17	205	38	118
Idaho	1,399	813	123	270	4	141	5	43
Alaskan Region--total	<u>3,069</u>	<u>1,932</u>	<u>107</u>	<u>546</u>	<u>108</u>	<u>252</u>	<u>11</u>	<u>113</u>
Pacific Region--total	<u>2,516</u>	<u>1,869</u>	<u>40</u>	<u>205</u>	<u>98</u>	<u>219</u>	<u>15</u>	<u>70</u>
Outside U.S.--total	<u>10,497</u>	<u>6,415</u>	<u>111</u>	<u>875</u>	<u>1,226</u>	<u>800</u>	<u>151</u>	<u>919</u>

^{1/} Data for control tower operators, flight engineers, and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers, and ground instructors, represent total ratings issued to date. These ratings retain their validity.

NOTE: Puerto Rico and Virgin Island are included in Outside of U.S. total.

Table 7-14. FAA Certificated Repair Stations and Parachute Lofts
By FAA Region and State: December 31, 1976

FAA Region and State	Repair Stations	Parachute Lofts
Total	<u>3,300</u>	<u>59</u>
United States--total . .	<u>3,153</u>	<u>59</u>
New England--total	<u>145</u>	<u>2</u>
Maine	8	---
New Hampshire	10	---
Rhode Island	9	---
Massachusetts	33	1
Connecticut	79	1
Vermont	6	---
Eastern--total	<u>438</u>	<u>5</u>
New York	159	2
Pennsylvania	102	1
Virginia	34	---
Maryland	30	---
West Virginia	16	---
Delaware	6	---
New Jersey	84	2
District of Columbia	7	---
Great Lakes--total	<u>488</u>	<u>13</u>
Illinois	81	3
Indiana	74	3
Minnesota	56	---
Michigan	92	2
Ohio	137	5
Wisconsin	48	---
Central--total	<u>182</u>	<u>4</u>
Kansas	78	2
Iowa	36	1
Missouri	51	---
Nebraska	17	1
Southern--total	<u>434</u>	<u>7</u>
North Carolina	31	2
South Carolina	19	---
Georgia	52	1
Florida	232	2
Mississippi	10	---
Alabama	31	2
Tennessee	43	---
Kentucky	16	---

Table 7-14. FAA Certificated Repair Stations and Parachute Lofts
 By FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Repair Stations	Parachute Lofts
Southwest--total	<u>433</u>	<u>6</u>
Louisiana	30	---
Oklahoma	83	2
Texas	273	2
New Mexico	27	2
Arkansas	20	---
Rocky Mountain--total	<u>117</u>	<u>6</u>
Colorado	34	2
Wyoming	10	---
Utah	26	1
Montana	21	2
North Dakota	13	1
South Dakota	13	---
Western--total	<u>702</u>	<u>8</u>
California	632	8
Arizona	62	---
Nevada	8	---
Northwest--total	<u>130</u>	<u>5</u>
Washington	89	3
Oregon	24	1
Idaho	17	1
Alaskan--total	<u>67</u>	<u>3</u>
Pacific--total	<u>17</u>	---
Outside U.S.--total	<u>147</u>	---

Table 7-15. FAA Designated Mechanic and Parachute Rigger Examiners by FAA Region and State: 1976

FAA Region and State	Mechanic Examiners				Parachute Rigger Examiner			
	Total	Airframe	Powerplant	Airframe Powerplant	Total	Back	Chest	Seat
Total	575	31	29	515	82	82	82	78 1/2
United States--total	<u>538</u>	<u>31</u>	<u>29</u>	<u>478</u>	<u>78</u>	<u>78</u>	<u>78</u>	<u>74 2/3</u>
New England--total.	<u>19</u>	<u>4</u>	<u>4</u>	<u>11</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>3</u>
Maine	1	0	0	1	0	0	0	0
New Hampshire	1	1	0	0	1	1	1	1
Rhode Island.	0	0	0	0	0	0	0	0
Massachusetts	11	3	4	4	2	2	2	0
Connecticut	5	0	0	5	2	2	2	2
Vermont	1	0	0	1	0	0	0	0
Eastern--total.	<u>61</u>	<u>8</u>	<u>7</u>	<u>46</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12 4/5</u>
New York.	32	6	5	21	4	4	4	4 4/5
Pennsylvania.	14	0	0	14	1	1	1	1
Virginia.	3	0	0	3	2	2	2	2
Maryland.	4	0	0	4	2	2	2	2
West Virginia	1	0	0	1	0	0	0	0
Delaware.	1	0	0	1	0	0	0	0
New Jersey.	6	2	2	2	3	3	3	3
District of Columbia.	0	0	0	0	0	0	0	0
Great Lakes--total.	<u>112</u>	<u>3</u>	<u>2</u>	<u>107</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>9 4/5</u>
Illinois.	38	1	2	35	2	2	2	3 4/5
Indiana	14	0	0	14	2	2	2	2
Minnesota	18	2	0	16	0	0	0	0
Michigan.	16	0	0	16	1	1	1	1
Ohio	17	0	0	17	3	3	3	3
Wisconsin	9	0	0	9	0	0	0	0
Central--total.	<u>37</u>	<u>1</u>	<u>1</u>	<u>35</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Kansas.	7	1	1	5	1	1	1	1
Iowa.	9	0	0	9	1	1	1	1
Missouri.	16	0	0	16	1	1	1	1
Nebraska.	5	0	0	5	1	1	1	1
Southern--total.	<u>77</u>	<u>3</u>	<u>3</u>	<u>71</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>8</u>
North Carolina	6	0	0	6	1	1	1	1
South Carolina	2	0	0	2	0	0	0	0
Georgia	11	0	0	11	1	1	1	1
Florida	37	3	3	31	2	2	2	2
Mississippi.	5	0	0	5	0	0	0	0
Alabama	6	0	0	6	1	1	1	0
Tennessee	8	0	0	8	2	2	2	2
Kentucky	2	0	0	2	2	2	2	2

Table 7-15. FAA Designated Mechanic and Parachute Rigger Examiners by FAA Region and State: 1976 (Continued)

FAA Region and State	Mechanic Examiners				Parachute Rigger Examiner			
	Total	Airframe	Powerplant	Airframe Powerplant	Total	Back	Chest	Seat
Southwest--total	<u>66</u>	<u>10</u>	<u>8</u>	<u>48</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>7</u>
Louisiana	2	0	0	2	1	1	1	1
Oklahoma	21	5	4	12	1	1	1	1
Texas	36	5	4	27	3	3	3	3
New Mexico	4	0	0	4	1	1	1	1
Arkansas	3	0	0	3	2	2	2	1
Rocky Mountain--total	<u>17</u>	<u>1</u>	<u>2</u>	<u>14</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>8 4/</u>
Colorado	7	0	1	6	2	2	2	2
Wyoming	1	0	0	1	1	1	1	1
Utah	2	0	0	2	1	1	1	2 4/
Montana	3	1	1	1	3	3	3	2
North Dakota	2	0	0	2	0	0	0	0
South Dakota	2	0	0	2	1	1	1	1
Western--total	<u>100</u>	<u>0</u>	<u>1</u>	<u>99</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>12 3/</u>
California	85	0	1	84	8	8	8	10 3/
Arizona	10	0	0	10	1	1	1	1
Nevada	5	0	0	5	1	1	1	1
Northwest--total	<u>33</u>	<u>1</u>	<u>1</u>	<u>31</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>7</u>
Washington	22	1	1	20	2	2	2	2
Oregon	6	0	0	6	4	4	4	2
Idaho	5	0	0	5	3	3	3	3
Alaskan region--total	<u>14</u>	<u>0</u>	<u>0</u>	<u>14</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>3</u>
Pacific region--total	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Outside U.S.--total	<u>37</u>	<u>0</u>	<u>0</u>	<u>37</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4 4/</u>

- 1/ Includes 6 Examiners with Lap Ratings.
- 2/ Includes 5 Examiners with Lap Ratings.
- 3/ Includes 2 Examiners with Lap Ratings.
- 4/ Includes 1 Examiner with Lap Rating.

VIII. U.S. REGISTERED AIRCRAFT

Source of Data: In January of each year, owners of all aircraft registered as of December 31 of the prior year receive an Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73 (see Appendix A). In Part 1, mandatory under Federal Air Regulation (FAR) 47.44, the owner is required to verify or cancel the registration of the aircraft. If the owner does not submit the form, the aircraft registration is revoked and it is then illegal to fly that aircraft. In Part 2 of the form, general aviation aircraft owners are requested to supply various information including the number of flight hours in each use category for the prior year.

Part 1 is used to verify the aircraft registration for the year in which the form is mailed. Part 2 is used to collect activity data for the year prior to which the form is mailed.

Classification of Aircraft Fleet: Aircraft are classified into two major categories based on the number of flight hours either reported or estimated.

1. Active - All legally registered civil aircraft for which one or more flight hours are reported.
2. Inactive - All legally registered civil aircraft for which zero flight hours were reported.

Flight Hours for Nonrespondents: Flight hours are estimated and assigned to nonrespondents if there is no reported activity data for an aircraft. The situation occurs when the owner does not complete Part 2 of the registration verification form, or when the owner has not returned the form before the activity statistics are compiled.

The hours reported in Part 2 provide the basis for estimating general aviation activity (number of active aircraft and total flight hours) for the entire fleet. The estimating procedure is as follows:

1. Each aircraft, reported or not reported, is assigned a random number.
2. All aircraft are then grouped by manufacturer, model, and series.
3. Aircraft within the groups are sequenced by the random number assigned in step 1.
4. Aircraft in each group having no activity data are assigned the number of hours in the same use categories as the aircraft preceding it in the sequence.
5. The aircraft for which activity data were assigned are identified as "imputes."

In this way, an aircraft may be classified as active with a positive number of flight hours assigned to it or as inactive with zero hours assigned.

The methodology implies that the nonresponding owners use their aircraft in exactly the same pattern as owners who do respond; that is, the aircraft are flown approximately the same number of hours and in the same use categories.

Geographical Location of Aircraft: The region, state, and county of an aircraft is dependent upon the location of the airport at which the aircraft is based. However, if an owner completes Part 2 of the registration form by entering "None" or "Not based at an Airport," the aircraft is assigned to the state and county of the owner's address.

If the base airport is unknown because the owner did not respond to Part 2 or did not return the form before the activity statistics are compiled, a base airport is assigned to the aircraft.

1. All aircraft are sequenced according to the region, state, county, and zip code of the owner's address.
2. Aircraft that have an unknown base airport are assigned to the same base airport as the aircraft preceding it in the sequence. Please note that this procedure allows a base airport of "None" to be assigned.

This method implies that aircraft owners base their aircraft at the same airport used by their neighbors. The procedure is designed so that the aircraft may not be assigned to an airport outside the owner's region; and so that the base airport of an owner in one state may not be used to assign a base airport for an owner living in another state.

Base airport for air carrier aircraft has no meaning. Therefore, these aircraft are excluded from all geographical tables.

It must be emphasized that these measures of general aviation aircraft activity are estimates. The accuracy of these estimates are dependent upon (1) the quality and quantity of the activity data reported by aircraft owners and (2) the validity of the assumptions regarding the usage patterns of the nonrespondent owners.

Activity Data: Table 8-2 shows general aviation aircraft activity for 1973, 1974, 1975 and 1976. Total aircraft, number of active aircraft, and total flight hours are shown.

Table 8-1. Active General Aviation Aircraft, by Type of Aircraft and Primary Use: Calendar Year 1976

Type Aircraft	Estimated Total Active	Executive	Business	Personal	Aerial	Instruc-tional	Air Taxi	Industrial	Rental	Other
Total--all aircraft	<u>178,304</u>	<u>10,080</u>	<u>37,756</u>	<u>87,329</u>	<u>7,850</u>	<u>13,366</u>	<u>6,791</u>	<u>2,695</u>	<u>8,837</u>	<u>3,600</u>
Reported	119,798	6,688	25,727	59,646	5,086	8,514	4,274	1,748	5,736	2,379
Estimated	58,506	3,392	12,029	27,683	2,764	4,852	2,517	947	3,101	1,221
Total--fixed-wing	<u>170,625</u>	<u>9,482</u>	<u>37,182</u>	<u>84,697</u>	<u>7,183</u>	<u>12,769</u>	<u>5,815</u>	<u>1,874</u>	<u>8,579</u>	<u>3,044</u>
Piston aircraft--total	<u>166,201</u>	<u>6,182</u>	<u>36,925</u>	<u>84,650</u>	<u>7,178</u>	<u>12,745</u>	<u>5,291</u>	<u>1,854</u>	<u>8,548</u>	<u>2,828</u>
Single-engine	144,881	1,612	28,484	81,462	6,824	12,177	2,327	1,585	8,078	2,332
Multi-engine	21,320	4,570	8,441	3,188	354	568	2,964	269	470	496
Turboprop--total	<u>2,486</u>	<u>1,781</u>	<u>194</u>	<u>34</u>	<u>3</u>	<u>7</u>	<u>347</u>	<u>15</u>	<u>20</u>	<u>85</u>
Single-engine	30	3	2	3	---	2	5	---	1	14
Multi-engine	2,456	1,778	192	31	3	5	342	15	19	71
Tubojet--total	<u>1,938</u>	<u>1,519</u>	<u>63</u>	<u>13</u>	<u>2</u>	<u>17</u>	<u>177</u>	<u>5</u>	<u>11</u>	<u>131</u>
Single-engine	30	---	5	2	---	---	---	4	---	19
Multi-engine	1,908	1,519	58	11	2	17	177	1	11	112
Total--rotary wing	<u>4,505</u>	<u>580</u>	<u>388</u>	<u>472</u>	<u>6+3</u>	<u>296</u>	<u>974</u>	<u>809</u>	<u>41</u>	<u>302</u>
Piston--total	2,753	129	295	460	579	281	182	606	28	193
Turbine--total	1,752	451	93	12	64	15	792	203	13	109
Miscellaneous--total	<u>3,174</u>	<u>18</u>	<u>186</u>	<u>2,160</u>	<u>24</u>	<u>301</u>	<u>2</u>	<u>12</u>	<u>217</u>	<u>254</u>
Glider	2,345	9	40	1,681	17	237	---	2	213	146
Balloon	824	8	146	479	7	64	2	6	4	108
Blimp/dirigible	5	1	---	---	---	---	---	4	---	---

Table 8-2. Estimated General Aviation Aircraft Activity
Calendar Years 1973 through 1976

Item	Number of Aircraft			Total Hours Flown (Million Hours)
	Total (000)	Active (000)	Inactive (000)	
<u>Reported Data 1/</u>				
1973	132.2	114.0	18.2	22.6
1974	134.8	116.8	18.0	24.1
1975	138.6	120.6	18.0	25.2
1976	137.7	119.8	17.9	25.1
<u>Estimated for Non-respondents 2/</u>				
1973	44.8	39.5	5.3	7.4
1974	50.4	44.6	5.8	8.3
1975	55.1	47.9	7.2	9.0
1976	65.6	58.5	7.1	11.0
<u>Total Estimate 3/</u>				
1973	177.0	153.5	23.5	30.0
1974	185.2	161.4	23.8	32.5
1975	193.7	168.5	25.2	34.2
1976	203.3	178.3	25.0	36.1

1/ From AC Form 8050-73.

