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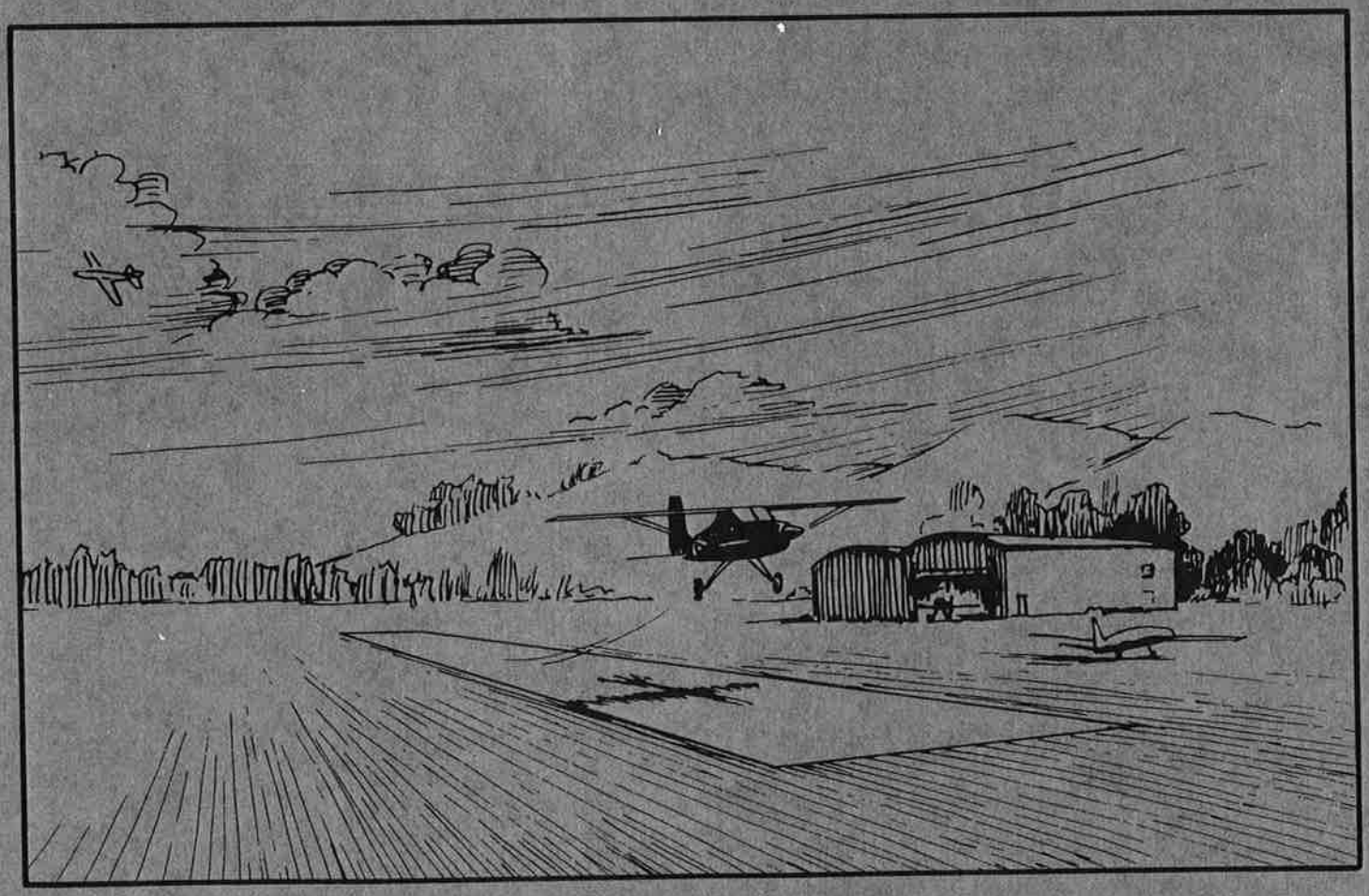
of Transportation
**Federal Aviation
Administration**

General Aviation Activity and Avionics Survey

Annual Summary Report 1983 Data



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15. Supplementary Notes

16. Abstract

This report presents the results and a description of the 1983 General Aviation Activity and Avionics Survey. The survey was conducted during 1984 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 10.7 percent of the general aviation fleet and obtained a response rate of 62 percent. Survey results are based upon responses but are expanded upward to represent the total population.

Survey results revealed that during 1983 an estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 164 hours. The active aircraft represented about 82 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates. In addition, tables are included for detailed analysis of the avionics capabilities of the GA fleet. Estimates of general aviation miles flown in 1983 have been included for the first time in this report, broken down by aircraft type.

17. Key Words	18. Distribution Statement
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PREFACE

This report presents the results of the 1983 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division sponsored and coordinated the activities associated with the survey. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, developed the sample design and computer system for sample selection, data editing and estimation of results, ran the system during survey production, analyzed survey results, and prepared the survey report. TSC transferred the survey responses to machine readable forms and was also responsible for printing names, addresses, and aircraft information on the survey questionnaires.

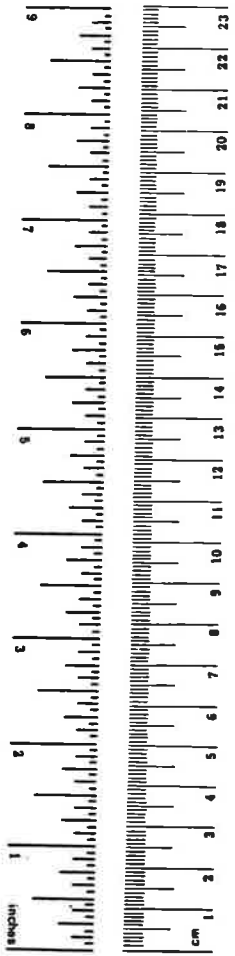
The authors would like to acknowledge contributions to this report by: Nicholas Soldo and Patricia Carter, AMS-420, who guided the project and reviewed the report text; Marilyn Marotta of Systems Development Corporation, who revised the computer programs for the 1983 survey and performed the production runs to produce the estimates contained in this report; and John Royal of Systems Development Corporation, and Juan Bellantoni and Russ Nahigian of TSC, who developed the methodology and computer software for estimating general aviation miles flown.

Distribution: ZMS-348D.

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
		MASS (weight)		
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
		VOLUME		
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
		AREA		
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F

EXECUTIVE SUMMARY

This report presents the results of the seventh General Aviation Activity and Avionics Survey, conducted in 1984 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1983 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 10.7 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 62 percent.

Some important survey findings appear below:

- An estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet during 1983. There was a 1.7 percent increase in the number of active aircraft from 1982 to 1983. The active aircraft had a mean flight time per aircraft of 164 hours and represented about 82 percent of the registered general aviation fleet.

- Turboprop and turbojet aircraft averaged a greater number of flight hours per aircraft than other aircraft types with 389 hours and 382 hours, respectively. Twin engine turboprops with thirteen or more seats flew almost 1139 hours per aircraft. In contrast, single engine piston powered aircraft with fewer than four seats averaged approximately 140 hours.

- The most common primary use of general aviation aircraft was personal for an estimated 48 percent of the active fleet, followed by business for 21 percent of the fleet, and executive for 8 percent of the fleet.

- The most populous region in terms of based aircraft was the Great Lakes Region, which housed an estimated 18 percent of all registered general aviation aircraft, followed closely by the Western-Pacific Region with 17 percent. The most populous state was California, which housed 13 percent of the registered aircraft.

- About 84 percent of the general aviation aircraft had two-way VHF communication equipment, about 64 percent were equipped with 4096-code transponders, about 56 percent had at least one component of an instrument landing system, and about 79 percent had some form of navigation equipment.

- An estimated 25.8 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 67.0 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.

- An estimated 40.5 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1983.

- About 76 percent of the total hours logged by the 1983 general aviation fleet were flown in visual meteorological (VM) conditions during the day. Aircraft flown in VM night, instrument meteorological (IM) day, and IM night conditions accounted for 10 percent, 10 percent, and 4 percent of the total hours flown, respectively.

- The general aviation aircraft fleet consumed an estimated 1,041 million gallons of fuel during 1983, 428 million gallons of aviation gasoline and 613 million gallons of jet fuel.

- The general aviation aircraft fleet flew an estimated 4,261 billion air miles during 1983.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1983 general aviation composed over 98 percent of the U.S. civil air fleet [1], accounted for 81 percent of civil operations at FAA towered airports[2], and logged 80 percent of the total hours flown by the U.S. civil air fleet[3]. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S , served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form, (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1983 statistics in this report were derived from the seventh survey, which took place in 1984. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

---

[1] Census of U.S. Civil Aircraft, Calendar Year 1983, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1984), p. 4.

[2] "FAA Air Traffic Activity, Calendar Year 1983 Report," Federal Aviation Administration, (Washington, DC, 1984).

Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

[3] Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1983, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1984), p. 21. General Aviation: Table 2.4