2/ Estimated by FAA.

3/ The sum of reported data and data estimated for nonrespondents.

Table 8-3. Estimated Hours Flown in Active General Aviation by Type of Flying
 Calendar Years: 1967 through 1976
 Actual Use

(Thousands of Hours)

Year	Total Estimated Hours	Business		Commercial		Instructional		Personal		Other	
		Hours	Percent	Hours	Percent	Hours	Percent	Hours	Percent	Hours	Percent
1967 <u>1/</u>	22,153	6,578	30	3,918	18	6,262	28	5,173	23	222	1
1968 <u>2/</u>	24,053	6,976	29	4,810	20	6,494	27	5,532	23	241	1
1969 <u>2/</u>	25,351	7,064	28	4,928	19	7,023	28	5,999	24	337	1
1970 <u>3/</u>	26,030	7,204	28	4,582	18	6,791	26	6,896	26	557	2
1971 <u>3/</u>	25,512	7,141	28	4,264	17	6,416	25	7,252	28	439	2
1972 <u>3/</u>	26,974	7,239	27	4,831	18	6,814	25	7,601	28	489	2
1973 <u>3/</u>	30,048	8,558	28	5,608	19	7,646	25	7,546	25	690	3
1974 <u>3/</u>	32,475	9,140	28	6,294	19	7,972	25	8,404	26	665	2
1975 <u>3/</u>	34,165	9,545	28	6,480	19	8,174	24	9,244	27	722	2
1976 <u>3/</u>	36,128	10,095	28	7,029	19	8,591	24	9,768	27	645	2

1/ Estimated from FAA Form 2350.

2/ Estimated from FAA Form 8320-3.

3/ Estimated from AC Form 8050-73.

- NOTE: 1. Business includes business and executive.
 2. Commercial includes air taxi, aerial application, and industrial/special.
 3. Instructional includes training and rental.

Table 8-4. Number of Aircraft and Estimated Hours Flown in Active General Aviation, by Type of Aircraft: Calendar Year 1976

Type of Aircraft	Aircraft		Hours		Average Hours Per Aircraft
	Number	Percent	Number (000)	Percent	
Total--all aircraft. . .	<u>178,304</u>	<u>100.0</u>	<u>36,128</u>	<u>100.0</u>	<u>203</u>
Total--fixed-wing. . . .	<u>170,625</u>	<u>95.7</u>	<u>34,082</u>	<u>94.3</u>	<u>200</u>
Piston--total	<u>166,201</u>	<u>93.2</u>	<u>31,755</u>	<u>87.9</u>	<u>191</u>
Single-engine. . .	144,881	81.2	26,145	72.4	180
Multi-engine . . .	21,320	12.0	5,610	15.5	263
Turbine--total	<u>4,424</u>	<u>2.5</u>	<u>2,327</u>	<u>6.4</u>	<u>526</u>
Turboprop.	<u>2,486</u>	<u>1.4</u>	<u>1,327</u>	<u>3.6</u>	<u>534</u>
Single-engine. . .	30	<u>1/</u>	5	<u>1/</u>	167
Multi-engine . . .	2,456	1.4	1,322	3.6	538
Turbojet	<u>1,938</u>	<u>1.1</u>	<u>1,000</u>	<u>2.8</u>	<u>516</u>
Single-engine. . .	30	<u>1/</u>	1	<u>1/</u>	33
Multi-engine . . .	1,908	1.1	999	2.8	524
Total--rotorcraft.	<u>4,505</u>	<u>2.5</u>	<u>1,762</u>	<u>4.9</u>	<u>391</u>
Turbine.	1,752	1.0	975	2.7	557
Piston	2,753	1.5	787	2.2	312
Total--all other	<u>3,174</u>	<u>1.8</u>	<u>284</u>	<u>0.8</u>	<u>89</u>

1/ Less than 0.05 percent.

Table 8-5. Estimated Miles Flown in Active General Aviation by Type of Flying
 Calendar Years 1967 through 1976
 Actual Use

(Thousands of Miles)

Year	Estimated Total Miles Flown	Business		Commercial		Instructional		Personal		Other	
		Miles	Percent	Miles	Percent	Miles	Percent	Miles	Percent	Miles	Percent
1967 <u>1/</u>	3,439,964	1,431,372	42	568,502	16	713,242	21	690,595	20	36,253	1
1968 <u>2/</u>	3,700,864	1,406,328	38	666,156	18	814,190	22	777,181	21	37,009	1
1969 <u>2/</u>	3,926,461	1,425,923	36	722,916	19	910,290	23	829,043	21	38,289	1
1970 <u>3/</u>	3,207,127	1,134,279	35	554,683	17	686,152	22	753,434	24	78,579	2
1971 <u>3/</u>	3,143,181	1,128,951	36	506,598	16	651,019	21	794,713	25	61,900	2
1972 <u>3/</u>	3,317,068	1,143,841	34	580,861	18	691,513	21	833,855	25	66,998	2
1973 <u>3/</u>	3,728,534	1,343,723	36	688,402	18	777,868	21	825,099	22	93,442	3
1974 <u>3/</u>	4,042,700	1,433,276	35	789,695	20	815,543	20	919,587	23	84,599	2
1975 <u>3/</u>	4,238,400	1,486,876	35	818,065	19	829,362	20	1,008,276	24	95,821	2
1976 <u>3/</u>	4,476,014	1,562,939	35	885,021	20	873,025	20	1,068,114	24	86,915	2

1/ Estimated from FAA Form 2350.

2/ Estimated from FAA Form 8320-3.

3/ Estimated from AC Form 8050-73.

- NOTE: 1. Business includes business and executive.
 2. Commercial includes air taxi, aerial application, and industrial/special.
 3. Instructional includes training and rental.

Table 8-6. Active* U.S. Civil Aircraft and Airports on Record with FAA
 As of December 31, 1967 through 1976

Year	Active Registered Civil Aircraft								Airports on Record with FAA
	Total	Total Air Carrier <u>1/</u>	General Aviation Aircraft						
			Total	Fixed-Wing Aircraft			Rotor ¹ craft <u>2/</u>	Other <u>3/</u>	
				Multi-Engine	Single-Engine				
				4-Place & Over	3-Place & Over				
1967.	116,781	2,595	114,186	14,651	56,865	39,675	1,899	1,096	10,126
1968.	127,164	2,927	124,237	16,760	60,977	42,830	2,350	1,320	10,470
1969.	133,814	3,008	130,806	18,111	63,703	45,001	2,557	1,434	11,050
1970.	134,539	2,796	131,743	18,291	64,759	44,884	2,255	1,554	11,261
1971.	133,869	2,721	131,148	17,855	64,464	44,792	2,352	1,685	12,070
1972.	147,695	2,685	145,010	19,849	70,998	49,448	2,787	1,928	12,405
1973.	156,207	2,667	153,540	21,929	74,831	51,386	3,143	2,251	12,700
1974.	164,160	2,658	161,502	23,418	78,924	53,008	3,610	2,542	13,062
1975.	171,156	2,681	168,475	24,559	82,621	54,390	4,073	2,832	13,251
1976.	180,854	2,550	178,304	25,684	88,211	56,730	4,505	3,174	13,770

1/ Includes helicopters.

2/ Includes autogiros; excludes air carrier helicopters.

3/ Includes gliders, blimps, balloons, and dirigibles.

* Prior to 1970 this category was defined as Eligible Aircraft.

Table 8-7. U.S. Active General Aviation Aircraft Per 1,000 Square Miles,
and by 10,000 Population by FAA Region and State: December 31, 1976

FAA Region and State	Aircraft Per 1,000 Square Miles	Aircraft Per 10,000 Population	Total Active Aircraft	State Area (Square Miles) ^{1/}	Estimated July Population (000) ^{1/}
Total	<u>49.3</u>	<u>8.3</u>	<u>178,304</u>	<u>3,618,690</u>	<u>214,658</u>
United States--2/ total	<u>49.1</u>	<u>8.3</u>	<u>177,379</u>	<u>3,615,122</u>	<u>214,658</u>
New England--total	<u>95.9</u>	<u>5.2</u>	<u>6,385</u>	<u>66,608</u>	<u>12,221</u>
Connecticut	270.3	4.3	1,354	5,009	3,117
Maine	30.6	9.5	1,017	33,215	1,070
Massachusetts	307.7	4.4	2,541	8,257	5,809
New Hampshire	84.2	9.5	783	9,304	822
Rhode Island	242.2	3.2	294	1,214	927
Vermont	41.2	8.3	396	9,609	476
Eastern--total	<u>120.4</u>	<u>4.4</u>	<u>21,734</u>	<u>180,444</u>	<u>49,563</u>
Delaware	274.7	9.7	565	2,057	582
District of Columbia	---	2.3	159	67	702
Maryland	229.8	5.9	2,431	10,577	4,144
New Jersey	458.5	4.9	3,593	7,836	7,336
New York	120.4	3.3	5,967	49,576	18,084
Pennsylvania	123.7	4.7	5,607	45,333	11,862
Virginia	59.2	4.8	2,416	40,817	5,032
West Virginia	41.2	5.5	996	24,181	1,821
Great Lakes--total	<u>98.0</u>	<u>7.3</u>	<u>32,555</u>	<u>332,351</u>	<u>44,899</u>
Illinois	129.6	6.5	7,309	56,400	11,229
Indiana	109.8	7.5	3,985	36,291	5,302
Michigan	110.7	7.1	6,444	58,216	9,104
Minnesota	48.3	10.2	4,060	84,068	3,965
Ohio	177.1	6.8	7,299	41,222	10,690
Wisconsin	61.6	7.5	3,458	56,154	4,609
Central--total	<u>46.6</u>	<u>11.6</u>	<u>13,313</u>	<u>285,467</u>	<u>11,511</u>
Iowa	58.8	11.5	3,309	56,290	2,870
Kansas	46.8	16.6	3,848	82,264	2,310
Missouri	55.5	8.1	3,865	69,686	4,778
Nebraska	29.7	14.8	2,291	77,227	1,553
Southern--total	<u>67.7</u>	<u>7.4</u>	<u>26,176</u>	<u>386,609</u>	<u>35,369</u>
Alabama	47.0	6.6	2,425	51,609	3,665
Florida	148.2	10.3	8,677	58,560	8,421
Georgia	59.9	7.1	3,525	58,876	4,970
Kentucky	37.2	4.4	1,501	40,395	3,428
Mississippi	41.6	8.4	1,986	47,716	2,354
North Carolina	66.4	6.4	3,490	52,586	5,469
Puerto Rico	85.3	---	293	3,435	NA
South Carolina	50.0	5.4	1,552	31,055	2,848
Tennessee	59.8	6.0	2,526	42,244	4,214
Virgin Islands	5.0	---	66	133	NA
Foreign	---	---	135	NA	NA

Table 8-7. U.S. Active General Aviation Aircraft Per 1,000 Square Miles,
and by 10,000 Population by FAA Region and State: December 31, 1976 (Continued)

FAA Region and State	Aircraft Per 1,000 Square Miles	Aircraft Per 10,000 Population	Total Active Aircraft	State Area (Square Miles) ^{1/}	Estimated July Population (000) ^{1/}
Southwest--total	<u>43.2</u>	<u>10.8</u>	<u>24,219</u>	<u>560,550</u>	<u>22,371</u>
Arkansas	43.2	10.9	2,295	53,104	2,109
Louisiana	60.9	7.7	2,953	48,523	3,841
New Mexico	14.5	15.1	1,764	121,666	1,168
Oklahoma	53.0	13.4	3,709	69,919	2,766
Texas	50.4	10.8	13,479	267,338	12,487
Foreign	---	---	19	NA	NA
Rocky Mountain--total	<u>17.3</u>	<u>16.0</u>	<u>10,047</u>	<u>581,927</u>	<u>6,283</u>
Colorado	31.1	12.6	3,244	104,247	2,583
Montana	13.5	26.4	1,986	147,138	753
North Dakota	20.9	22.9	1,474	70,665	643
South Dakota	16.0	18.0	1,235	77,047	686
Utah	13.9	10.0	1,178	84,916	1,228
Wyoming	9.5	23.8	930	97,914	390
Western--total	<u>71.7</u>	<u>11.3</u>	<u>27,466</u>	<u>383,142</u>	<u>24,400</u>
Arizona	32.8	16.5	3,740	113,909	2,270
California	140.6	10.4	22,317	158,693	21,520
Nevada	12.7	23.1	1,409	110,540	610
Northwest--total	<u>44.1</u>	<u>16.2</u>	<u>10,962</u>	<u>248,730</u>	<u>6,772</u>
Idaho	21.6	21.7	1,801	83,557	831
Oregon	41.1	17.1	3,987	96,981	2,329
Washington	75.6	14.3	5,157	68,192	3,612
Foreign	---	---	17	NA	NA
Alaskan--total	<u>8.0</u>	<u>122.7</u>	<u>4,687</u>	<u>586,412</u>	<u>382</u>
Pacific--total	---	---	<u>449</u>	---	---
Hawaii	56.6	4.1	365	6,450	887
South Pacific ^{3/}	---	---	8	NA	NA
Foreign	---	---	76	NA	NA
European--total	---	---	<u>311</u>	<u>NA</u>	<u>NA</u>
Foreign	---	---	311	NA	NA

NA-Not Available.

^{1/} Source: Bureau of the Census.

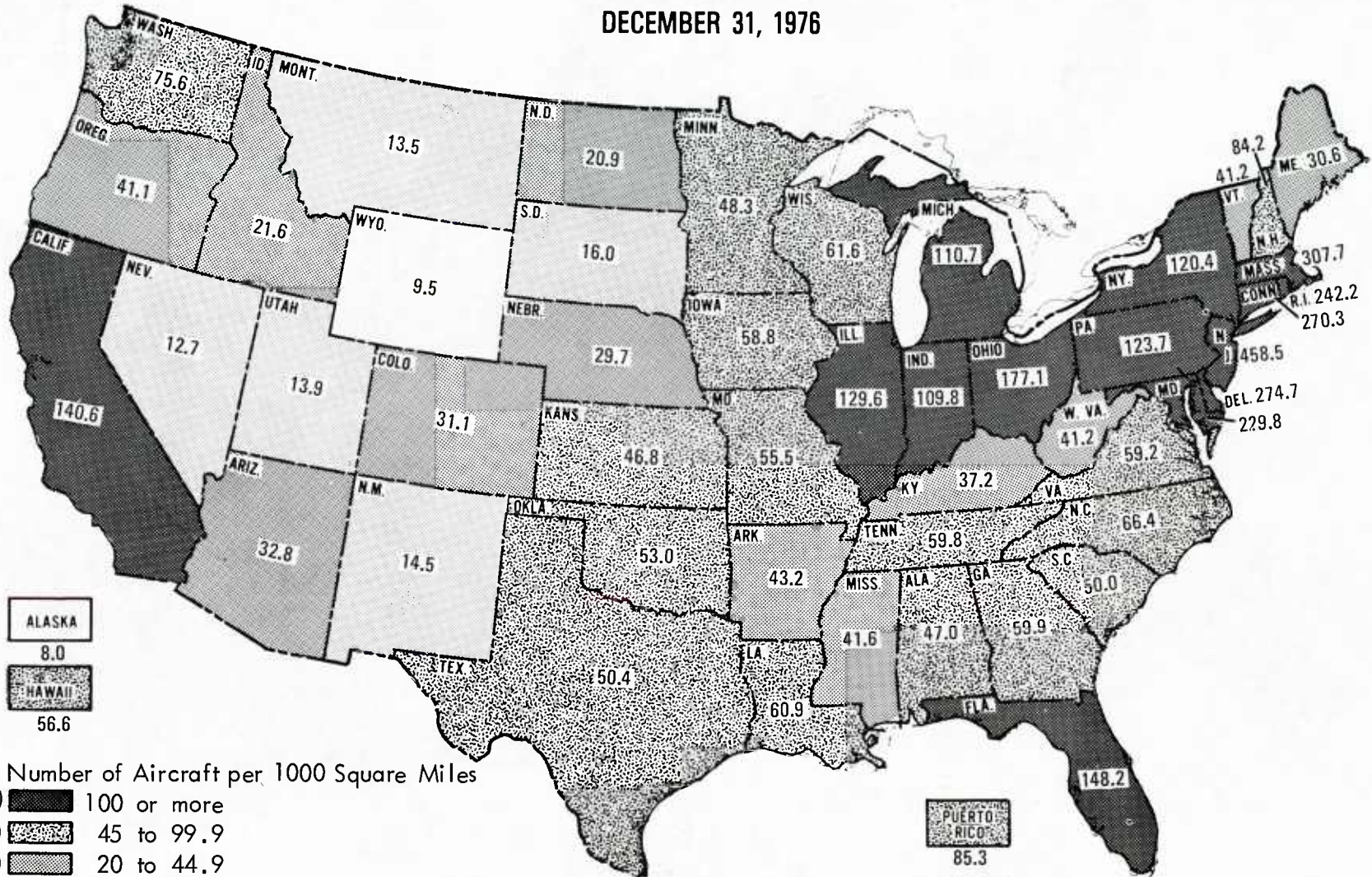
^{2/} U.S. total does not include Puerto Rico and Virgin Islands.

^{3/} American Samoa and Guam.

AVERAGE ACTIVE AIRCRAFT PER 1,000 SQUARE MILES BY STATE

(U.S. AVERAGE = 49.1)

DECEMBER 31, 1976



Number of Aircraft per 1000 Square Miles

- (1) 100 or more
- (2) 45 to 99.9
- (3) 20 to 44.9
- (4) 10 to 19.9
- (5) Less than 10

PUERTO RICO
85.3

VIRGIN ISL.
5.0

AVERAGE ACTIVE AIRCRAFT PER 10,000 POPULATION BY STATE

(U.S. AVERAGE = 8.3)

DECEMBER 31, 1976

120

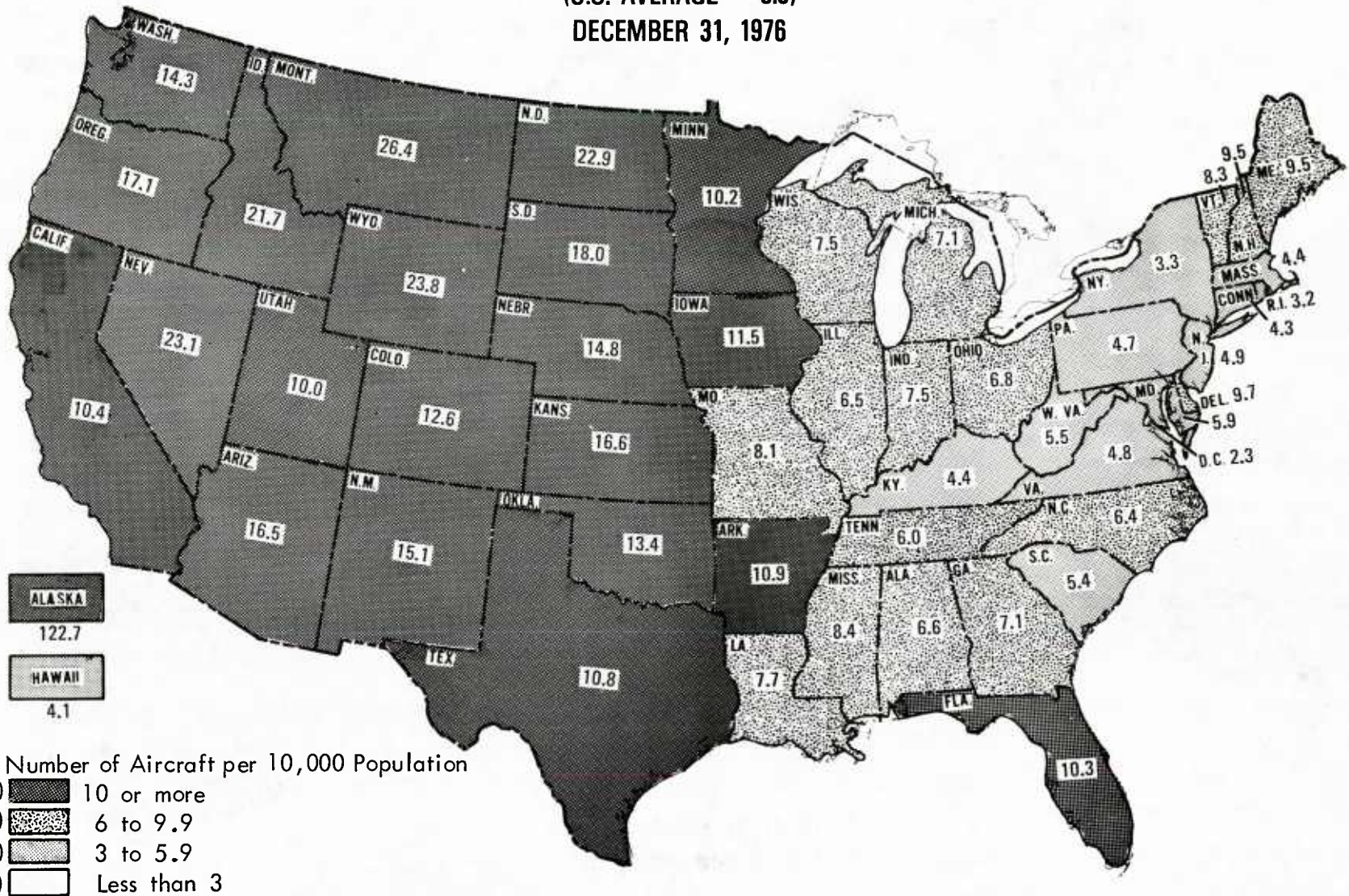


Table 8-8. U.S. Registered Civil Aircraft, Fixed-Wing
Piston-Powered by Engine Power and Number of Seats:
December 1975 and 1976

Type of Aircraft	1976 Total	1975 Total
Total Piston	<u>188,274</u>	<u>179,615</u>
By total rated takeoff engine power:		
1-engine	<u>165,368</u>	<u>157,674</u>
Up to 100 hp	42,999	44,536
101-200 hp	72,236	66,872
201-400 hp	45,665	42,219
401-600 hp	4,087	3,686
601-800 hp	84	73
801-1,000 hp	8	8
1,001-1,500 hp	180	171
1,501-2,000 hp	50	57
2,001-2,500 hp	57	50
3,001-4,000 hp	2	2
2-engine	<u>22,508</u>	<u>21,558</u>
Up to 100 hp	1,018	1,452
101-200 hp	3,639	3,566
201-400 hp	15,388	14,077
401-600 hp	1,361	1,327
601-800 hp	10	9
801-1,000 hp	11	13
1,001-1,500 hp	622	644
1,501-2,000 hp	62	62
2,001-2,500 hp	387	399
3,001-4,000 hp	10	9
3-engine	<u>11</u>	<u>11</u>
Up to 100 hp	---	---
201-400 hp	4	4
401-600 hp	7	7
4-engine	<u>387</u>	<u>372</u>
Up to 100 hp	99	99
201-400 hp	33	33
401-600 hp	3	1
601-800 hp	1	1
1,001-1,500 hp	64	53
1,501-2,000 hp	6	7
2,001-2,500 hp	109	102
2,501-3,000 hp	2	2
3,001-4,000 hp	70	74

Table 8-8. U.S. Registered Civil Aircraft, Fixed-Wing
Piston-Powered by Engine Power and Number of Seats:
December 1975 and 1976 (Continued)

Type of Aircraft	1976 Total	1975 Total
By number of seats:		
1-engine	<u>165,368</u>	157,674
1-3 seats.	72,209	70,000
4-5 seats.	81,242	78,658
6-20 seats	11,917	9,016
50 seats and over.	---	---
2-engine	<u>22,508</u>	<u>21,558</u>
1-6 seats.	15,216	15,240
7-11 seats	6,173	5,159
12-19 seats.	178	185
20-49 seats.	749	772
50 seats and over.	192	202
3-engine	<u>11</u>	<u>11</u>
7-11 seats	2	2
12-19 seats.	8	8
20-49 seats.	1	1
4-engine	<u>387</u>	<u>372</u>
3 seats.	1	1
4 seats.	9	10
7-11 seats	4	3
12-19 seats.	38	39
20-49 seats.	24	28
50 seats and over.	311	291

Table 8-9. U.S. Registered Civil Aircraft, Fixed-Wing
Turbine-Powered by Engine Power and Number of Seats:
December 1975 and 1976

Type of Aircraft	1976 Total	1975 Total
Total	<u>7,263</u>	<u>7,173</u>
Turbojet (by total pounds of thrust).	<u>4,395</u>	<u>4,228</u>
1-engine	<u>163</u>	<u>146</u>
Up to 3,000	98	85
3,001-4,000	1	1
4,001-5,000	10	11
5,001-7,500	36	36
7,501-10,000	17	13
Over 10,000	1	---
2-engine	<u>2,278</u>	<u>2,131</u>
Up to 2,000	291	319
2,001-2,500	185	146
2,501-3,000	701	625
3,001-4,000	122	106
4,001-5,000	228	195
5,001-7,500	1	1
7,501-10,000	15	2
10,000-12,500	407	357
Over 12,500	328	380
3-engine	<u>1,061</u>	<u>1,027</u>
Up to 10,000	41	87
10,001-20,000	816	765
Over 20,000	204	175
4-engine	<u>893</u>	<u>924</u>
Up to 3,000	153	160
3,001-4,000	1	1
4,001-5,000	1	1
7,501-10,000	1	1
10,000-12,500	51	45
12,501-15,000	31	47
15,000-17,500	93	94
17,501-20,000	451	476
Over 20,000	111	99

Table 8-9. U.S. Registered Civil Aircraft, Fixed-Wing
Turbine-Powered by Engine Power and Number of Seats:
December 1975 and 1976 (Continued)

Type of Aircraft	1976 Total	1975 Total
Turboprop (by total equivalent shaft horsepower)	<u>2,868</u>	<u>2,945</u>
1-engine	49	52
Up to 100	7	4
401-600	23	28
601-800	16	18
801-1,000	3	2
2-engine	<u>2,686</u>	<u>2,751</u>
Up to 100	200	297
101-200	1	2
201-400	5	6
401-600	847	1,000
601-800	772	656
801-1,000	368	285
1,001-1,500	51	48
1,501-2,000	15	20
2,001-2,500	236	238
2,501-3,000	67	71
3,001-4,000	124	128
4-engine	<u>133</u>	<u>142</u>
Up to 2,000	45	51
2,001-4,000	67	70
4,001-5,000	18	18
Over 5,000	3	3
By number of seats:		
Turbojet	<u>4,395</u>	<u>4,228</u>
1-engine	<u>163</u>	<u>146</u>
1 seat	67	51
2 seats	92	91
3 seats	4	4
2-engine	<u>2,278</u>	<u>2,131</u>
1 seat	1	1
2 seats	29	28
4 seats	11	14
6 seats	187	191
7-11 seats	1,071	946
12-19 seats	239	240
20-49 seats	150	140
50 seats and over	590	571