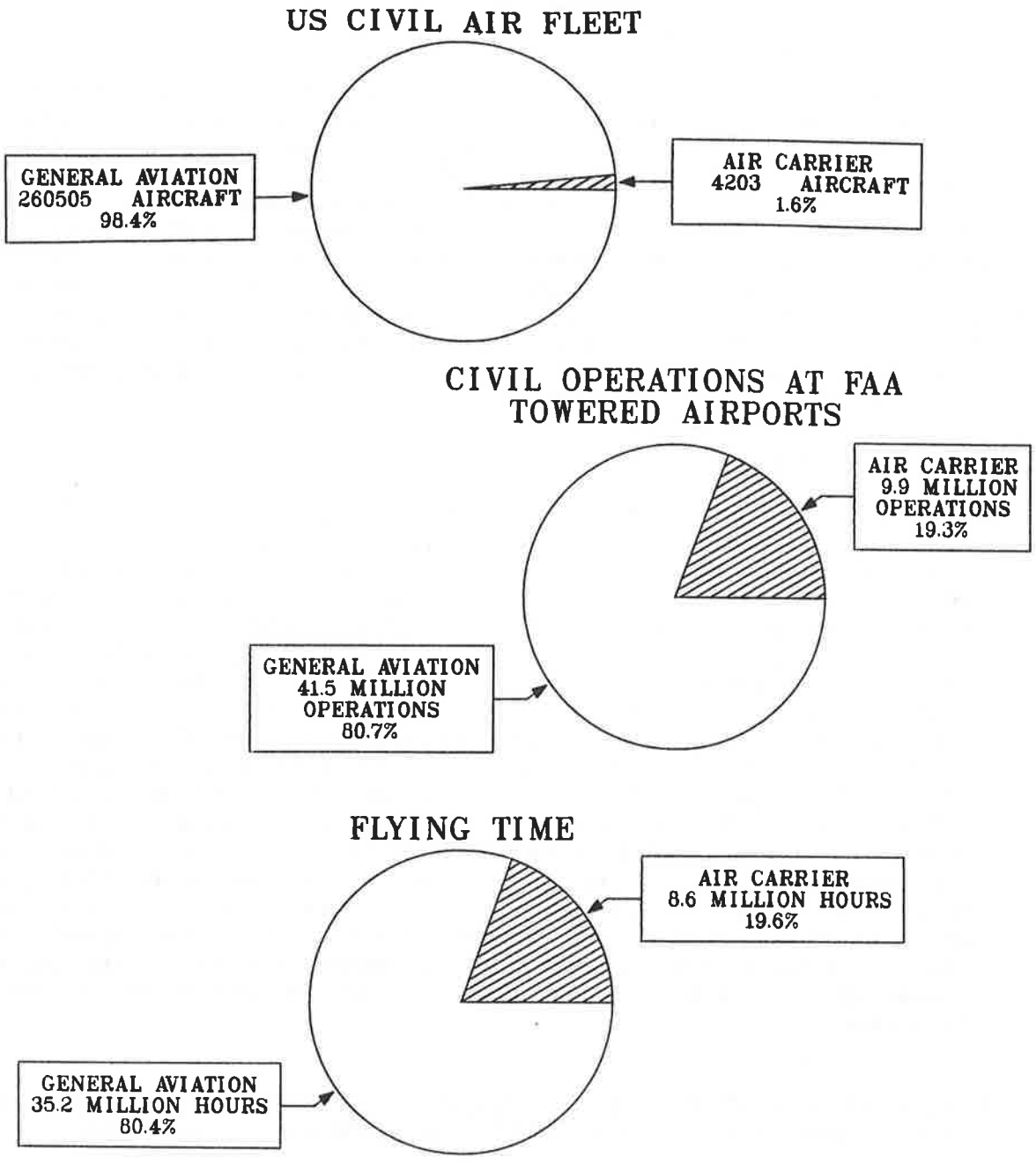


FIGURE 1.1. A CONTRAST OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1983

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

Part 91: General operating and flight rules.

Part 123: Certification and operations: air travel clubs using large airplanes.

Part 133: Rotorcraft external load operations.

Part 135: Air taxi operators and commercial operators of small aircraft.

Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1983. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, D.C., with about 0.20 percent (534 aircraft) registered in Puerto Rico and other U.S. territories, and 0.13 percent (350 aircraft) registered to owners living in foreign countries[1].

1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide the following information on the sampled aircraft's characteristics and uses for various periods:

---

[1]Source: FAA Aircraft Registration Master File as of December 31, 1983.

1) Hours by use, IFR hours, percentage of hours flown in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during the day and evening, and fuel consumption for entire calendar year 1983,

2) Airframe hour reading and location of aircraft base as of December 31, 1983, and

3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The method of collecting data for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in February, 1984, covered all 27,828 aircraft in the sample and had a response rate of 54 percent as shown in Table 1-1. This was about 86 percent of the total responses to the survey. The second mailing conducted in April, 1984, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 19 percent which accounted for 14 percent of the total responses to the survey. The combined response rate for the two mailings was 62 percent.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE (R/(TOTAL R) X 100%)
FIRST MAILING	27,827	14,897	54%	86%
SECOND MAILING	12,930	2,443	19%	14%
TOTAL	27,827	17,340	62%	100%

1.4 SUMMARY OF SURVEY RESULTS

1.4.1 National Scene

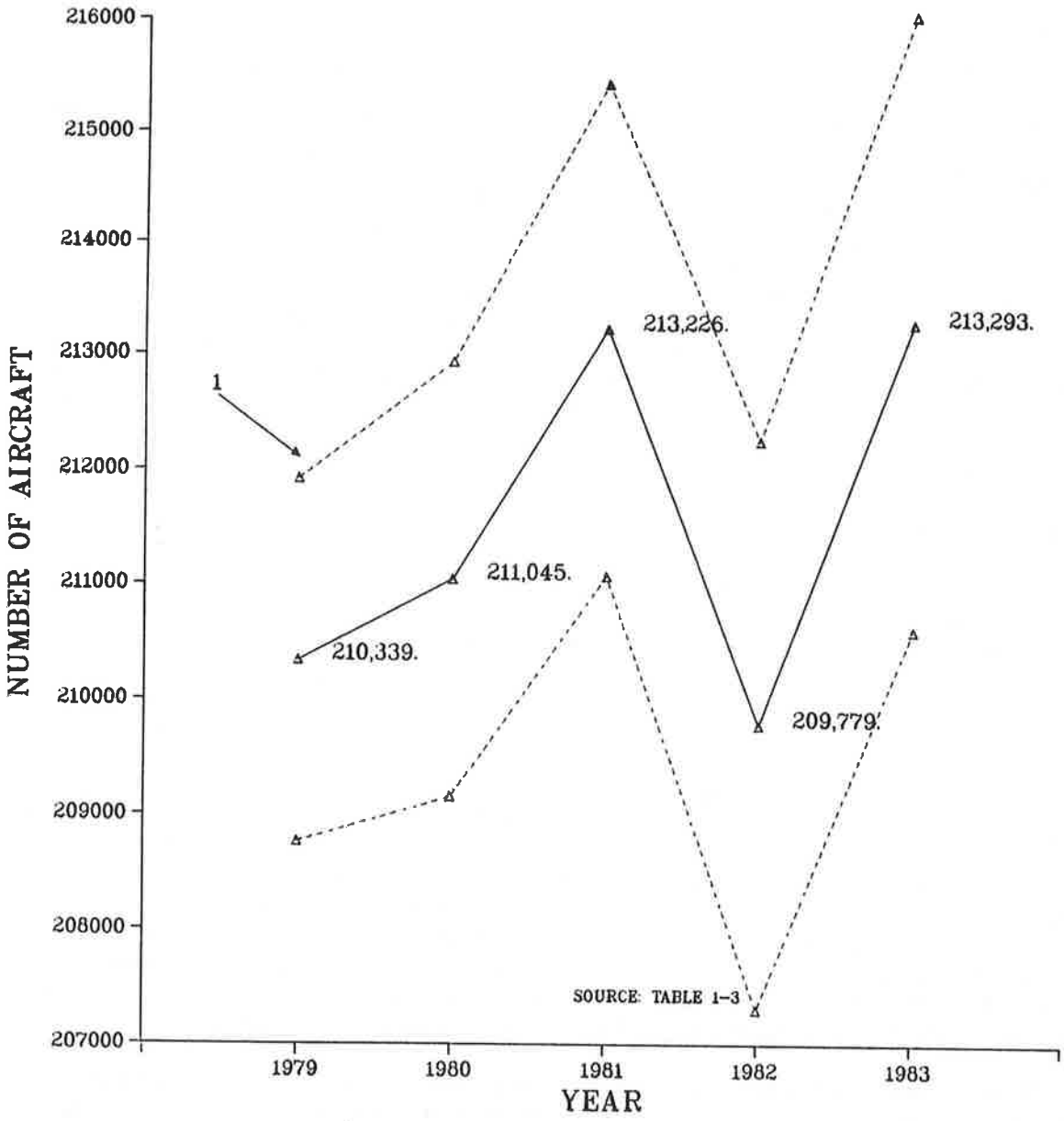
Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1983 an estimated 35.2 million hours of flying time were logged by the 213,293 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 164 hours. These aircraft comprised 82 percent of the registered general aviation fleet. The statistics for 1983 showed a 3.6 percent decrease in flying hours, a 1.0 percent increase in the number of active aircraft in the general aviation fleet, and a 5.7 percent decrease in mean hours per aircraft over the comparable figures for 1982. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. Although the number of active aircraft has been increasing in general over the years, the other activity measures have shown a steady decrease. Both general aviation total flying time and mean time per aircraft have decreased 19 percent since 1979. The decrease can most likely be attributed to the decline in the economy and rising aircraft operational costs. In addition, the air traffic controller's strike in August, 1981, which caused the FAA to institute certain constraints on the users of the National Airspace System to assure safe and efficient operations, reduced general aviation traffic levels in both 1981 and 1982.

1.4.2 Results by Aircraft Type

The most heavily used aircraft types were fixed wing turboprops with thirteen or more seats, averaging over 1100 hours per aircraft, because of their heavy commercial usage as commuter air carriers and air taxis. There was a great deal of variation in activity among all types of general aviation aircraft in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