Table 8-9. U.S. Registered Civil Aircraft, Fixed-Wing
Turbine-Powered by Engine Power and Number of Seats:
December 1975 and 1976 (Continued)

Type of Aircraft	1976 Total	1975 Total
3-engine	<u>1,061</u>	<u>1,027</u>
50 seats and over	1,061	1,027
4-engine	<u>893</u>	<u>924</u>
7-11 seats.	77	77
12-19 seats	52	45
20-49 seats	1	1
50 seats and over	763	801
Turboprop	<u>2,868</u>	<u>2,945</u>
1-engine	<u>49</u>	<u>52</u>
1 seat	1	1
4 seats	6	5
7 seats and over.	42	46
2-engine	<u>2,686</u>	<u>2,751</u>
2 seats	1	2
4 seats	---	---
6 seats	148	372
7-11 seats.	1,736	1,563
12-19 seats	257	259
20-49 seats	373	370
50 seats and over	171	185
4-engine	<u>133</u>	<u>142</u>
3 seats	23	23
5 seats	---	1
7-11 seats.	4	4
12-19 seats	7	8
50 seats and over	99	106

Table 8-10. U.S. Registered Civil Aircraft, Rotorcraft by
 Engine Power and Number of Seats, and Other Aircraft:
 December 1975 and 1976

Type of Aircraft	1976 Total	1975 Total
Total Rotorcraft	<u>6,391</u>	<u>6,011</u>
Piston (by total rated takeoff engine power)	<u>4,503</u>	<u>4,347</u>
1-engine	<u>4,503</u>	<u>4,347</u>
Up to 100 hp	1,877	1,973
101-200 hp	891	844
201-400 hp	1,620	1,405
401-600 hp	42	40
601-800 hp	35	36
801-1,000 hp	6	24
1,001-1,500 hp	12	6
1,501-2,000 hp	17	16
2,001-2,500 hp	3	3
Turboshaft and other (by total equivalent shaft power)	<u>1,888</u>	<u>1,664</u>
1-engine	<u>1,712</u>	<u>1,519</u>
Up to 100 hp	134	184
201-400 hp	1,342	1,121
401-600 hp	133	120
601-800 hp	7	7
1,001-1,500 hp	79	74
1,501-2,000 hp	2	---
2,501-3,000 hp	15	13
2-engine	<u>176</u>	<u>145</u>
Up to 400 hp	82	67
401-600 hp	56	50
1,001-1,500 hp	27	23
1,501-2,000 hp	3	---
2,501-3,000 hp	2	---
Over 4,000 hp	6	5

Table 8-10. U.S. Registered Civil Aircraft, Rotorcraft by
 Engine Power and Number of Seats, and Other Aircraft:
 December 1975 and 1976 (Continued)

Type of Aircraft	1976 Total	1975 Total
By number of seats:		
Piston--total	<u>4,503</u>	<u>4,347</u>
1-engine	<u>4,503</u>	<u>4,347</u>
1 seat	872	866
2 seats	634	615
3 seats	1,994	1,925
4 seats	716	659
5-10 seats	20	17
10 seats and over	267	265
Turbohaft--total	<u>1,888</u>	<u>1,664</u>
1-engine	<u>1,712</u>	<u>1,519</u>
1 seat	1	1
2-3 seats	33	16
4 seats	515	508
5 seats	962	834
6 seats	49	22
7-11 seats	23	25
12-19 seats	113	98
20 seats and over	16	15
2-engine	<u>176</u>	<u>145</u>
1-3 seats	11	9
6 seats	51	51
7-11 seats	3	1
12-19 seats	70	54
20 seats and over	41	30
Gliders	<u>2,972</u>	<u>2,744</u>
Balloons	<u>975</u>	<u>794</u>
Blimp/Dirigibles	<u>6</u>	<u>5</u>

Table 8-11. Registered U.S. Civil Aircraft by Type and Year of Manufacture

Aircraft Class	Registered Aircraft			Year of Manufacture											
	Total	Active	Inactive	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	Prior 1967	Unknown Yr.Mfr.
Total aircraft	<u>180,853</u>	<u>25,028</u>	<u>205,881</u>	<u>10,561</u>	<u>11,754</u>	<u>10,799</u>	<u>10,290</u>	<u>7,836</u>	<u>5,332</u>	<u>5,055</u>	<u>9,330</u>	<u>10,582</u>	<u>9,805</u>	<u>113,507</u>	<u>1,030</u>
Total fixed-wing	<u>173,166</u>	<u>22,373</u>	<u>195,539</u>	<u>9,745</u>	<u>10,807</u>	<u>9,729</u>	<u>9,533</u>	<u>7,221</u>	<u>4,842</u>	<u>4,599</u>	<u>8,888</u>	<u>10,053</u>	<u>9,273</u>	<u>110,020</u>	<u>829</u>
Piston engine--total	<u>166,328</u>	<u>21,948</u>	<u>188,276</u>	<u>9,333</u>	<u>10,326</u>	<u>9,206</u>	<u>9,007</u>	<u>6,871</u>	<u>4,651</u>	<u>4,286</u>	<u>8,139</u>	<u>9,194</u>	<u>8,667</u>	<u>107,906</u>	<u>690</u>
Single engine--total	<u>144,896</u>	<u>20,474</u>	<u>165,370</u>	<u>8,425</u>	<u>8,961</u>	<u>7,929</u>	<u>7,534</u>	<u>5,873</u>	<u>4,156</u>	<u>3,705</u>	<u>6,840</u>	<u>7,954</u>	<u>7,576</u>	<u>95,927</u>	<u>490</u>
1-3 place	<u>56,672</u>	<u>15,539</u>	<u>72,211</u>	<u>2,768</u>	<u>3,510</u>	<u>3,116</u>	<u>3,096</u>	<u>2,598</u>	<u>2,043</u>	<u>1,700</u>	<u>3,251</u>	<u>3,172</u>	<u>3,073</u>	<u>43,631</u>	<u>253</u>
4+ place	<u>88,224</u>	<u>4,935</u>	<u>93,159</u>	<u>5,657</u>	<u>5,451</u>	<u>4,813</u>	<u>4,438</u>	<u>3,275</u>	<u>2,113</u>	<u>2,005</u>	<u>3,589</u>	<u>4,782</u>	<u>4,503</u>	<u>52,296</u>	<u>237</u>
Two engine--total	<u>21,203</u>	<u>1,305</u>	<u>22,508</u>	<u>896</u>	<u>1,358</u>	<u>1,270</u>	<u>1,472</u>	<u>997</u>	<u>494</u>	<u>581</u>	<u>1,296</u>	<u>1,239</u>	<u>1,091</u>	<u>11,635</u>	<u>179</u>
1-6 place	<u>14,614</u>	<u>602</u>	<u>15,216</u>	<u>551</u>	<u>768</u>	<u>791</u>	<u>869</u>	<u>580</u>	<u>350</u>	<u>444</u>	<u>971</u>	<u>893</u>	<u>884</u>	<u>8,031</u>	<u>84</u>
7+ place	<u>6,589</u>	<u>703</u>	<u>7,292</u>	<u>345</u>	<u>590</u>	<u>479</u>	<u>603</u>	<u>417</u>	<u>144</u>	<u>137</u>	<u>325</u>	<u>346</u>	<u>207</u>	<u>3,604</u>	<u>95</u>
Three plus engine--total	<u>229</u>	<u>169</u>	<u>398</u>	<u>12</u>	<u>7</u>	<u>7</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>344</u>	<u>21</u>
Turbojet engine--total	<u>4,077</u>	<u>318</u>	<u>4,395</u>	<u>196</u>	<u>257</u>	<u>285</u>	<u>285</u>	<u>198</u>	<u>103</u>	<u>204</u>	<u>472</u>	<u>587</u>	<u>382</u>	<u>1,332</u>	<u>94</u>
Single engine--total	<u>30</u>	<u>133</u>	<u>163</u>	<u>6</u>	<u>6</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>123</u>	<u>14</u>
Two engine--total	<u>2,248</u>	<u>30</u>	<u>2,278</u>	<u>141</u>	<u>172</u>	<u>198</u>	<u>152</u>	<u>105</u>	<u>53</u>	<u>86</u>	<u>299</u>	<u>330</u>	<u>184</u>	<u>497</u>	<u>61</u>
1-12 place	<u>1,497</u>	<u>14</u>	<u>1,511</u>	<u>116</u>	<u>144</u>	<u>179</u>	<u>129</u>	<u>92</u>	<u>36</u>	<u>49</u>	<u>134</u>	<u>110</u>	<u>90</u>	<u>386</u>	<u>46</u>
13+ place	<u>751</u>	<u>16</u>	<u>767</u>	<u>25</u>	<u>28</u>	<u>19</u>	<u>23</u>	<u>13</u>	<u>17</u>	<u>37</u>	<u>165</u>	<u>220</u>	<u>94</u>	<u>111</u>	<u>15</u>

Table 8-11. Registered U.S. Civil Aircraft by Type and Year of Manufacture (Continued)

Aircraft Class	Registered Aircraft			Year of Manufacture											
	Total	Active	Inactive	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	Prior 1967	Unknown Yr. Mfr.
Three plus engine--total	<u>1,799</u>	<u>155</u>	<u>1,954</u>	<u>49</u>	<u>79</u>	<u>85</u>	<u>131</u>	<u>91</u>	<u>47</u>	<u>116</u>	<u>170</u>	<u>257</u>	<u>198</u>	<u>712</u>	<u>19</u>
Turboprop engine--total.	<u>2,761</u>	<u>107</u>	<u>2,868</u>	<u>216</u>	<u>224</u>	<u>238</u>	<u>241</u>	<u>152</u>	<u>88</u>	<u>109</u>	<u>277</u>	<u>272</u>	<u>224</u>	<u>782</u>	<u>45</u>
Single engine--total	<u>30</u>	<u>19</u>	<u>49</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>4</u>	<u>5</u>	<u>4</u>	<u>10</u>	<u>20</u>	<u>2</u>
Two engine--total.	<u>2,615</u>	<u>71</u>	<u>2,686</u>	<u>213</u>	<u>222</u>	<u>236</u>	<u>241</u>	<u>148</u>	<u>86</u>	<u>103</u>	<u>268</u>	<u>265</u>	<u>211</u>	<u>651</u>	<u>42</u>
1-12 place	<u>1,886</u>	<u>23</u>	<u>1,909</u>	<u>198</u>	<u>210</u>	<u>202</u>	<u>226</u>	<u>143</u>	<u>83</u>	<u>93</u>	<u>163</u>	<u>152</u>	<u>150</u>	<u>252</u>	<u>37</u>
13+ place	<u>729</u>	<u>48</u>	<u>777</u>	<u>15</u>	<u>12</u>	<u>34</u>	<u>15</u>	<u>5</u>	<u>3</u>	<u>10</u>	<u>105</u>	<u>113</u>	<u>61</u>	<u>399</u>	<u>5</u>
Three plus engine--total	<u>116</u>	<u>17</u>	<u>133</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>3</u>	<u>3</u>	<u>111</u>	<u>1</u>
Total rotorcraft	<u>4,513</u>	<u>1,878</u>	<u>6,391</u>	<u>453</u>	<u>557</u>	<u>611</u>	<u>409</u>	<u>355</u>	<u>307</u>	<u>241</u>	<u>261</u>	<u>290</u>	<u>350</u>	<u>2,398</u>	<u>159</u>
Piston	<u>2,754</u>	<u>1,750</u>	<u>4,504</u>	<u>255</u>	<u>243</u>	<u>290</u>	<u>183</u>	<u>197</u>	<u>199</u>	<u>152</u>	<u>146</u>	<u>175</u>	<u>280</u>	<u>2,287</u>	<u>97</u>
Turbine.	<u>1,759</u>	<u>128</u>	<u>1,887</u>	<u>198</u>	<u>314</u>	<u>321</u>	<u>226</u>	<u>158</u>	<u>108</u>	<u>89</u>	<u>115</u>	<u>115</u>	<u>70</u>	<u>111</u>	<u>62</u>
Other aircraft	<u>3,174</u>	<u>777</u>	<u>3,951</u>	<u>363</u>	<u>390</u>	<u>459</u>	<u>348</u>	<u>260</u>	<u>183</u>	<u>215</u>	<u>181</u>	<u>239</u>	<u>182</u>	<u>1,089</u>	<u>42</u>

Table B-12. U.S. Registered Air Carrier Aircraft ^{1/}: December 31, 1976

Type of Aircraft, Number of Engines, and Model	Number	Type of Aircraft, Number of Engines, and Model	Number	Type of Aircraft, Number of Engines, and Model	Number
Total aircraft	<u>2,550</u>	Cessna CE-500	1	Curtiss Wright CW-46 . .	17
Total fixed-wing	<u>2,542</u>	Oassault/Sud FFJ	1	Curtiss Wright CW-46F. .	5
Turbine-powered--total	<u>2,415</u>	Douglas DC-9	354	Douglas DC-3	14
Four-engine--total	<u>681</u>	Lear LR-23	2	Fairchild 82-A	1
Turbojet--total	<u>616</u>	North American N-265 . .	1	Grumman G-21	7
Boeing 8-707	263	Turboprop--total	<u>210</u>	Grumman G-44	2
Boeing 8-720	25	Beech 99	3	Grumman G-73	1
Boeing 8-747	107	Convair CV-600	15	Martin M-404	10
Convair CV-30A	1	Convair CV-640/340 . . .	80	Single-engine--total	<u>15</u>
Convair CV-22	1	Convair CV-640/44D . . .	26	Cessna CE-172	1
Douglas DC-8	218	DeHavilland OHC-6	22	Cessna CE-185	1
Lockheed L-1329	1	Fairchild F-27	9	Cessna CE-206	2
Turboprop--total	<u>65</u>	Fairchild F-227	29	Cessna CE-210	2
Lockheed L-188	45	Grumman G-159	2	Cessna CE-207	3
Lockheed L-382	20	Hawke Siddeley HS-748 . .	1	DeHavilland DHC-2	2
Three-engine--total	<u>983</u>	Nihon YS-111	23	DeHavilland OHC-3	1
Boeing 8-727	776	Piston-powered--total	<u>127</u>	Piper PA-J3C	1
Douglas DC-1D	123	Four-engine--total	<u>36</u>	Piper PA-24	1
Lockheed L-1D11	84	Douglas DC-6	34	Luscombe 8A	1
Twin-engine--total	<u>751</u>	Douglas OC-7	2	Total rotary-wing	<u>8</u>
Turbojet--total	<u>541</u>	Twin-engine--total	<u>76</u>	Turbine-powered--total	<u>7</u>
Boeing B-737	150	Beech 8E-18	4	Sikorsky S-61	6
British Aircraft Corp.		Beech 8E-58	1	Vertol 1D7	1
BAC-111	32	Cessna CE-411	1	Piston-powered--total	<u>1</u>
		Convair CV-340/44D . . .	11	Sikorsky S-58	1
		Convair CV-44D	2		

^{1/} Includes only those aircraft which have been identified as operating under FAR's 121 or 127.

IX. AERONAUTICAL PRODUCTION AND EXPORTS

The data presented in this chapter were obtained from the following sources:

1. Aircraft Shipments: Bureau of the Census, Form M37G "Complete Aircraft Plant Report" and General Aviation Manufacturers Association's shipment report.
2. Employment and Earnings: Bureau of Labor Statistics, "Employment and Earnings."
3. Aeronautical Exports: Bureau of the Census, Current Industrial Reports "Complete Aircraft and Aircraft Engines."

Due to regulations regarding data disclosure of fewer than four companies, statistics pertaining to engine and propeller shipments are not reported here.

Table 9-1. Total Civil Aircraft Shipments: Calendar Years 1967 through 1976
(Airframe Weight, Value and Average Unit Cost)

Calendar Year	Number of Aircraft	Airframe Weight (000 lbs)	Value Complete Units (\$000)	Average Unit Cost
1967.....	14,479	55,734	2,921,734	201,791
1968.....	14,969	76,986	4,350,695	290,647
1969.....	13,600	61,226	3,624,096	266,478
1970.....	8,190	60,406	3,607,592	440,487
1971.....	8,143	49,256	2,921,751	358,805
1972.....	11,435	47,905	3,270,185	285,980
1973.....	14,748	64,183	4,629,662	313,918
1974.....	15,117	64,285	4,967,752	328,620
1975.....	15,196	60,393	3,745,153	246,457
1976.....	16,446	52,110	3,486,841	212,018

Table 9-2. Complete Aircraft Shipped by U.S. Manufacturers of Civil Aircraft: 1967 through 1976 ^{1/}

Type	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total	<u>14,479</u>	<u>14,969</u>	<u>13,600</u>	<u>8,190</u>	<u>8,143</u>	<u>10,523</u>	<u>14,748</u>	<u>15,117</u>	<u>15,196</u>	<u>16,446</u>
Fixed-wing	<u>14,036</u>	<u>14,451</u>	<u>13,090</u>	<u>7,695</u>	<u>7,680</u>	<u>9,995</u>	<u>13,966</u>	<u>14,289</u>	<u>14,357</u>	<u>15,886</u>
Transports	500	702	509	311	230	230	295	263	314	238
General aviation	13,536	13,749	12,581	7,384	7,450	9,765	13,671	14,026	14,043	15,648
Single-engine										
1- to 3-place	4,873	4,507	4,447	1,981	1,948	2,398	3,137	3,346	3,047	3,175
4-place and over	6,657	6,972	5,746	4,049	4,329	5,500	7,681	8,124	8,460	9,854
Multi-engine	2,006	2,270	2,388	1,354	1,173	1,867	2,853	2,556	2,536	2,619
Rotorcraft	<u>443</u>	<u>518</u>	<u>510</u>	<u>495</u>	<u>463</u>	<u>528</u>	<u>782</u>	<u>828</u>	<u>839</u>	<u>560</u>
Transports	19	14	21	13	20	19	8	20	21	22
General aviation	424	504	489	482	443	509	774	808	818	538

^{1/} Includes both domestic and export output.

Source: Compiled from reports submitted by aircraft manufacturers to Census Bureau, General Aviation Manufacturers Association Reports, and FAA.

Table 9-3. Total Production of Civil Aircraft by Type: Calendar Years 1967 through 1976

Calendar Year	Total Aircraft	Fixed-wing					Rotorcraft
		Total	Single Engine	Twin-engine	Three-engine	Four-engine	
1967	14,479	14,036	11,530	2,179	141	186	443
1968	14,969	14,451	11,479	2,558	160	254	518
1969	13,541	13,031	10,134	2,608	115	174	510
1970	8,190	7,695	6,030	1,440	54	171	495
1971	8,143	7,680	6,277	1,170	33	200	463
1972	11,435	10,907	8,815	1,900	51	141	528
1973	14,748	13,966	10,818	2,887	188	73	782
1974	15,117	14,289	11,470	2,647	107	65	828
1975	15,196	14,357	11,507	2,622	159	69	839
1976	16,446	15,886	13,029	2,616	96	57	560

Table 9-4. Total Rotorcraft Shipments: Calendar Years 1967 through 1976
(Airframe Weight, Average Unit Weight, Value and Average Unit Cost)

Calendar Year	Number of Rotorcraft	Airframe Weight (000 lbs)	Average Unit Weight	Value of Complete Units (\$000)	Average Unit Cost
1967.....	443	636	1,436	41,989	94,783
1968.....	518	700	1,351	53,196	102,521
1969.....	510	879	1,724	74,040	145,176
1970.....	495	643	1,299	54,294	109,685
1971.....	463	833	1,799	78,775	170,140
1972.....	528	941	1,784	87,921	166,517
1973.....	782	1,122	1,435	123,830	158,350
1974.....	828	1,358	1,640	196,932	237,841
1975.....	839	2,732	3,256	316,528	377,268
1976.....	560	2,066	3,689	574,301	1,025,538

Table 9-5. General Aviation Fixed-Wing Shipments: Calendar Years 1967 through 1976
(Airframe Weight, Average Unit Weight, Value, and Average Unit Cost)

Calendar Year	Number of Aircraft	Airframe Weight (000 lbs)	Average Unit Weight	Value of Complete Units (\$000)	Average Unit Cost
1967.....	13,536	15,654	1,156	410,387	30,318
1968.....	13,749	16,910	1,230	553,186	40,235
1969.....	12,581	16,036	1,275	581,807	46,245
1970.....	7,384	9,408	1,274	339,887	46,030
1971.....	7,450	8,998	1,208	309,426	41,534
1972.....	10,677	12,750	1,194	536,783	50,275
1973.....	13,671	18,291	1,338	810,534	59,288
1974.....	14,026	18,497	1,319	884,166	63,038
1975.....	14,043	21,322	1,518	991,509	70,605
1976.....	15,648	22,413	1,432	1,412,675	90,278

Table 9-6. Total General Aviation Aircraft Shipments: Calendar Year 1976

Aircraft Category	Units Shipped		Airframe Weight		Average Unit Weight
	Number	Percent of Total	(000 lbs)	Percent of Total	
Grand Total	16,186	100.0	24,335	100.0	1,503
Total Piston Engine	15,569	96.2	20,603	84.6	1,323
Single-engine, 1-3 place	3,175	19.6	3,906	16.1	1,230
Single-engine, 4 place and over	9,834	60.8	10,401	42.7	1,058
Multi-engine, 4 place and over	2,275	14.0	5,215	21.4	2,292
Rotorcraft	285	1.8	1,081	4.4	3,793
Total Turbine Engine	617	3.8	3,732	15.4	6,049
Single-engine, 4 place and over	20	0.1	1,240	5.1	62,000
Multi-engine, 4 place and over	344	2.1	1,844	7.6	5,360
Rotorcraft	253	1.6	648	2.7	2,561

Table 9-7. Fixed-Wing Transport-Type Shipments: Calendar Years 1967 through 1976

Calendar Year	Number of Aircraft	Airframe Weight (000 lbs)	Average Unit Weight	Value of Complete Units (\$000)	Average Unit Cost
1967.....	500	39,444	78,888	2,469,358	4,938,716
1968.....	702	59,375	84,580	3,744,403	5,333,907
1969.....	509	44,310	87,053	2,978,249	5,851,177
1970.....	311	50,355	161,913	3,213,411	10,332,511
1971.....	230	39,425	171,413	2,582,611	11,228,743
1972.....	230	34,214	148,757	2,645,481	11,502,091
1973.....	295	44,770	151,763	3,695,298	12,526,434
1974.....	263	44,430	168,935	3,886,654	14,778,152
1975.....	314	36,339	115,729	2,437,153	7,776,634
1976.....	238	27,632	116,101	1,499,865	6,301,954

Table 9-8. Total Transport Shipments by Type, Airframe Weight, and Average Unit Weight: Calendar Year 1976

Aircraft Category	Units Shipped		Airframe Weight		Average Unit Weight
	Number	Percent of Total	(000 lbs)	Percent of Total	
Grand Total	<u>260</u>	<u>100.0</u>	<u>27,968</u>	<u>100.0</u>	<u>107,569</u>
Total Fixed-Wing	<u>238</u>	<u>91.5</u>	<u>27,632</u>	<u>98.8</u>	<u>116,101</u>
Turbojet	211	81.1	23,959	85.7	113,550
Turboprop	27	10.4	3,673	13.1	136,037
Total Rotorcraft	<u>22</u>	<u>8.5</u>	<u>336</u>	<u>1.2</u>	<u>15,273</u>
Piston	0	0	0	0	0
Turbine	22	8.5	336	1.2	15,273

Table 9-9. Value of Backlog Orders, Net New Orders, and Net Sales Reported by Manufacturers of Complete Aircraft, Aircraft Engines, and Propellers: 1967 through 1976

(Millions of Dollars)

Year	Net New Orders During Year <u>1/</u>	Net Sales During Year	Backlog December 31
1967	26,279	23,444	29,339
1968	27,168	25,592	30,749
1969	22,005	24,648	28,297
1970	21,161	24,752	24,705
1971	21,553	21,679	24,579
1972	23,570	21,289	26,860
1973	27,044	24,305	29,661
1974	32,879	26,768	35,770
1975	28,815	29,205	35,126
1976	35,991	30,363	37,682

1/ New order received during the year less terminations during the year.

Table 9-10. Average Employment and Earnings in U.S. Aircraft Industry: Calendar Years 1970 through 1976

Industry	1976	1975	1974	1973	1972	1971	1970
<u>Average Monthly Employees (000)</u>							
Aircraft and parts	<u>484.5</u>	<u>514.4</u>	<u>532.1</u>	<u>514.0</u>	<u>501.1</u>	<u>538.1</u>	<u>689.9</u>
Aircraft	262.0	275.0	289.3	274.6	272.2	290.7	387.8
Engines and parts	131.9	139.6	146.2	144.8	138.5	153.4	180.0
Other aircraft parts and equipment	90.6	99.8	96.5	94.5	90.5	93.9	122.1
<u>Average Weekly Hours</u>							
Aircraft and parts	<u>41.7</u>	<u>41.1</u>	<u>40.5</u>	<u>41.5</u>	<u>41.6</u>	<u>40.7</u>	<u>41.0</u>
Aircraft	41.6	40.4	39.4	41.1	41.7	41.0	41.0
Engines and parts	41.0	41.4	41.2	41.8	41.1	39.8	40.5
Other aircraft parts and equipment	42.7	41.9	42.1	42.1	41.9	41.2	41.8
<u>Average Weekly Earnings</u>							
Aircraft and parts	<u>278.56</u>	<u>246.19</u>	<u>218.70</u>	<u>207.50</u>	<u>193.44</u>	<u>175.82</u>	<u>168.92</u>
Aircraft	283.30	250.48	219.46	210.84	197.66	178.76	170.97
Engines and parts	281.26	249.64	223.72	211.09	193.17	173.53	166.05
Other aircraft parts and equipment	263.89	231.29	210.92	196.19	183.10	171.80	167.62
<u>Average Hourly Earnings</u>							
Aircraft and parts	<u>6.68</u>	<u>5.99</u>	<u>5.40</u>	<u>5.00</u>	<u>4.65</u>	<u>4.32</u>	<u>4.12</u>
Aircraft	6.81	6.20	5.57	5.13	4.74	4.36	4.17
Engines and parts	6.86	6.03	5.43	5.05	4.70	4.36	4.10
Other aircraft parts and equipment	6.18	5.52	5.01	4.66	4.37	4.17	4.01

Table 9-11. United States Exports of Aeronautical Products: Calendar Years 1975 through 1976

Item	1975		1976	
	Number	Value (\$000)	Number	Value (\$000)
Aircraft, parts, and accessories--total ..	---	7,222,166	---	7,059,787
Commercial and civilian aircraft--total	4,539	3,229,468	4,531	3,217,360
Cargo-transport, new:				
Under 33,000 pounds (empty airframe weight)	---	---	1	175
33,000 pounds and over (empty airframe weight) .	6	43,784	10	108,062
Passenger transports, new:				
Under 33,000 pounds (empty airframe weight)	6	5,776	3	1,159
33,000 pounds and over (empty airframe weight) .	149	2,086,180	133	2,033,222
Passenger, cargo combinations, new:				
Under 33,000 pounds (empty airframe weight)	---	---	---	---
33,000 pounds and over (empty airframe weight) .	27	294,186	16	334,319
Aircraft, personal, and utility types:				
Single engine, new	2,460	70,755	2,374	73,885
Multiple engine, new:				
Under 3,000 pounds (empty airframe weight)	168	11,313	228	17,328
3,000 pounds and over (empty airframe weight) ..	637	224,722	612	269,229
Rotary-wing, new:				
Under 2,000 pounds (empty airframe weight)	210	27,456	201	28,131
2,000 pounds and over (empty airframe weight) ..	124	77,176	114	85,211
Aircraft: used, rebuilt, modified or converted, including aircraft changed from military to nonmilitary type	581	386,971	591	263,940
Aircraft, new (not elsewhere classified)	171	1,149	248	2,699
Aircraft engines--total	3,802	45,134	3,498	33,806
Internal combustion aircraft engines, new:				
Under 500 h.p.	2,310	21,649	2,417	19,716
500 h.p. and over	256	7,703	127	5,434
Aircraft engines, used	1,236	15,782	954	15,687
Aircraft components, parts, and accessories ^{1/}	---	3,947,564	---	3,801,590

^{1/} Includes military aircraft, parts, jet and gas turbines for aircraft, new or used.