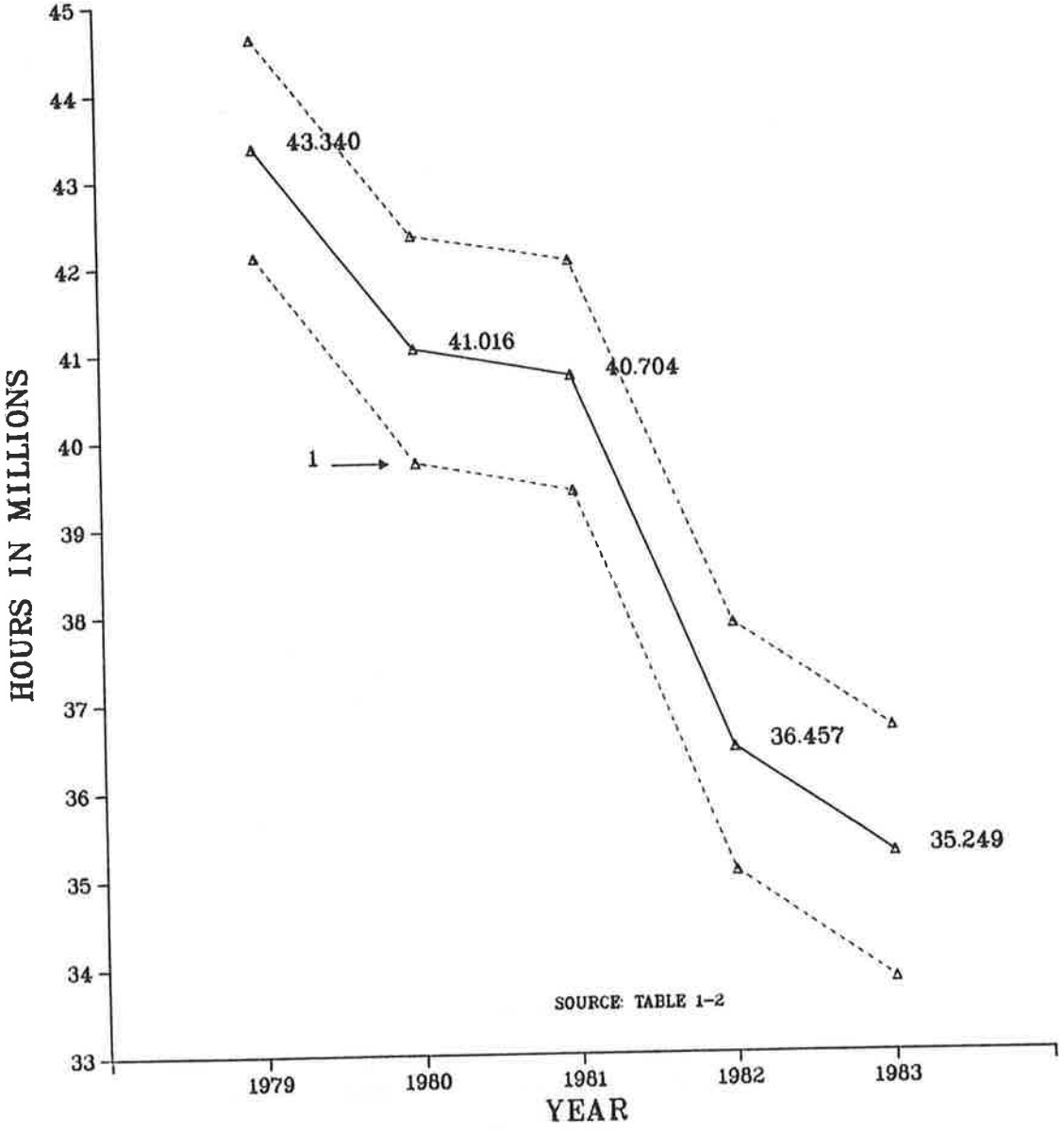
Although owners of ultralights are not required to register their aircraft under current aviation regulations, a number of owners have done so. An item on the questionnaire makes it possible to identify ultralights responding to the survey and to estimate their activity. There are approximately 977 registered aircraft that are ultralights, about 588 of which are active, flying around 117 hours per aircraft for a total flying time of 76,000 hours.

Five-year trends from 1978 to 1983 for total flight time and number of active aircraft are shown by aircraft type in Tables 1-2 and 1-3. Even though the number of active aircraft has registered an annual growth rate of over 1.4 percent, the trend for total flight time is downward at an annual rate of -2.2 percent. Closer examination of the tables reveals that the fixed-wing single engine piston aircraft and small twin engine piston aircraft are largely responsible for the decline in



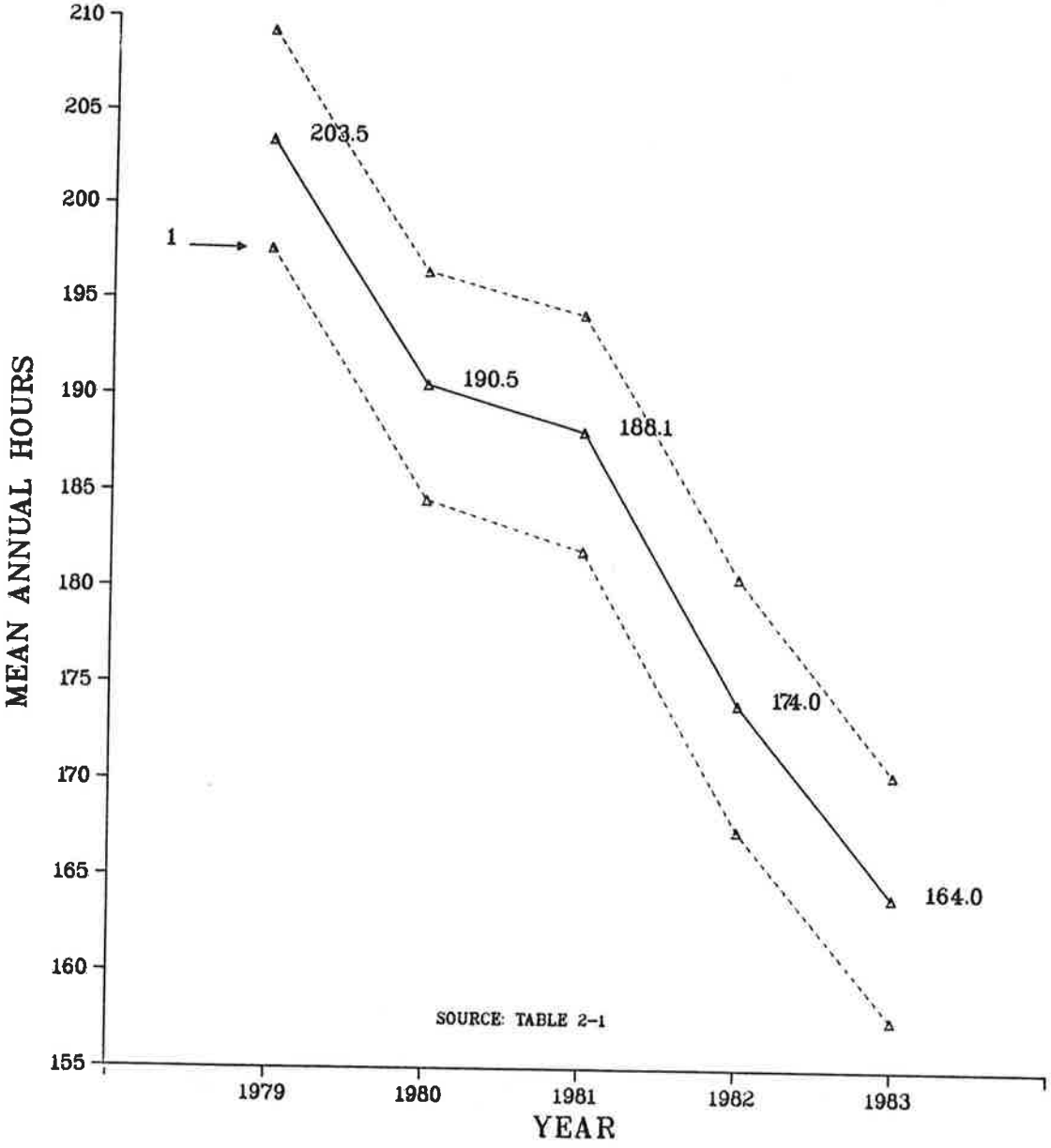
1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1979 – 1983 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE 1979 – 1983



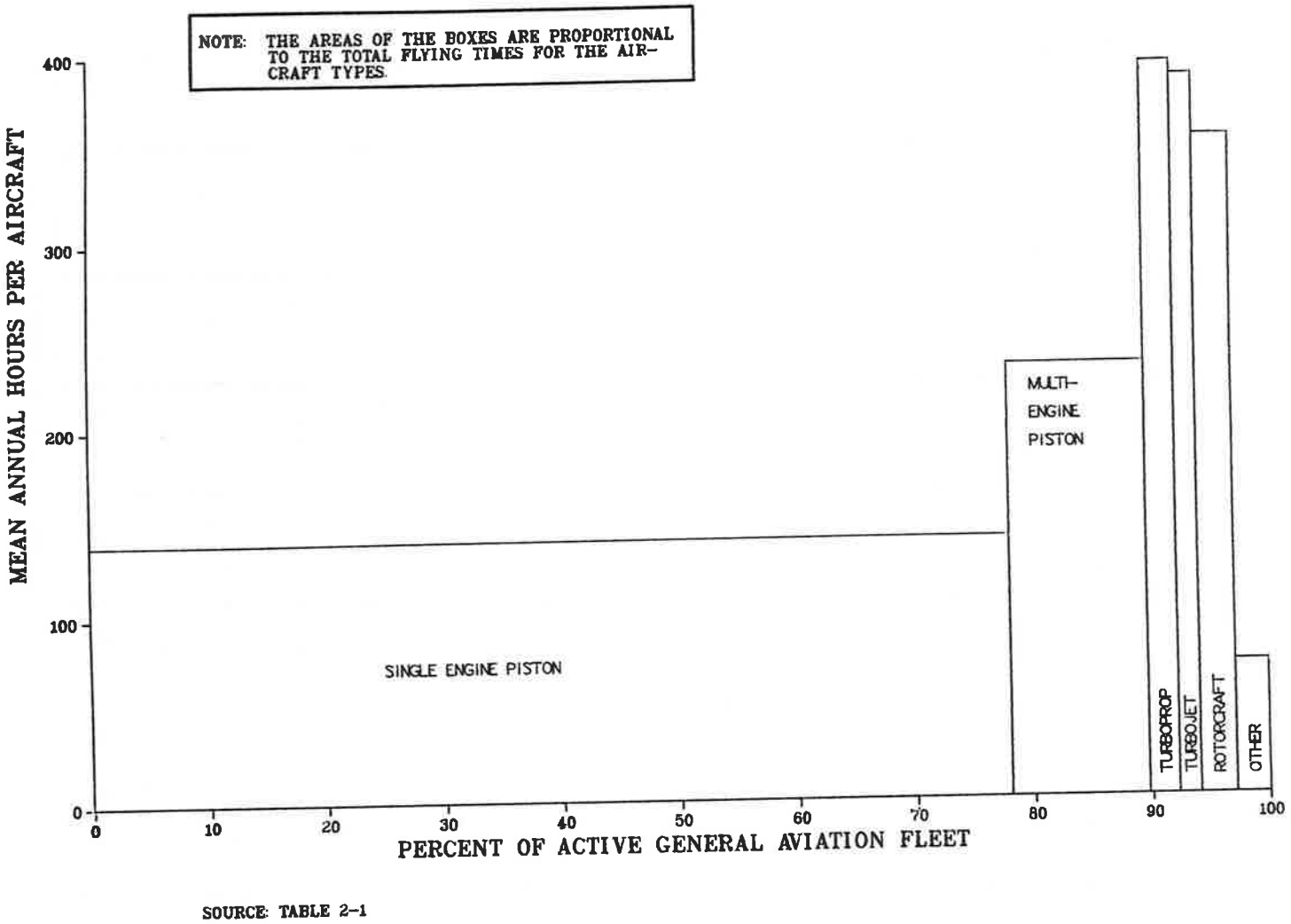
1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1979 – 1983 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME 1979 – 1983



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1979 – 1983 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT 1979 – 1983