Source: Current Industrial Reports, Bureau of the Census, U.S. Department of Commerce.

X. AIRCRAFT ACCIDENTS

The data presented in this chapter were obtained from the following sources:

Accidents: National Transportation Safety Board.

Air Carrier Miles Flown: National Transportation Safety Board.

Estimated General Aviation Hours and Miles Flown: Federal Aviation Administration.

As defined by the NTSB, an aircraft accident is: "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage."

"Fatal injury" means any injury which results in death within 7 days of the accident.

"Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

"Serious injury" means any injury which (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

"Substantial damage":

(1) Except as provided in subparagraph (2) of this paragraph, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally required major repair or replacement of the affected component.

(2) Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes or wingtips are not considered "substantial damage" for the purpose of this part.

Commencing in 1968 general aviation accidents cannot be compared with earlier years because of an amendment to the definition of "substantial damage."

Prior to January 1, 1968, the definition of "substantial damage" was:

(1) Except as provided in subparagraph (ii) of this paragraph:

(i) Substantial damage in aircraft of 12,500 pounds maximum certificated takeoff weight or less means damage or structural failure reasonably estimated to cost \$300 or more to repair.

(ii) Substantial damage in aircraft of more than 12,500 pounds maximum certificated takeoff weight means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repairs or replacement of the affected component.

(2) Engine failure, damage limited to an engine, bent fairings, or cowling, dented skin, small puncture holes in the skin or fabric, taxiing damage to propeller blades, damage to tires, engine accessories, brakes or wingtips are not considered "substantial damage" for the purpose of this part.

More detailed accident data may be obtained from the National Transportation Safety Board, Bureau of Aviation Safety.

Table 10-1. Aircraft Accidents, Fatalities, and Fatality Rates - U.S. Air Carrier Operations: 1976

Air Carrier and Operation	Number of Accidents		Number of Fatalities	Passenger Fatality Rate <u>1/</u>
	Total	Fatal		
Total	<u>28</u>	<u>4</u>	<u>45</u>	<u>---</u>
Certificates route air carriers (all operations)	25	3	42	0.001
Supplemental air carriers (all operations)	1	0	0	0
Commercial (all operations)	2	1	3	---
Passenger operations:				
Certificated route air carriers scheduled passenger service	22	3	42	0.020
Domestic passenger service	19	2	5	0.003
International/territorial passenger service	3	1	37	0.096
Supplemental air carrier passenger service (civil and military)	1	0	0	0
Commercial	2	1	3	---

1/ Per 100 million passenger miles.

NOTE: 1. Beginning in 1975, accidents involving commercial operators of large aircraft are included.
2. Nonrevenue miles of the supplemental air carriers are not reported.

Source: National Transportation Safety Board.

Table 10-2. Fatal Accidents, Fatalities - U.S. Air Carriers, All Operations: 1975 and 1976

Date	Location	Operator	Service	Aircraft	Facilities				Total Aboard	Reported Type of Accident
					Total	Passenger	Crew	Other		
Certificated Route Air Carriers										
06/24/75	JFK Airport, NY	EAL	Psg., SD	B-727	112	106	6	0	124	Crashed on landing during thunderstorm activity
08/30/75	Gambell Vil., St. Lawrence Island, AK	WAA	Psg., SD	F-27	10	7	3	0	32	Crashed during landing
Commercial Operators of Large Aircraft										
02/16/75	Fairbanks, AK	PAIX	Cargo, NS0	DC-6	2	0	2	0	3	Crashed during takeoff
Total					124	113	11	0	159	
Certificated Route Air Carriers										
03/07/76	Igiugig, AK	KWA	Psg., SD	C-207	4	3	1	0	4	Crashed enroute
04/05/76	Ketchikan, AK	ASA	Psg., SO	B-727	1	1	0	0	50	Aircraft ran off end of runway during landing, fire after impact
04/27/76	Charlotte Amalie, St. Thomas, VI	AAL	Psg., SI	8-727	37	35	2	0	88	Crashed during landing
Commercial Operators of Large Aircraft										
02/08/76	Van Nuys, CA	MERX	Ferry	DC-6	3	0	3	0	6	Engine failure during takeoff, crashed during emergency landing
Total					45	39	6	0	148	

Table 10-3. Aircraft Accidents, Accident Rates, and Fatalities - U.S. Air Carrier Operations: 1967 through 1976

Year	Number of Accidents		Aircraft Miles Flown (000) <u>1/</u>	Accident Rate Per Million Aircraft Miles From		Fatalities		
	Total	Fatal		Total Accidents	Fatal Accidents	Total	Passengers	Crew and Other
1967	70	12	2,160,363	0.032	0.006	286	229	57
1968	71	15 <u>2/</u>	2,498,848	0.028	0.005	349	306	43
1969	63	10 <u>2/</u>	2,736,596	0.023	0.003	158	132	26
1970	55	8	2,684,552	0.020	0.003	146	118	28
1971	48	8 <u>2/</u>	2,660,731	0.018	0.002	203	174	29
1972	50	8	2,619,043	0.019	0.003	190	160	30
1973	43	9	2,646,669	0.016	0.003	227	200	27
1974	47	9	2,464,295 <u>r/</u>	0.019	0.003 <u>r/</u>	467	421	46
1975 <u>3/</u>	45	3	2,477,764	0.018	0.001	124	113	11
1976	28	4	2,536,000	0.011	0.002	45	39	6

r/ Revised.

1/ The nonrevenue miles of the Supplemental Air Carriers are not reported.

2/ Includes midair collisions nonfatal to air carrier occupants, excluded from fatal accident rates, (1968-2; 1971-2).

3/ Beginning in 1975, accidents involving commercial operators of large aircraft are included.

Note: Sabotage accident occurring 9/8/74 is included in all computations except rates.

Source: National Transportation Safety Board.

Table 10-4. Aircraft Accidents, Accident Rates, and Fatalities - U.S. Certificated Route Air Carriers: 1967 through 1976

Year	Number of Accidents		Aircraft Miles Flown (000) <u>1/</u>	Accident Rate Per Million Aircraft Miles Flown		Fatalities		
	Total	Fatal		Total Accidents	Fatal Accidents	Total	Passengers	Crew and Other
1967	66	11	2,083,668	0.032	0.005	283	229	54
1968	62	14 <u>1/</u>	2,385,309	0.026	0.005	348	305	43
1969	61	10 <u>1/</u>	2,620,803	0.023	0.003	158	132	26
1970	49	5	2,591,706	0.019	0.002	83	70	13
1971	47	8 <u>1/</u>	2,557,968	0.018	0.002	203	174	29
1972	48	8	2,526,021	0.019	0.003	190	160	30
1973	40	8	2,555,732	0.016	0.003	221	197	24
1974	45	8	2,384,933 <u>r/</u>	0.018	0.003	463	420	43
1975	36	2	2,357,425	0.015	0.001	122	113	9
1976	25	3	2,408,000	0.010	0.001	42	39	3

r/ Revised.

1/ Includes midair collisions nonfatal to air carrier occupants, excluded in computation of fatal accident rate (1968-1; 1969-1; 1971-2).

Note: Sabotage accident occurring 9/8/74 is included in all computations except rates.

Source: National Transportation Safety Board.

Table 10-5. Aircraft Accidents, Fatalities, and Fatality Rates - U. S. Certificated Route Air Carrier Scheduled Passenger Service: 1967 through 1976

Year	Aircraft Accidents		Fatalities			Passengers Carried	Passenger Miles Flown (000)	Passenger Fatality Rate Per 100 Million Passenger Miles
	Total	Fatal	Total	Passenger	Crew and Other			
1967	51	8	255	226	29	132,088,038	103,381,996	0.219
1968	53	13 <u>1/</u>	345	305	40	152,163,000	119,612,578	0.255
1969	48	7	152	132	20	159,213,414	132,161,593	0.100
1970	39	2	3	2	1	171,697,097	139,157,806	0.001
1971	41	6 <u>1/</u>	194	174	20	173,664,737	145,678,876	0.119
1972	43	7	186	160	26	188,938,932	159,722,015	0.100
1973	32	6	217	197	20	202,207,000	171,436,549	0.115
1974	42 <u>r/</u>	7	460	420	40	207,449,006 <u>r/</u>	173,349,894 <u>r/</u>	0.197 <u>r/</u>
1975	28	2	122	113	9	205,059,571	174,173,138	0.065
1976	22	3	42	39	3	223,800,000	190,400,000	0.020

r/ Revised.

1/ Includes midair collisions nonfatal to air carrier occupants.

Note: Passenger deaths occurring in sabotage accidents are included in the passenger fatality column, but excluded in the computation of passenger fatality rates (1974-79).

Source: National Transportation Safety Board.

Table 10-6. Aircraft Accidents, Fatalities, and Fatality Rates - U.S. Certificated Route Air Carrier Scheduled Domestic Passenger Service: 1967 through 1976

Year	Aircraft Accidents		Fatalities			Passengers Carried	Passenger-Miles Flown (000)	Passenger Fatality Rate Per 100 Million Passenger-Miles
	Total	Fatal	Total	Passenger	Crew and Other			
1967 . . .	43	8	255	226	29	118,663,542	78,910,851	0.286
1968 . . .	42	11 <u>1/</u>	288	258	30	134,434,632	91,688,180	0.281
1969 . . .	36	7	152	132	20	142,364,035	100,815,837	0.131
1970 . . .	32	1	1	0	1	155,097,644	109,183,837	0.000
1971 . . .	33	6 <u>1/</u>	194	174	20	156,097,403	113,240,603	0.154
1972 . . .	37	6	185	160	25	169,931,415	123,775,960	0.129
1973 . . .	27	4	138	128	10	183,271,000	133,733,181	0.096
1974 . . .	31	3	168	158	10	189,723,697 <u>r/</u>	137,657,951 <u>r/</u>	0.115 <u>r/</u>
1975 . . .	21	2	122	113	9	188,743,983	140,299,953	0.081
1976 . . .	19	2	5	4	1	206,500,000	154,100,000	0.003

r/ Revised.

1/ Includes 2 midair collisions nonfatal to air carrier occupants.

Source: National Transportation Safety Board.

Table 10-7. Aircraft Accidents, Fatalities, and Fatality Rates - U.S. Certificated Route Air Carriers
Scheduled International/Territorial Passenger Service: 1967 through 1976

Year	Aircraft Accidents		Fatalities			Passengers Carried	Passenger-Miles Flown (000)	Passenger Fatality Rate Per 100 Million Passenger-Miles
	Total	Fatal	Total	Passenger	Crew and Other			
1967 . . .	8	0	0	0	0	13,424,496	24,470,223	0
1968 . . .	11	2	57	47	10	15,728,069	27,944,398	0.168
1969 . . .	12	0	0	0	0	16,849,379	31,345,756	0
1970 . . .	7	1	2	2	0	16,599,453	29,973,969	0.007
1971 . . .	8	0	0	0	0	17,567,334	32,438,273	0
1972 . . .	6	1	1	0	1	19,007,517	35,946,055	0
1973 . . .	5	2	79	69	10	18,936,000	37,703,368	0.183
1974 . . .	12 r/	4	292	262	30	17,725,309 r/	35,691,093 r/	0.513 r/
1975 . . .	7	0	0	0	0	16,315,588	33,873,185	0
1976 . . .	3	1	37	35	2	17,300,000	36,400,000	0.096

r/ Revised.

Note: Passenger deaths occurring in sabotage accidents are included in passenger fatality column, but are excluded in the computation of passenger fatality rates (1974-79).

Source: National Transportation Safety Board.

Table 10-8. Aircraft Accidents, Accident Rates, and Fatalities - U.S. Supplemental Air Carrier Operations:
1967 through 1976

Year	Number of Accidents		Aircraft Miles Flown (000) 1/	Accident Rate Per Million Aircraft Miles Flown		Fatalities		
	Total	Fatal		Total Accidents	Fatal Accidents	Total	Passengers	Crew and Other
1967	4	1	96,071	0.042	0.010	3	0	3
1968	9	1	113,540	0.079	0.009	0	0	0
1969	2	0	115,793	0.017	0	0	0	0
1970	6	3	92,846	0.065	0.032	61	46	15
1971	1	0	102,763	0.010	0	0	0	0
1972	2	0	93,022	0.022	0	0	0	0
1973	3	1	90,937	0.033	0.011	6	3	3
1974	2	1	79,363 r/	0.025 r/	0.013 r/	4	1	3
1975	2	0	65,476	0.031	0	0	0	0
1976	1	0	71,000	0.014	0	0	0	0

r/ Revised.

1/ Nonrevenue miles not reported.

Source: National Transportation Safety Board.

Table 10-9. Aircraft Accidents, Fatalities, and Fatality Rates - U.S. Supplemental Air Carrier Civil and Military Passenger Operations: 1967 through 1976

Year	Accidents		Fatalities			Passengers Carried	Passenger-Miles Flown (000)	Passenger Fatality Rate Per 100 Million Passenger-Miles
	Total	Fatal	Total	Passenger	Crew			
1967	0	0	0	0	0	2,315,820	5,995,901	0
1968	3	1	1	1	0	2,669,466	8,885,783	0.011
1969	0	0	0	0	0	3,705,975	11,134,706	0
1970	2	1	47	46	1	2,950,224	10,288,728	0.447
1971	0	0	0	0	0	3,295,803	10,573,646	0
1972	0	0	0	0	0	3,473,599	10,049,683	0
1973	1	0	0	0	0	3,569,912	11,790,513	0
1974	1	0	0	0	0	3,194,463 <i>r/</i>	10,862,449 <i>r/</i>	0
1975	1	0	0	0	0	2,352,423	8,759,279	0
1976	1	0	0	0	0	2,200,000	8,200,000	0

r/ Revised.

Source: National Transportation Safety Board.

Table 10-10. Aircraft Accidents, Fatalities, and Accident Rates - U.S. General Aviation Flying: 1967 through 1976

Year	Accidents		Fatalities	Aircraft Hours Flown (000) <i>1/</i>	Aircraft-Miles Flown (000) <i>1/</i>	Accident Rates			
	Total	Fatal				100,000 Aircraft Hours		Million Aircraft Miles	
			Total	Fatal	Total	Fatal			
1967	6,115	603	1,333 <i>2/</i>	22,153	3,439,964	27.6	2.72	1.78	0.175
1968 <i>3/</i>	4,968 <i>4/</i>	692 <i>4/</i>	1,399	24,053	3,700,000	20.6	2.86	1.34	0.186
1969	4,767	647	1,495 <i>2/</i>	25,351	3,926,461	18.8	2.55	1.21	0.164
1970 <i>5/</i>	4,712 <i>4/</i>	641 <i>4/</i>	1,310	26,030	3,207,127 <i>5/</i>	18.1	2.46	1.47	0.200
1971	4,651	661	1,355	25,512	3,143,181	18.2	2.59	1.48	0.211
1972	4,228 <i>4/</i>	695 <i>4/</i>	1,426 <i>2/</i>	26,974	3,400,000	15.8	2.57	1.28	0.209
1973	4,255 <i>4/</i>	723 <i>4/</i>	1,412	30,048	3,728,500	14.2	2.40	1.14	0.193
1974	4,425 <i>4r/</i>	729 <i>4r/</i>	1,438 <i>r/</i>	32,475 <i>r/</i>	4,042,700 <i>r/</i>	13.6 <i>r/</i>	2.24 <i>r/</i>	1.09 <i>r/</i>	0.180 <i>r/</i>
1975	4,237	675	1,345	34,165	4,238,400	12.4	1.97	1.00	0.159
1976	4,567	636	1,188	36,500	4,296,400	12.5	1.74	1.06	0.148

r/ Revised.

1/ Estimated by FAA.

2/ Includes air carrier fatalities when in collision with general aviation aircraft (1966-2; 1967-104; 1969-82; 1972-5).

3/ Commencing January 1, 1968 the definition of substantial damage was changed, therefore, fewer accidents were reported. Care should be used in comparing with similar data for prior years.

4/ Suicide/sabotage accidents included in all computations except rates (1968-3; 1970-1; 1972-3; 1973-2; 1974-2; 1975-2).

5/ Beginning in 1970, the decrease in aircraft-miles flown is the result of a change in the FAA standard for estimated miles flown.

Source: National Transportation Safety Board.

Table 10-11. Comparative Accident Data: 1967 through 1976
(Passenger Fatalities Per 100,000,000 Passenger-Miles)

Year	Passenger Automobiles and Taxis	Buses	Railroad Passenger Trains	Domestic Scheduled Air Transport Planes
1967	2.40	.18	.09	.29
1968	2.40	.21	.20	.28
1969	2.30	.19	.07	.13
1970	2.10	.19	.09	.00
1971	1.90	.19	.24	.15
1972	1.90	.19	.53	.13
1973	1.70	.14	.07	.10
1974	1.30	.21	.07	.12
1975	1.40	.15	.08	.08
1976	1.50	.01	.05	.003

Source: Motor vehicle data (automobiles, taxis, and buses) from the National Safety Council "Accident Facts" based on data from State traffic authorities, Bureau of Public Roads, National Association of Motor Bus Operators and the American Transit Association. Railroad data from the National Safety Council "Accident Facts" based on the data from the Interstate Commerce Commission. Domestic scheduled air transport data from the National Transportation Safety Board.

Table 10-12. Aircraft Accidents, Fatalities, and Accident Rates -
U.S. Air Taxi Operations: 1967 through 1976

Year	Accidents		Fatalities	Aircraft Hours Flown ^{1/}	Accident Rate Per 100,000 Aircraft Hours Flown	
	Total	Fatal			Total ¹	Fatal
1967	237	33	94	1,766,000	13.42	1.87
1968 ^{2/}	179	46	111	1,999,000	8.95	2.30
1969	207	29	142	2,238,000	9.25	1.30
1970	190	38	100	2,481,000	7.66	1.53
1971	148	32	109	2,225,000	6.65	1.44
1972	147	42	121	2,555,000	5.75	1.64
1973	163	42	109	3,066,000	5.32	1.37
1974	191	40	111	3,640,000	5.25	1.10
1975	180	26	70	3,822,000 ^{3/}	4.71	0.68
1976	195	39	118	3,872,000 ^{3/}	5.04	1.01

^{1/} Aircraft hours estimated by FAA.
^{2/} Definition of accident changed.
^{3/} Aircraft hours estimated by NT58.

Source: National Transportation Safety Board.

GLOSSARY

The following terms are used in this publication, and the general definitions given here are intended to help the reader comprehend the data presented. Technical detail has been omitted for these definitions.

- ACTIVE AIRCRAFT--All legally registered civil aircraft for which one or more flight hours are reported.
- AERIAL APPLICATION--Any use of an aircraft for work purposes which concern the production of foods, fibers, and health control in which the aircraft is used in lieu of farm implements or ground vehicles for the particular task accomplished. This includes the distribution of chemicals or seeds in agriculture, reforestation, or insect control; it excludes firefighting operations.
- AIR CARGO--All commercial air express and air freight exclusive of air mail and air parcel post.
- AIR CARRIER--A person who undertakes directly by lease, or other arrangement, to engage in air transportation.
- AIRCRAFT ACCIDENT--As defined for within agency use, (1) when, as a result of the operation of an aircraft, any person (occupant or nonoccupant) receives fatal or serious injury, or any aircraft receives substantial damage as provided in Part 320.2(d) of the Regulations (CAB); (2) aircraft collide in flight; or (3) an aircraft is overdue and is believed to have been involved in an accident.
- AIRCRAFT CONTACTED--Aircraft with which the flight service stations have established radio communications contact. One count is made for each enroute, landing, or departing aircraft contacted by a flight service station regardless of the number of contacts made with an individual aircraft during the same flight. A flight contacting five FSSs would be counted as five aircraft contacted.
- AIRCRAFT HANDLED--See IFR AIRCRAFT HANDLED.
- AIRCRAFT MILES or PLANE MILES--The miles (computed in airport-to-airport distances) for each inter-airport hop actually completed, whether or not performed in accordance with the scheduled pattern. For this purpose, operation to a flag stop is a hop completed even though a landing is not actually made.
- AIRCRAFT OPERATION--The airborne movement of aircraft in controlled or noncontrolled airport terminal areas and about given enroute fixes or at other points where counts can be made. There are two types of operations--local and itinerant.
1. Local operations are performed by aircraft which:
 - (a) Operate in the local traffic pattern or within sight of the airport.

- (b) Are known to be departing for, or arriving from, flight in local practice areas within a 20 mile radius of the airport.
 - (c) Execute simulated instrument approaches or low passes at the airport.
2. Itinerant operations are all aircraft operations other than local operations.

AIRCRAFT TYPE--A term used in grouping aircraft by basic configuration--fixed-wing, rotorcraft, glider, dirigible, and balloon.

AIRLINE--An established system of aerial transportation--especially a commercial system--together with its equipment, holdings, and facilities.

AIRMAN--A pilot, mechanic, or other licensed aviation technician.

AIRMAN CERTIFICATE--A document issued by the Administrator of the Federal Aviation Administration certifying that he has found the holder to comply with the regulations governing the capacity in which the certificate authorizes the holder to act as an airman in connection with aircraft.

AIRPORT--An area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

AIRPORT ADVISORY SERVICE--A service provided by Flight Service Stations at airports not served by a control tower. This service consists of providing information to arriving and departing aircraft concerning wind direction and speed, favored runway, altimeter setting, pertinent known field conditions, airport taxi routes and traffic patterns, and authorized instrument approach procedures. This information is advisory in nature and does not constitute an ATC clearance.

AIRPORT OF ENTRY--An international airport designated by the U.S. Bureau of Customs for the landing of aircraft upon arrival from a foreign country. At these airports, landing is permissible at any time; personnel authorized to conduct the formalities incident to customs, immigration, public health, agricultural quarantine, and similar procedures are permanently located there.

AIRPORT SURVEILLANCE RADAR (ASR)--Radar providing position of aircraft by azimuth and range data. It does not provide elevation data. It is designed for range coverage up to 60 nautical miles and is used by terminal area air traffic control.

AIRPORT TRAFFIC--Aircraft operating in the air or on an airport surface exclusive of loading ramps and parking areas.

AIRPORT TRAFFIC CONTROL SERVICE--Air traffic control service provided by an airport traffic control tower for aircraft operating on the movement area, and in the vicinity of an airport.

- AIRPORT TRAFFIC CONTROL TOWER (ATCT)--A central operations facility in the terminal air traffic control system, consisting of a tower cab structure, including an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling and other devices, to provide safe and expeditious movement of terminal air traffic.
- AIRPORT TYPE--General Use--Airports serving as regular, alternate, or provisional stops for scheduled and large irregular air carriers; non-air-carrier airports offering a minimum of services such as fuel and regular attendants during normal working hours; and airports operating seasonally which qualify under above definition.
 Limited Use--Airports available to public but not equipped to offer minimum services.
 Restricted Use--Use by general public prohibited except in case of forced landing or by previous arrangement.
- AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC)--A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace, and principally during the en route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.
- AIR TAXI OPERATOR--An operator providing either scheduled or unscheduled air taxi service or mail service.
- AIR TRAFFIC--Aircraft operating in the air or on an airport surface, exclusive of loading ramps and parking areas.
- AIR TRAFFIC CONTROL--A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.
- AIR TRAFFIC CONTROL FACILITY--A facility in the U.S., its possessions and territories, and in foreign countries especially established by international agreement, that has the capability to provide air traffic control services to the aeronautical public.
- AIR TRAFFIC HUB--Air traffic hubs are not airports; they are the cities and Standard Metropolitan Statistical Areas requiring aviation services. Communities fall into four classes as determined by each community's percentage of the total enplaned passengers in scheduled service of the fixed-wing operations of the domestic certificated route air carriers in the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. (See Standard Metropolitan Area.)
- AIRWORTHINESS CERTIFICATE--The issuance of this certificate by the Federal Aviation Administration signifies that an aircraft conforms to the type design (except for the experimental classification) and is in condition for safe operation.
- ALL-CARGO CARRIER--One of a class of air carriers holding Certificates of Public Convenience and Necessity, issued by the CAB, authorizing the performance of scheduled air freight, express, and mail transportation over specified routes, as well as the conduct of nonscheduled operations, which may include passengers.

ALL-CARGO SERVICE (AIR)--Flights scheduled primarily for the transportation of freight and express. Could include mail.

ALL SERVICES (AIR)--The total of scheduled and nonscheduled services.

ALTERNATE AIRPORT--An approved airport at which an aircraft may land if a landing at the intended airport becomes inadvisable.

APPROACH CONTROL FACILITY--A terminal area traffic control facility providing approach control service.

APPROACH CONTROL SERVICE--Air traffic control service provided by an approach control facility for arriving and departing VFR/IFR aircraft and, on occasion, en route aircraft. At some airports not served by an approach control facility, the ARTCC provides limited approach control service.

ARTCC--Air Route Traffic Control Center.

ARSR--Air Route Surveillance Radar.

ATC--Air Traffic Control.

AVAILABLE SEAT-MILES--The aircraft miles flown on each inter-airport hop multiplied by the available aircraft capacity (tons) for that hop, representing the traffic-carrying capacity offered.

BUSINESS TRANSPORTATION--Any use of an aircraft not for compensation or hire by an individual for the purposes of transportation required by a business in which he is engaged.

CAB--Civil Aeronautics Board.

CERTIFICATED ROUTE AIR CARRIER--An air carrier holding a Certificate of Public Convenience and Necessity issued by the CAB authorizing the performance of scheduled service over specified routes, and a limited amount of nonscheduled service.

CERTIFICATED ROUTE-MILES OPERATED--Certificated route miles operated are based on each carrier's certificate. This is duplication in that if a pair of points are on different segments they are counted for each segment.

COACH SERVICE (AIR)--Transport service established for the carriage of passengers at fares and quality of service below that of first-class service.

COMBINED STATION/TOWER--A combined facility (see Airport Traffic Control Tower and Flight Service Station).

COMMERCIAL OPERATOR--One of a class of air carriers operating on a private for-hire basis, as distinguished from a public or common air carrier, holding a commercial operator certificate, issued by the Administrator of the Federal Aviation Administration (pursuant to Part 45 of the Civil Air Regulations) authorizing it to operate aircraft in air commerce for the transportation of goods or passengers for compensation or hire.

COMMUTER OPERATOR--Any operator who performs, pursuant to published schedule, at least five round trips per week between two or more points, or carries mail on contract.

CONTROLLED AIRSPACE--Airspace control area designated as a continental control area, control zone, terminal control area, or transition area, within which some or all aircraft may be subject to air traffic control.

CS/T--Combined Station/Tower.

DEFENSE VISUAL FLIGHT RULES (DVFR)--Rules applicable to flights within an Air Defense Identification Zone conducted under the visual flight rules in Federal Aviation Regulation, Part 91.