SOURCE: TABLE 2-1

FIGURE 1.5. 1983 GENERAL AVIATION ACTIVITY MEASURES BY AIRCRAFT TYPE

TABLE 1-2 GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE, 1978 - 1983 (Thousands of Hours)

AIRCRAFT TYPE	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	1982 (Standard Error)	1983 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	10,111 (570)	11,180 (384)	10,044 (399)	10,185 (399)	8,325 (374)	8,189 (399)	-4.13
1-engine piston 4+ seats	17,746 (992)	19,109 (420)	18,295 (428)	17,506 (432)	15,934 (472)	14,959 (441)	-3.36
2-engine piston 1-6 seats	3,644 (241)	4,006 (148)	3,730 (172)	3,606 (144)	3,040 (177)	3,013 (192)	-3.73
2-engine piston 7+ seats	2,439 (189)	2,855 (137)	2,547 (143)	2,762 (153)	2,617 (197)	2,717 (235)	2.18
Other piston	104 (7)	152 (15)	130 (18)	24 (63)	33 (10)	32 (10)	-21.00
2-engine turboprop 1-12 seats	960 (49)	1,254 (57)	1,489 (55)	1,549 (68)	1,576 (116)	1,431 (93)	8.31
2-engine turboprop 13+ seats	622 (63)	572 (45)	964 (55)	542 (45)	520 (84)	659 (118)	1.16
Other turboprop	24 (3)	45 (2)	56 (10)	62 (11)	71 (20)	83 (31)	28.17
2-engine turbojet	1,019 (44)	1,125 (39)	1,163 (52)	1,238 (48)	1,347 (98)	1,350 (92)	5.79
Other turbojet	176 (30)	134 (9)	169 (27)	149 (16)	264 (46)	124 (31)	-6.76
ROTORCRAFT							
Piston	806 (79)	892 (97)	736 (75)	930 (108)	579 (58)	572 (49)	-6.63
Turbine	1,421 (135)	1,664 (108)	1,603 (115)	1,754 (150)	1,771 (145)	1,700 (151)	3.65
OTHER	338 (20)	353 (29)	359 (21)	391 (34)	379 (40)	420 (49)	4.44
TOTAL AIRCRAFT	39,409 (1,199)	43,340 (627)	41,016 (650)	40,704 (659)	36,456 (701)	35,249 (712)	-2.21

NOTE: Column summations may differ from printed totals due to estimation procedures.

TABLE 1-3 GROWTH OF ACTIVE GENERAL AVIATION FLEET BY AIRCRAFT TYPE, 1978 - 1983 (Number of Aircraft)

AIRCRAFT TYPE	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	1982 (Standard Error)	1983 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1-3 seats	59,185 (860)	62,362 (594)	60,505 (688)	59,914 (748)	57,670 (910)	59,199 (976)	0.00
1-engine piston 4+ seats	101,466 (857)	106,028 (450)	107,930 (538)	107,983 (656)	106,503 (687)	107,228 (778)	1.11
2-engine piston 1-6 seats	15,621 (259)	16,891 (157)	16,224 (246)	16,749 (246)	16,381 (303)	16,249 (315)	0.79
2-engine piston 7+ seats	7,328 (202)	7,958 (90)	8,141 (153)	8,607 (181)	8,501 (168)	8,660 (150)	3.40
Other piston	221 (10)	229 (11)	212 (17)	114 (29)	140 (24)	143 (14)	-8.34
2-engine turboprop 1-12 seats	2,507 (68)	2,944 (13)	3,339 (41)	3,968 (46)	4,427 (45)	4,733 (72)	13.55
2-engine turboprop 13+ seats	566 (10)	538 (15)	627 (18)	557 (17)	610 (28)	578 (48)	0.42
Other turboprop	56 (3)	96 (3)	123 (10)	134 (5)	149 (28)	142 (38)	20.45
2-engine turbojet	2,115 (27)	2,309 (29)	2,551 (37)	2,808 (68)	3,309 (84)	3,447 (92)	10.26
Other turbojet	364 (34)	343 (6)	441 (13)	362 (23)	687 (73)	451 (91)	4.38
ROTORCRAFT							
Piston	2,822 (155)	3,123 (127)	2,794 (133)	3,250 (173)	2,419 (178)	2,541 (191)	-2.08
Turbine	2,492 (30)	2,740 (50)	3,207 (49)	3,724 (73)	3,749 (140)	3,998 (153)	9.92
OTHER	4,028 (75)	4,770 (114)	4,945 (142)	5,049 (179)	5,233 (211)	5,923 (207)	8.02
TOTAL AIRCRAFT	198,778 (1,269)	210,339 (789)	211,045 (945)	213,226 (1,078)	209,779 (1,238)	213,293 (1,345)	1.42

NOTE: Column summations may differ from printed totals due to estimation procedures.

hours, and have exhibited little growth over the last five years. On the other hand, small fixed wing twin engine turboprops and twin engine turbojets have shown strong growth in both numbers and usage. In the rotorcraft area, piston-powered rotorcraft have been declining in number and hours flown, while turbine-powered rotorcraft have shown gains in both measures of activity from 1979 to 1983.

The general aviation aircraft fleet consumed an estimated 1,041 million gallons of fuel during 1983, 428 million gallons of aviation gasoline and 613 million gallons of jet fuel. From Figure 1.6, it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. The high rates account for turbojets' burning 32 percent of all fuel consumed in 1983, as shown in Figure 1.7 even though they represent only 2 percent of active aircraft. Fixed wing piston aircraft account for 40 percent of the fuel consumed in 1983 due to their high representation in the general aviation fleet. Table 2-21 shows more detailed fuel consumption estimates and their standard errors.

The general aviation aircraft fleet flew an estimated 4,261 billion miles over the land during 1983. The estimate is based on a mathematical model, incorporating speed differentials by phase of flight, cruising speed by manufacturer/model group of aircraft, and the number of hours flown by manufacturer/model group. Detailed estimates by aircraft type and primary use can be found in Table 2-22.

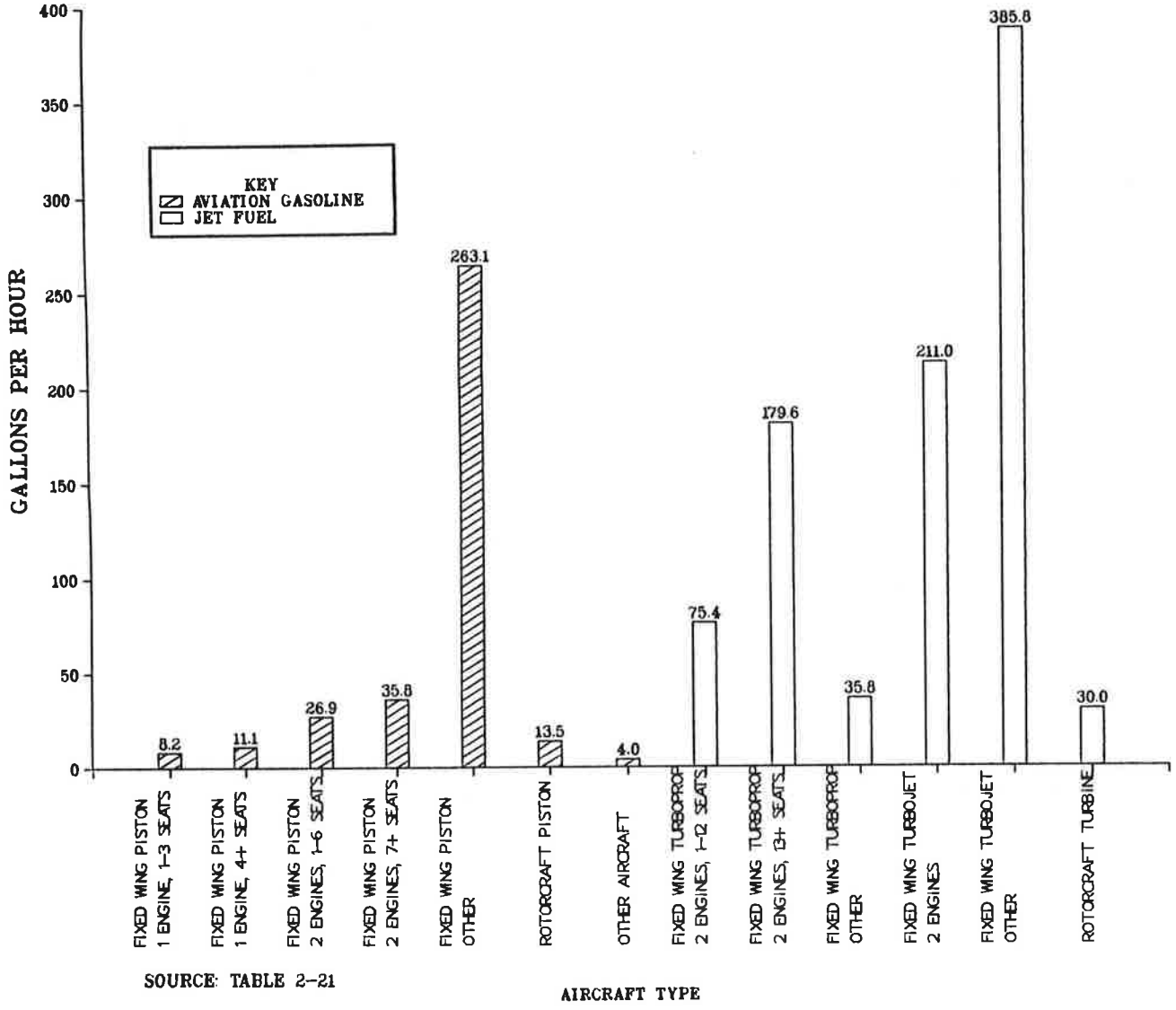
1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates mean hours per aircraft. Distance along the horizontal axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to to the total flying time for each primary use. Aircraft used as commuter air carriers showed the highest individual usage with a mean of 1083 hours flown per aircraft. Aircraft used for instructional purposes, as air taxis and for executive purposes also had fairly high levels of individual usage with mean hours flown per aircraft of 315, 369 and 307, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 48 and 21 percent of the active fleet. While total hours flown for the general aviation fleet declined by about 4 percent from 1982 to 1983, flying time for aircraft in the commuter carrier, air taxi, and other work categories increased significantly. Executive and personal uses showed small gains, while all other uses decreased in hours flown.

1.4.4 Results by Flying Conditions

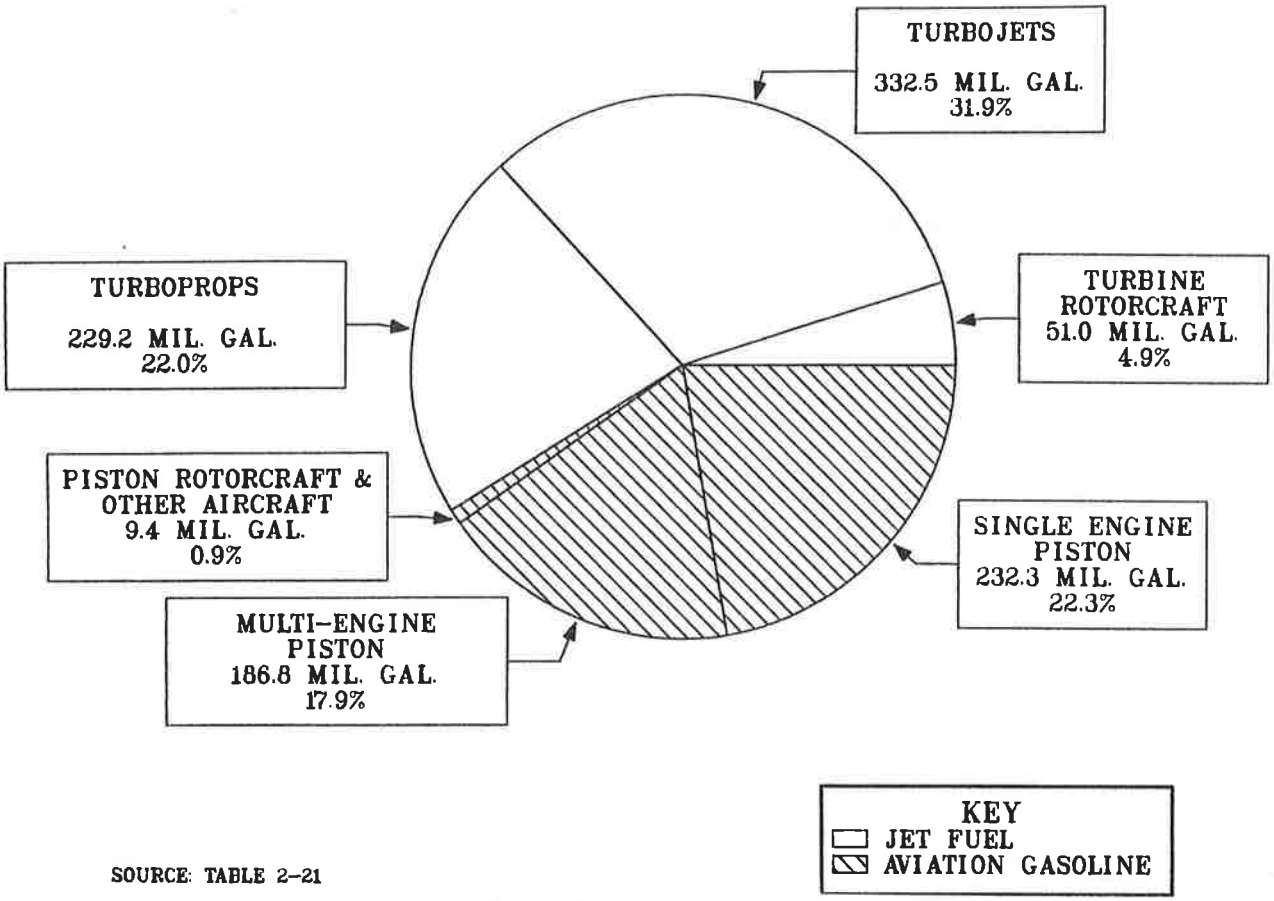
Survey results indicate that over 76 percent of the total hours logged by the 1983 general aviation fleet were flown in Visual Meteorological (VM) conditions during the day. Aircraft flown in VM night, Instrument Meteorological (IM) day, and IM night conditions accounted for 10 percent, 10 percent, and 4 percent of the total hours flown, respectively. These results are illustrated in Figure 1.9.

Not suprisingly , fixed wing single engine piston aircraft and rotorcraft spend the bulk of their flying time in VM conditions. Single engine piston aircraft fly 92 percent of their flight hours in VM conditions. Fixed wing piston aircraft with two engines, turboprops, and turbojcts spcnd considerably more of their flying time in IM conditions, approximately 35 percent. Table 2-12 contains more data on general aviation annual hours flown by weather and light conditions by aircraft type. In addition, Tables 2-13 and 2-14 give detailed breakdowns of general aviation annual



SOURCE: TABLE 2-21

FIGURE 1.6. 1983 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE



SOURCE: TABLE 2-21

FIGURE 1.7. 1983 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE

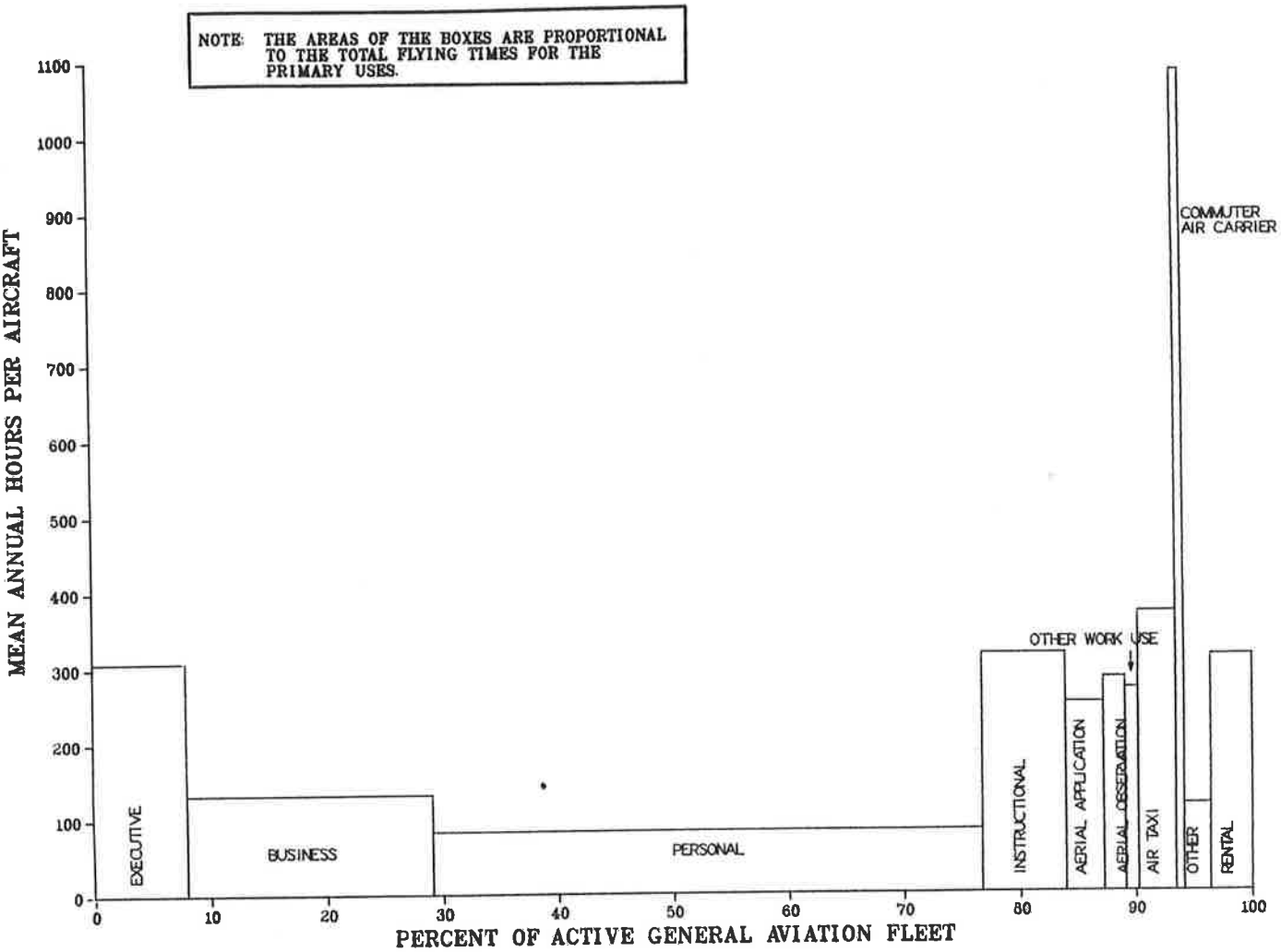


FIGURE 1.8. 1983 GENERAL AVIATION ACTIVITY MEASURES BY PRIMARY USE

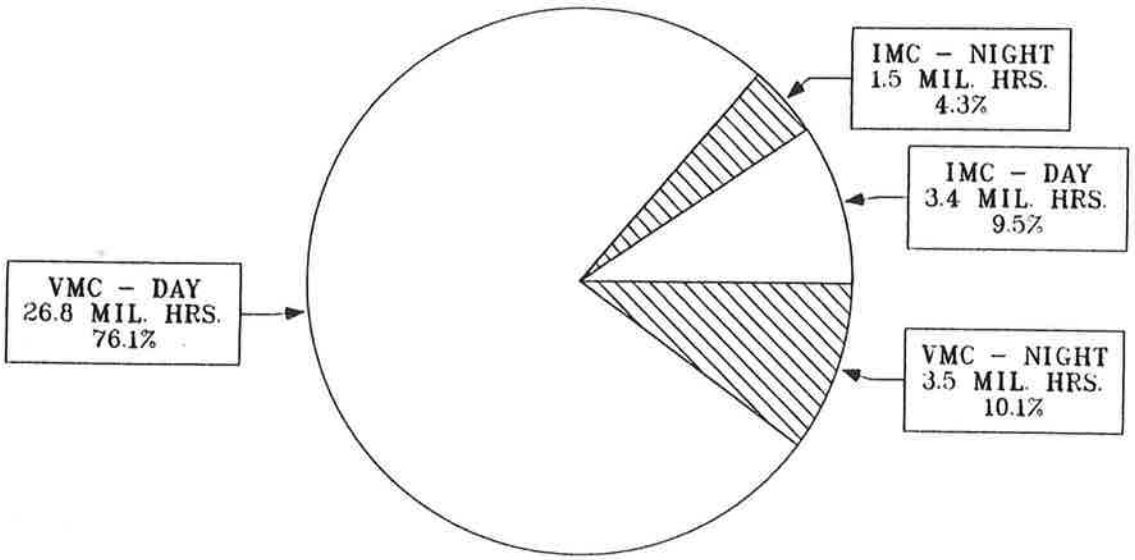


FIGURE 1.9. 1983 GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS

hours flown by weather and light conditions by region of based aircraft and by SDR manufacturer/model group, respectively.