DOMESTIC OPERATIONS--In general, operations within and between the 50 States, and the District of Columbia. Includes domestic operations of the certificated trunk carriers, and the local service, helicopter, Alaskan, Hawaiian, domestic all-cargo, and other carriers.

DOMESTIC TRUNKS (DOMESTIC TRUNK OPERATIONS)--Domestic operations of the domestic trunk carriers. This group of carriers operates primarily within and between the 50 States of the United States over routes servicing primarily the larger communities. International operations of these carriers are shown under "international operations," and not under "domestic trunk operations."

DVFR--Defense Visual Flight Rules.

ECONOMY SERVICE (AIR)--Transport service established for the carriage of passengers at fares and quality service below coach service.

ENPLANED PASSENGERS--The number of revenue passengers boarding aircraft, including originating, stopover, and transfer passengers.

EXECUTIVE TRANSPORTATION--Any use of an aircraft by a corporation, company or other organization for the purposes of transporting its employees and/or property not for compensation or hire, and employing professional pilots for the operation of the aircraft.

EXPRESS (AIR)--Property transported by air under published air express tariffs filed with the Civil Aeronautics Board.

FAA--Federal Aviation Administration.

FAR--Federal Air Regulations.

FAS--Flight Advisory Service.

FEDERAL AIRWAY--A control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids.

FIRST-CLASS SERVICE (AIR)--Transport service established for the carriage of passengers at standard fares, premium fares, or at reduced fares such as family plan and first-class excursion for whom standard or premium quality services are provided.

FIXED-WING AIRCRAFT--Aircraft having wings fixed to the airplane fuselage and outspread in flight, i.e., nonrotating wings.

FLIGHT ADVISORY SERVICE--Advice and information provided by a center to assist pilots in the safe conduct of flight.

FLIGHT CONDITION MESSAGE--A message for an en route aircraft that summarizes the weather condition expected to be encountered and, when appropriate, recommends alternate routes to avoid adverse weather conditions.

FLIGHT PLAN--Specified information, relating to the intended flight of an aircraft, that is filed orally or in writing with air traffic control.

FLIGHT SERVICE STATION (FSS)--Air Traffic service facilities within the National Airspace System which provide preflight pilot briefing and en route communications with VFR flights, assist lost IFR/VFR aircraft, assist aircraft having emergencies, relay ATC clearances, originate, classify, and disseminate Notice to Airmen, broadcast aviation weather and NAS information, receive and close flight plans, monitor radio NAVAIDS, notify search and rescue units of mission VFR aircraft, and operate the national weather teletypewriter systems. In addition, at selected locations, FSSs take weather observations, issue airport advisories, administer airman written examinations, and advise Customs and Immigration of transborder flight.

FOREIGN FLAG AIR CARRIER--An air carrier other than a U.S. flag air carrier engaged in international air transportation (see also U.S. Flag Carrier).

FOREIGN MAIL--Mail transported outside the United States by U.S. flag carriers for a foreign government.

FREIGHT--Property other than express and passenger baggage transported by air.

FSS--Flight Service Station.

GENERAL AVIATION FLYING--That portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity from the Civil Aeronautics Board, and large aircraft commercial operators.

HELICOPTER--A rotorcraft that, for its horizontal motion, depends principally on its engine driven rotors.

HELICOPTER CARRIERS--Domestic certificated route air carriers primarily employing helicopter aircraft for their operations.

HELIPORT--An area of land, water, or any structure used or intended to be used for the landing and takeoff of helicopters.

HORSEPOWER--The measure of power for piston engines.

ICAO--International Civil Aviation Organization (Montreal, Canada).

IFR--Instrument Flight Rules.

IFR AIRCRAFT HANDLED--The number of IFR departures multiplied by two plus the number of IFR overs. This definition assumes that the number of departures (acceptances, extensions, and originations of IFR flight plans) is equal to the number of landings (IFR flight plans closed).

IFR DEPARTURE--An IFR departure includes IFR flights:

1. Originating in a center's area;
2. Accepted by the center under SOLE EN ROUTE clearance procedures;
3. Extended by the center.

IFR OVER--An IFR flight that originates outside the ARTC area and passes through the area without landing.

IFSS--International Flight Service Station.

ILS--Instrument Landing System. A landing approach system that establishes a course and descent path to align an aircraft with a runway for final approach.

INACTIVE AIRCRAFT--All legally registered civil aircraft for which zero flight hours were reported.

INDUSTRIAL/SPECIAL--Any use of an aircraft for specialized work allied with industrial activity; excluding transportation and aerial application. (Examples: pipeline patrol; survey; advertising; photography; helicopter hoist; etc.)

INSTRUCTIONAL FLYING--Any use of an aircraft for the purpose of formal instruction with the flight instructor aboard, or with the maneuvers on the particular flight(s) specified by the flight instructor.

INSTRUMENT APPROACH--A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority.

INSTRUMENT FLIGHT RULES (IFR)--Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

INTERNATIONAL FLIGHT SERVICE STATION (IFSS)--A central operations facility in the flight advisory system, manned and equipped to control aeronautical point-to-point telecommunications, and air/ground telecommunications with pilots operating over international territory or waters, providing flight plan following, weather information, search and rescue action, and other flight assistance operations.

INTERNATIONAL OPERATIONS--In general, operations outside the territory of the United States, including operations between the United States and foreign countries, and the United States and its territories or possessions. Includes both the combination passenger/cargo carrier and the all-cargo carriers engaged in international and territorial operations.

LARGE AIR TRAFFIC HUB--A community enplaning 1.00 percent or more of the total enplaned passengers in all services and all operations for all communities within the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. (Also see AIR TRAFFIC HUB.)

LOCAL SERVICE CARRIERS--Certificated domestic route air carriers operating routes of lesser density between the smaller traffic centers and between those centers and principal centers.

MEDIUM AIR TRAFFIC HUB--A community enplaning from 0.25 to 0.99 percent of the total enplaned passengers in all services and all operations for all communities within the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. (Also see AIR TRAFFIC HUB.)

MIXED-CLASS SERVICE (AIR)--Transport service for the carriage in any combination of first-class, coach (tourist) and/or economy (thrift) passengers on the same aircraft. The aircraft could also carry freight, express, and/or mail, but excludes all-first-class, all-coach, and all-economy service.

NAFEC--National Aviation Facilities Experimental Center of FAA, at Atlantic City, New Jersey.

NONHUB--A community enplaning less than 0.05 percent of the total enplaned passengers in all services and all operations for all communities within the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. (Also see AIR TRAFFIC HUB.)

NONPRIORITY U.S. MAIL--Mail transported by air on a space available basis.

NONSCHEDULED SERVICE--Revenue flights that are not operated in regularly scheduled service such as charter flights.

NUMBER OF PLACES--Minimum crew plus maximum number of passenger seats.

OVERALL (ton-miles, load factor, available capacity, etc.)--This term applies to the sum total of passenger plus nonpassenger traffic, i.e., to the sum of passenger and baggage, freight, express, U.S. mail, and foreign mail.

PASSENGER/CARGO AIR CARRIER--One of a class of air carriers holding certificates of public convenience and necessity issued by the CAB, authorizing the performance of scheduled air transportation of passengers and property over specified routes.

- PERSONAL FLYING--Any use of an aircraft for personal purposes not associated with a business or profession, and not for hire. This includes maintenance of pilot proficiency.
- PILOT BRIEFING--A service provided by the Flight Service Station to assist pilots in flight planning. Briefing items may include weather information NOTAMS, military activities, flow control information, and other items as requested.
- PISTON-POWERED AIRCRAFT--An aircraft operated by engines in which pistons moving back and forth work upon a crankshaft or other device to create rotational movement.
- POSITIVE CONTROL--Control of all air traffic, within designed airspace, by air traffic control.
- PRIORITY MAIL--Mail transported by air on a priority basis, includes air mail, and may include first class mail.
- PRIVATELY-OWNED AIRPORT--An airport which is owned by a private individual or corporation.
- PRIVATE-USE AIRPORT--An airport which is not open for the use of the general public.
- PROVISIONAL AIRPORT--An airport approved for use by an air carrier for the purpose of providing service to a community when the regular airport serving that community is not available.
- PUBLIC AIRPORT--An airport for public use, publicly owned and under control of a public agency.
- PUBLIC-USE AIRPORT--An airport open to the public without prior permission, and without restrictions within the physical capacities of available facilities.
- REGISTERED AIRCRAFT--Aircraft registered with FAA.
- RELIEVER AIRPORT--An airport to serve general aviation aircraft which might otherwise use a congested air carrier served airport.
- RENTAL AIRCRAFT--Aircraft owned for the purpose of renting out.
- REVENUE--Pertaining to activities for which remuneration is received by the carrier.
- REVENUE AIRCRAFT DEPARTURES PERFORMED--The number of aircraft takeoffs actually performed in scheduled passenger/cargo and all-cargo services.
- REVENUE AIRCRAFT MILES--The total aircraft miles flown in revenue services.

REVENUE HOURS FLOWN--The aircraft hours of flights inclusive of all-cargo flights performed in revenue service. Aircraft hours are the airborne hours computed from the moment an aircraft leaves the ground until it touches the ground at the end of the flight.

REVENUE LOAD CAPACITY--The average overall carrying capacity (tons) offered for sale by aircraft in revenue services, including passengers and allowable passenger baggage.

REVENUE PASSENGER--Person receiving air transportation from an air carrier for which remuneration is received by the air carrier. Excludes any person traveling under reduced-rate transportation.

REVENUE PASSENGER ENPLANEMENTS--The count of the total number of passengers boarding aircraft.

REVENUE PASSENGER-MILE--One revenue passenger transported one mile in revenue service. Revenue passenger-miles are computed by summation of the products of the revenue aircraft miles flown on each inter-airport hop multiplied by the number of revenue passengers carried on that hop.

REVENUE TON-MILE--One ton of revenue traffic transported one mile.

ROTORCRAFT--A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

SCHEDULED AIRCRAFT DEPARTURES COMPLETED--The total number of aircraft departures actually performed pursuant to published schedules at each airport. Scheduled departures performed do not include departures of flights operated as extra sections to scheduled flights.

SCHEDULED SERVICE--Transport service operated over an air carrier's certificated routes, based on published flight schedules, including extra sections and related nonrevenue flights.

SMALL AIR TRAFFIC HUB--A community enplaning from 0.05 to 0.24 percent of the total enplaned passengers in all services and all operations for all communities within the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. (Also see AIR TRAFFIC HUB.)

STANDARD METROPOLITAN STATISTICAL AREA--A county that contains at least one city of 50,000 population, or twin cities with a combined population of at least 50,000, plus any contiguous counties that are metropolitan in character and have similar economic and social relationships.

STOLPORT--An airport specifically designed for STOL aircraft, separate from conventional airport facilities.

- SUPPLEMENTAL AIR CARRIER**--One of a class of air carriers now holding certificates of public convenience and necessity issued by the Civil Aeronautics Board, authorizing them to perform passenger and cargo charter services supplementing the scheduled service of the certificated route air carriers. Both international and domestic charter operations are for a temporary period. The authority of supplemental air carriers to engage in military charters is of an indefinite period. In addition, they can perform on an emergency basis, as may be authorized by the CAB, scheduled operations including the transportation of individually ticketed passengers and individually waybilled cargo.
- TON**--A short ton (2,000 pounds).
- TON-MILE**--One short ton (2,000 pounds) transported one statute mile (5,280 feet). Ton-miles are computed by multiplying the aircraft miles flown on each inter-airport hop by the number of tons carried on that hop.
- TOTAL FLIGHT SERVICES**--The sum of flight plans originated, and pilot briefs, multiplied by two, plus the number of aircraft contacted. No credit is allowed for airport advisories.
- TRUNK CARRIERS**--This group of carriers operates primarily within and between the 50 States of the United States over routes serving primarily the larger communities.
- TURBINE-POWERED AIRCRAFT**--Includes aircraft with either turbojet, turbofan, turboprop, or turboshaft engines.
- TURBOFAN**--Aircraft operated by a turbojet engine whose thrust has been increased by the addition of a low pressure compressor (fan). The turbofan engine can have an oversized low-pressure compressor at the front with part of the flow by-passing the rest of the engine (front-fan or forward-fan) or it can have a separate fan driven by a turbine stage (aft-fan).
- TURBOJET**--Aircraft operated by jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion of fuel, the gases of combustion (or the heated air) being used both to rotate the turbine and to create a thrust-producing jet.
- TURBOPROP**--Aircraft in which the main propulsive force is supplied by a gas turbine-driven conventional propeller. Additional propulsive force may be supplied from the discharged turbine exhaust gas.
- U.S. CIVIL AIR CARRIER FLEET**--See CERTIFICATED ROUTE AIR CARRIER, SUPPLEMENTAL AIR CARRIER, COMMERCIAL OPERATOR, AIR TAXI OPERATOR, and TRAVEL CLUBS.
- U.S. FLAG CARRIER OR AMERICAN FLAG CARRIER**--One of a class of air carriers holding a certificate of public convenience and necessity issued by the CAB, approved by President, authorizing scheduled operations over specified routes between the United States (and/or its territories) and one or more foreign countries. (See also FOREIGN FLAG AIR CARRIER.)

VFR--Visual Flight Rules.

VFR CONDITIONS--Basic weather conditions prescribed for flight under VFR.

VFR FLIGHT--Flight conducted in accordance with Visual Flight Rules.

VHF--Very high frequency.

VOR--Very high frequency omnidirectional radio range.

WEIGHTED AVERAGE ROUTE MILES OPERATED--The shortest distance connecting all of the points served by a carrier on all of its routes, along flight paths authorized in its certificates of public convenience and necessity, computed separately for each reporting entity. These data are weighted for the time element involved in route changes and differ from certificated route miles which contain varying amounts of duplication in route segments. (Sometimes referred to as "unduplicated route miles.")

☆U.S. GOVERNMENT PRINTING OFFICE: 1978-261-264/32

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