1.4.5 Results by FAA Region

Mean aircraft usage did not differ signficantly from region to region with the exception of the European (Foreign) Region, according to Figure 1.10. In the figure, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft than any other region. However, the Southern and Southwestern Regions accounted for more total flight time. The smallest region in continental United States was New England, with only 4 percent of the active aircraft and about 4 percent of the fleet's total flight time.

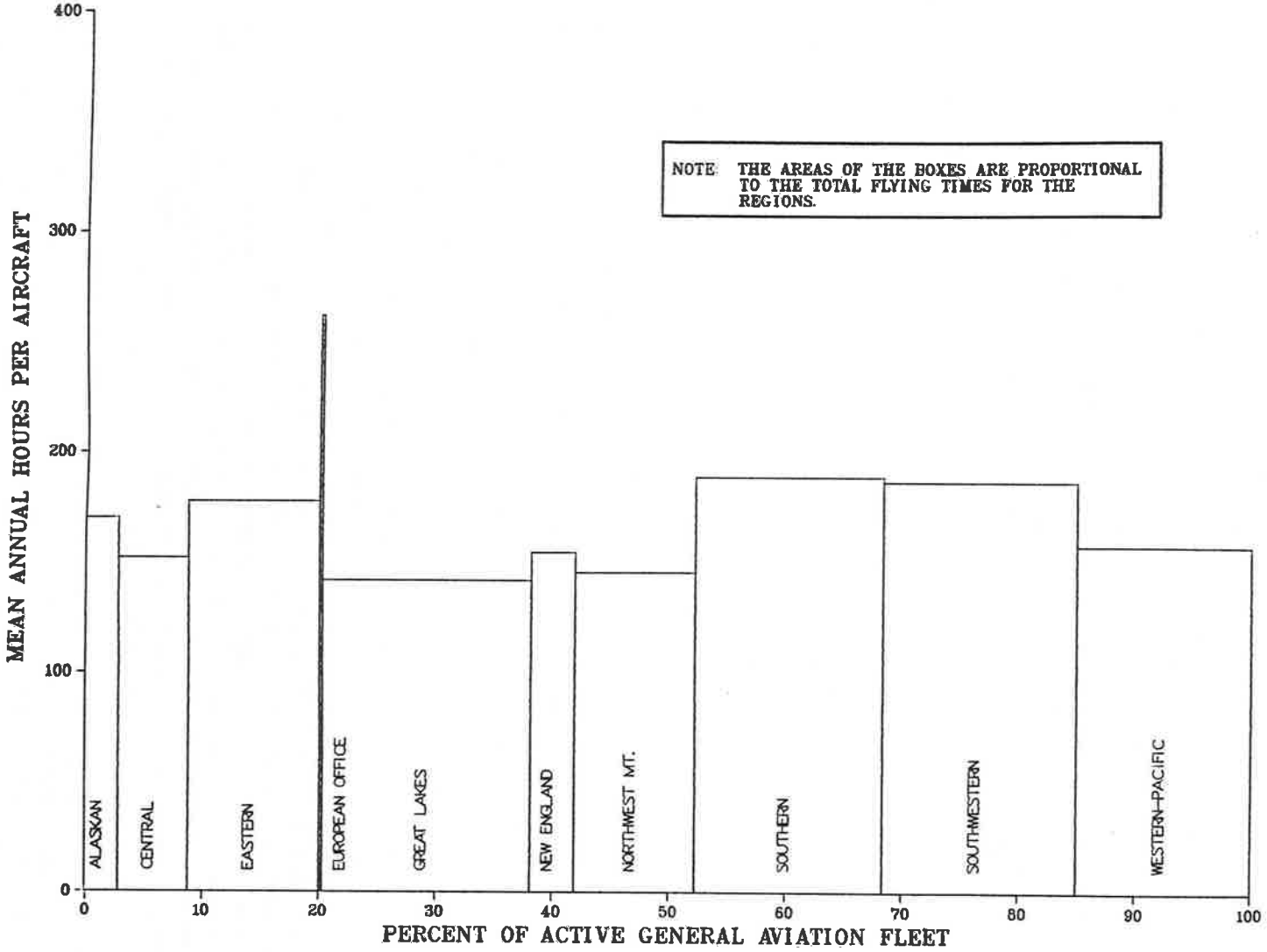
Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of based aircraft.

1.4.6 Results by Avionics Capability

1.4.6.1 Individual Avionics Components

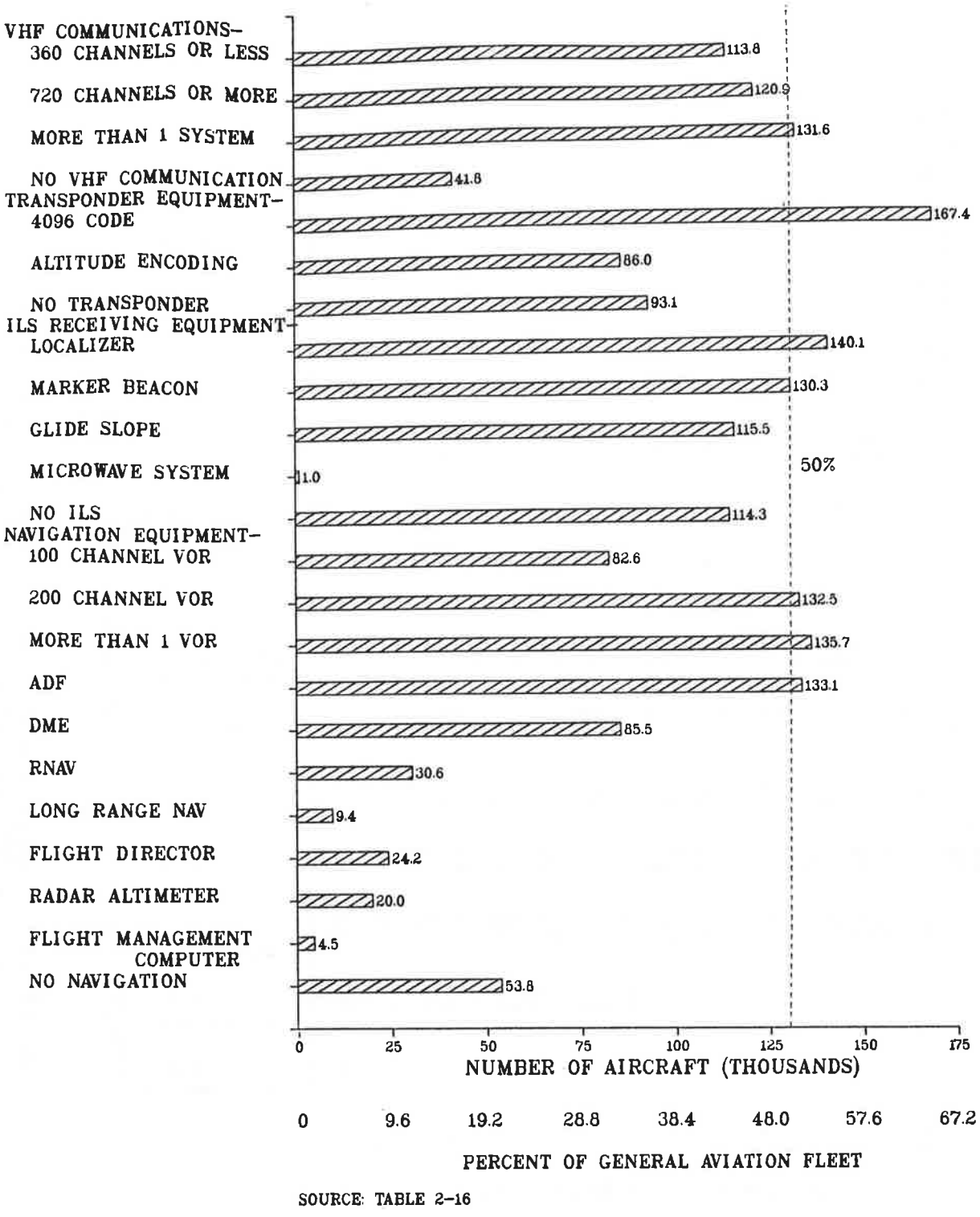
The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.11. Eighty-two percent of the aircraft have two-way VHF communications, 64 percent are equipped with 4096-code transponders, 56 percent have at least one component of an instrument landing system, and 79 percent have some form of navigation equipment. It is evident from comparing the 1983 and 1978 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. In terms of transponder equipment, there was a substantial increase in the percentage of the general aviation aircraft containing 4096 code transponders and altitude encoding equipment, while the percentage of aircraft containing no transponder equipment declined considerably over the five year period. In terms of VOR receivers there was a shift from 100 channel to 200 channel equipment. The proportion of the general aviation fleet with transponders increased from 53.3 percent in 1978 to 64.3 percent in 1983, and the proportion with at least one part of an ILS increased from 51.0 percent to 56.1 percent. The proportion of aircraft having two or more communications systems increased by 8.1 percent from 1978 to 1983. The proportion with two or more VOR receivers increased by 6.5 percent over the same five year period. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-15 through 2-18.

Figure 1.12 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1983 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1982 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100 percent of IFR flying was performed by aircraft equipped with transponders.



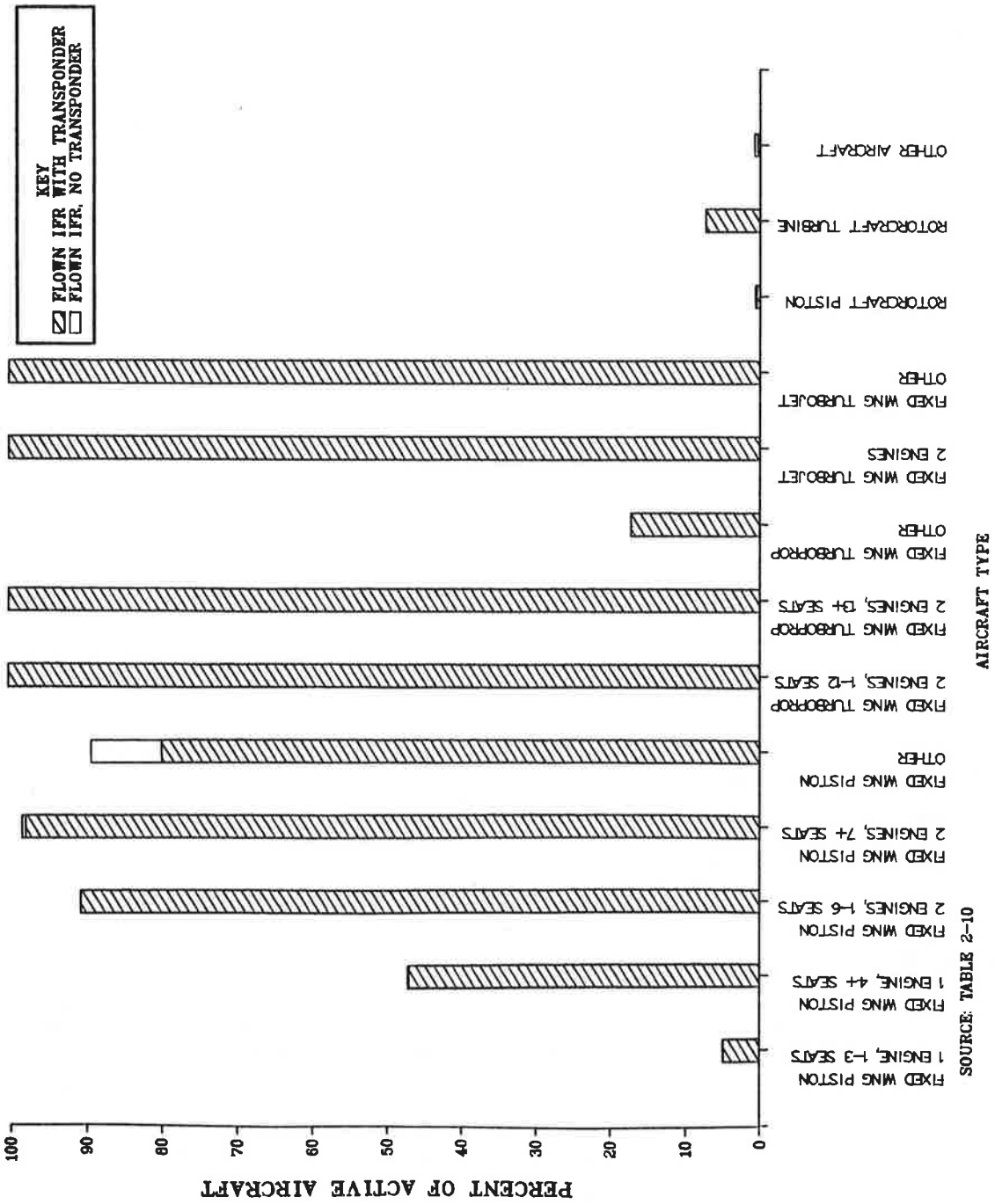
SOURCE: TABLE 2-3

FIGURE 1.10. 1983 GENERAL AVIATION ACTIVITY MEASURES BY FAA REGION



SOURCE: TABLE 2-16

FIGURE 1.11. AVIONICS EQUIPMENT IN THE 1983 GENERAL AVIATION AIRCRAFT FLEET



SOURCE: TABLE 2-10

FIGURE 1.12. 1983 GENERAL AVIATION ACTIVE AIRCRAFT FLOWN IFR AND TRANSPONDER EQUIPPED

1.4.6.2 Avionics Capability Groups

Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.[1] This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

Table 2-23 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-23 reveals the following on the GA fleet:

a. About 25.8 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 67 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.

---

[1] General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp.5-10.

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITES
Group 1 No regulatory avionics	1. Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV ...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. VFR flight, day and night 3. Uncontrolled airports
Group 2 Two-way communications	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters ... with 4096 code transponders...Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL) NOTE: Air taxis with navigation system and transponder: Group II TCA's Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
Group 3 Two-way communications Two systems—air taxis VOR or Automatic Direction Finder (ADF) or RNAV	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV. .Low altitude RNAV airways below 12,500 feet MSL 2. IFR flight 3. Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transponders...Group II TCA's All helicopters...Group I and II TCA's below 1,000 feet AGL
Group 4 Two-way communications Two systems—air taxis 4096 code transponder VOR or RNAV	1. Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL 2. IFR flight 3. Non-TCA controlled airports Group II TCA's Helicopters...Group I TCA's below 1,000 feet AGL
Group 5 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
Group 6 Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
Group 7 Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
Group 8 Two-way communications Two systems—air taxis 4096 code transponder Altitude encoding equipment VOR or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
Group 1 Localizer	Partial use of airport ILS
Group 2 Localizer Marker Beacon	Partial use of airport ILS
Group 3 Localizer Marker Beacon Glide Slope	Full use of airport ILS
Group 4 ILS Radar Altimeter	Landing approach in Category III[1] weather conditions at airports with Category III equipment
Group 5 Long Range RNAV	Area navigation over long distances and large bodies of water
Group 6 Radar Altimeter	Determination of altitude above level of terrain
Group 7 Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at airports with mountains and large buildings nearby
Group 8 ILS MLS	Backup landing systems
Group 9 Long Range RNAV MLS	Sophisticated navigational and landing capabilities

[1]See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data), (Washington, DC, 1981).

b. About 78 percent of GA aircraft are equipped to fly IFR.

c. Almost sixteen percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 22 percent can land at either non-TCA controlled airports or Group III TCA's. Approximately 30 percent can land at any type of airport except a Group I TCA. About 32 percent can land at Group I TCA's. This latter proportion has increased constantly over the past 5 years.

d. In general, Table 2-23 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e. NO GROUP), 74.3 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 93 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.

Tables 2-24 through 2-33 show distributions of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1983, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

a. As in prior years, as the hierarchical CG's increase in sophistication, the predominant uses also change from personal, to business and personal, to executive and business (Table 2-24).

b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business, to business and executive. For example, executive aircraft alone compose 46 percent of the aircraft reporting both a radar altimeter and a complete ILS and about 45 percent of the aircraft reporting long range navigation equipment, yet executive aircraft compose only 6.4 percent of the fleet (Table 2-29).

c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-25 and 2-30).

d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-26 and 2-31).

e. Computed aircraft type increases in sophistication as the level of avionics increases. (Tables 2-27 and 2-32).

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

1.4.7 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 220 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-19. Appendix D contains definitions of these groups. The report also includes a table (Table 2-20) on mean hours and number of active engines for 73 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

2. TABLES OF RESULTS

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN
BY
TYPE OF AIRCRAFT
1983

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	84221	59199	976	8189837	398873	4.9	139.7	6.4	4.6
1 ENG: 4+ SEATS	119549	107228	778	14959308	441249	2.9	138.8	4.0	2.9
1 ENGINE: TOTAL	203770	166427	1248	23149145	594811	2.6	139.1	3.5	2.5
2 ENG: 1-6 SEATS	18691	16249	315	3013160	192120	6.4	187.3	11.6	6.2
2 ENG: 7+ SEATS	10130	8660	150	2716694	235413	8.7	318.3	27.3	8.6
2 ENGINE: TOTAL	28821	24910	349	5729854	303857	5.3	230.5	11.9	5.2
PISTON: OTHER	327	143	14	32467	9711	29.9	240.4	32.3	13.4
PISTON: TOTAL	232918	191480	1296	28911466	668000	2.3	150.6	3.4	2.2
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	4868	4733	72	1431297	92972	6.5	301.4	19.2	6.4
2 ENG: 13+ SEATS	669	578	48	658671	118300	18.0	1139.1	178.6	15.7
2 ENGINE: TOTAL	5537	5311	87	2089968	150462	7.2	386.3	25.0	6.5
TURBOPROP: OTHER	204	142	38	83319	31050	37.3	578.5	131.2	22.7
TURBOPROP: TOTAL	5741	5453	95	2173287	153632	7.1	389.4	24.7	6.3

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN
BY
TYPE OF AIRCRAFT
1983

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3655	3447	92	1349589	91511	6.8	391.6	24.2	6.2
TURBOJET: OTHER	720	451	91	123656	31170	25.2	273.7	40.2	14.7
TURBOJET: TOTAL	4375	3898	130	1473245	96673	6.6	382.2	22.5	5.9
FIXED WING: TOTAL	243034	200831	1306	32557997	692223	2.1	160.9	3.3	2.1
ROTORCRAFT									
PISTON	5413	2541	191	571725	49213	8.6	221.1	15.0	6.8
TURBINE	4582	3998	153	1699652	151485	8.9	431.6	34.4	8.0
ROTORCRAFT: TOTAL	9995	6540	245	2271377	159278	7.0	350.2	21.9	6.3
OTHER	7476	5923	207	419792	49392	11.8	71.1	8.0	11.3
TOTAL	260505	213293	1345	35249171	712026	2.0	164.0	3.2	2.0

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2594	416	501400	124108
ALASKA	6075	598	1072247	161782
ARIZONA	4737	562	789778	137902
ARKANSAS	2977	459	594775	134849
CALIFORNIA	29236	1321	4514941	342201
COLORADO	4407	532	757622	159429
CONNECTICUT	1426	311	255537	97530
DELAWARE	809	237	181435	71474
DC	58	47	9787	8022
FLORIDA	12688	896	2399720	303091
GEORGIA	4955	578	875710	191009
HAWAII	381	152	96912	34329
IDAHO	2146	378	268195	57133
ILLINOIS	7700	706	1142295	206837
INDIANA	4207	530	722507	148279
IOWA	3165	469	370407	73615
KANSAS	4519	555	821596	189402
KENTUCKY	1752	338	240256	53580
LOUISIANA	3972	520	1531309	317510
MAINE	1263	288	141176	42385
MARYLAND	3116	467	425809	101338

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
MASSACHUSETTS	2737	432	502709	157439
MICHIGAN	7079	677	870500	128618
MINNESOTA	4733	563	610427	131886
MISSISSIPPI	2706	441	566897	150538
MISSOURI	3858	507	570307	122177
MONTANA	2538	418	374912	94211
NEBRASKA	1178	290	156887	56481
NEVADA	2288	396	334317	78648
NEW HAMPSHIRE	1430	313	202502	55778
NEW JERSEY	4021	525	980854	211778
NEW MEXICO	2387	396	371904	133403
NEW YORK	6045	626	993772	171064
NORTH CAROLINA	4344	537	793062	142320
NORTH DAKOTA	1734	341	313924	112936
OHIO	7478	693	1026558	143668
OKLAHOMA	5634	626	880482	186235
OREGON	4689	552	596065	106394
PENNSYLVANIA	6174	643	946871	167438
RHODE ISLAND	510	197	62989	32099
SOUTH CAROLINA	1686	337	258878	65975

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
SOUTH DAKOTA	1360	306	145619	44598
TENNESSEE	2935	431	689264	138643
TEXAS	20414	1117	3061276	272749
UTAH	1440	311	245951	83586
VERMONT	660	218	72273	27595
VIRGINIA	2554	419	454859	121816
WASHINGTON	5645	605	716866	120051
WEST VIRGINIA	1229	286	271911	98542
WISCONSIN	3782	495	535238	135207
WYOMING	1192	285	222566	70459
PUERTO RICO	362	161	87042	51141
OTHER U.S. TERRITORIES	183	115	40449	26762
FOREIGN	938	226	260492	105578
TOTAL	213293	1345	35249171	712026

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 3

GENERAL AVIATION TOTAL HOURS FLOWN
BY
REGION OF BASED AIRCRAFT
1983

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALASKAN	6075	598	1072247	161782
CENTRAL	12720	915	1924176	234884
EASTERN	24006	1219	4260794	357763
EUROPEAN OFFICE	508	153	137540	56249
GREAT LAKES	38072	1472	5373309	363859
NEW ENGLAND	8025	733	1251303	190833
NORTHWEST MT.	22064	1160	3196441	261345
SOUTHERN	34356	1412	6471928	437901
SOUTHWESTERN	35478	1438	6592042	490327
WESTERN-PACIFIC	36820	1454	5801550	373905
TOTAL	213293	1345	35249171	712026

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS												
EST.TOT.HOURS	33723	286751	2366116	2846201	1385485	319260	293248	0	40258	73464	592535	8189837
% STD. ERROR	74.8	19.7	5.5	11.2	13.7	29.5	28.4	0.0	80.5	32.5	23.7	4.9
1 ENG: 4+ SEATS												
EST.TOT.HOURS	513128	3730199	5551421	1640966	85016	565466	115710	182045	710359	217533	1567338	14959308
% STD. ERROR	17.1	5.9	4.4	13.7	81.2	30.1	53.6	56.2	19.0	46.0	14.4	2.9
1 ENGINE: TOTAL												
EST.TOT.HOURS	547287	4013598	7911865	4489672	1470276	883801	407520	182045	750740	289486	2160750	23149145
% STD. ERROR	16.6	5.7	3.5	8.7	13.3	21.4	25.3	56.2	18.4	34.2	12.3	2.6
2 ENG: 1-6 SEATS												
EST.TOT.HOURS	536728	1203556	248566	94273	17179	32064	653	213284	507324	43591	135760	3013160
% STD. ERROR	16.6	9.4	17.0	38.0	66.6	52.1	133.0	47.3	24.3	62.7	56.4	6.4
2 ENG: 7+ SEATS												
EST.TOT.HOURS	972743	434125	16588	21463	8596	17951	6746	687075	509257	21187	36336	2716694
% STD. ERROR	13.1	18.2	35.8	68.5	57.3	47.0	58.9	32.2	18.9	42.1	61.4	8.7
2 ENGINE: TOTAL												
EST.TOT.HOURS	1501676	1631406	265569	116850	26260	50369	7417	894679	1018677	65744	172388	5729854
% STD. ERROR	10.4	8.3	16.1	33.1	43.9	37.0	56.5	26.8	15.4	44.4	46.7	5.3
PISTON: OTHER												
EST.TOT.HOURS	188	79	0	0	4220	25	1880	12670	2391	2181	8748	32467
% STD. ERROR	136.5	63.9	0.0	0.0	23.0	203.9	90.5	66.1	107.4	44.1	41.3	29.9
PISTON: TOTAL												
EST.TOT.HOURS	2038129	5637257	8176338	4609806	1505213	936962	416692	1082160	1769720	358146	2341394	28911466
% STD. ERROR	9.0	4.7	3.4	8.5	12.9	20.2	24.8	24.0	11.8	29.0	11.9	2.3
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS												
EST.TOT.HOURS	1013140	172331	3410	0	0	0	7950	0	188761	35385	5024	1431297
% STD. ERROR	10.0	30.9	88.7	0.0	0.0	0.0	108.9	0.0	29.9	63.7	91.9	6.5

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
2 ENG: 13+ SEATS												
EST.TOT.HOURS	123084	0	139	0	0	0	0	521438	0	14011	0	658671
% STD. ERROR	24.6	0.0	276.1	0.0	0.0	0.0	0.0	24.4	0.0	123.2	0.0	18.0
2 ENGINE: TOTAL												
EST.TOT.HOURS	1133978	172331	3555	0	0	0	7950	521438	188761	48586	5024	2089968
% STD. ERROR	9.4	30.9	85.1	0.0	0.0	0.0	108.9	24.4	29.9	53.1	91.9	7.2
TURBOPROP: OTHER												
EST.TOT.HOURS	1748	0	238	0	77264	467	0	1557	765	1280	0	83319
% STD. ERROR	34.8	0.0	69.9	0.0	29.9	333.9	0.0	39.6	56.0	207.9	0.0	37.3
TURBOPROP: TOTAL												
EST.TOT.HOURS	1135654	172331	3761	0	77264	467	7950	523884	189582	50023	5024	2173287
% STD. ERROR	9.3	30.9	83.3	0.0	29.9	333.9	108.9	24.1	29.8	52.2	91.9	7.1
FIXED WING - TURBOJET												
2 ENGINE TURBOJET												
EST.TOT.HOURS	1221439	80189	13118	0	0	12435	0	0	21183	1225	0	1349589
% STD. ERROR	7.1	68.5	133.4	0.0	0.0	133.4	0.0	0.0	99.4	88.6	0.0	6.8
TURBOJET: OTHER												
EST.TOT.HOURS	89572	11041	22357	0	0	0	0	0	0	471	0	123656
% STD. ERROR	23.9	73.7	81.2	0.0	0.0	0.0	0.0	0.0	0.0	106.9	0.0	25.2
TURBOJET: TOTAL												
EST.TOT.HOURS	1321053	96776	35987	0	0	12435	0	0	21183	1702	0	1473245
% STD. ERROR	6.9	58.9	70.1	0.0	0.0	133.4	0.0	0.0	99.4	72.1	0.0	6.6
FIXED WING: TOTAL												
EST.TOT.HOURS	4472568	5895615	8207777	4609806	1561045	949757	424639	1590604	1980227	410903	2347322	32557997
% STD. ERROR	5.6	4.7	3.4	8.5	12.7	20.0	24.4	19.5	11.0	26.1	11.8	2.1
ROTORCRAFT												
PISTON												
EST.TOT.HOURS	3485	25693	22535	101006	196361	139505	46921	182	5462	23452	3310	571725
% STD. ERROR	84.7	38.1	34.0	31.3	15.5	23.9	49.7	233.9	91.3	41.0	65.6	8.6
TURBINE												
EST.TOT.HOURS	761797	35087	1567	61288	6699	42083	158974	9945	546713	93157	0	1699652
% STD. ERROR	19.3	54.8	125.9	71.0	31.6	75.3	43.0	38.0	21.4	44.7	0.0	8.9

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN
BY
AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
ROTORCRAFT: TOTAL												
EST.TOT.HOURS	765629	60417	24014	162988	203517	181048	206685	10161	551873	116564	3310	2271377
% STD. ERROR	19.2	34.4	32.7	29.5	14.8	24.0	34.1	40.5	21.1	35.1	65.6	7.0
OTHER												
EST.TOT.HOURS	4280	1239	239190	90417	0	9514	11720	0	678	27605	35512	419792
% STD. ERROR	68.7	73.0	12.9	41.0	0.0	43.9	40.2	0.0	88.3	48.7	49.1	11.8
TOTAL												
EST.TOT.HOURS	5240774	5956270	8477292	4864586	1761709	1137523	642007	1601651	2528288	553164	2389479	35249171
% STD. ERROR	3.9	3.6	2.9	5.7	8.5	14.6	13.2	10.8	5.4	19.5	7.5	2.0

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN 20 AIRCRAFT IN SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

01 FIXED WING PISTON, 1 ENGINE, 1-3, SEATS.
02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
05 FIXED WING PISTON, OTHER.
06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
08 FIXED WING TURBOPROP, OTHER.
09 FIXED WING TURBOJET, 2 ENGINES.
10 FIXED WING TURBOJET, OTHER.
11 ROTORCRAFT, PISTON.
12 ROTORCRAFT, TURBINE.
13 OTHER AIRCRAFT.

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
OTHER 01	13748	440987	73081	16.6	64.0	9.7	15.2
OTHER 02	3292	181750	48545	26.7	77.1	18.9	24.5
OTHER 03	1190	34919	22687	65.0	87.8	43.6	49.6
OTHER 04	658	110338	56845	51.5	253.6	115.8	45.6
OTHER 05	76	7327	4141	56.5	182.4	95.5	52.4
OTHER 06	1047	192979	39940	20.7	209.6	38.8	18.5
OTHER 07	449	621768	129171	20.8	1816.8	216.9	11.9
OTHER 08	133	13258	9643	72.7	301.7	69.4	23.0
OTHER 09	1547	454304	73607	16.2	347.7	49.1	14.1
OTHER 10	490	46759	23942	51.2	189.7	40.2	21.2
OTHER 11	1904	10797	5329	49.4	25.6	10.2	39.9
OTHER 12	1180	444343	95251	21.4	530.4	76.6	14.4
OTHER 13	3606	174430	27809	15.9	65.6	9.5	14.4
AERORSJ2	33	247	65	26.2	26.4	3.6	13.8
AGUSTAA109	42	3744	794	21.2	117.9	21.4	18.2
AIRPTSA	235	14789	4866	32.9	105.3	28.6	27.2
AIRSPC18	22	259	76	29.4	28.2	5.2	18.3
AIRTRCAT300	362	130822	18995	14.5	361.4	52.5	14.5
AMD FALC10	136	34530	8264	23.9	253.9	60.8	23.9
AMD FALC20	201	89839	18469	20.6	447.0	91.9	20.6
AMD FALC50	88	25103	7295	29.1	285.3	82.9	29.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AMTR TMK	27	67	50	74.9	30.0	12.3	40.9
ARCTICS1A	91	2024	359	17.7	55.4	8.1	14.7
ARCTICS1B1	23	437	127	29.0	43.0	6.9	16.0
ARONCA15	201	12344	8029	65.0	118.5	52.4	44.2
ARONCA58	149	5386	3182	59.1	88.3	33.7	38.2
ARONCA65	138	3114	732	23.5	41.1	6.3	15.3
ARONCAC3	59	301	48	16.0	22.4	2.5	11.1
AVIANWFALCON	26	650	86	13.2	31.6	3.7	11.7
AYRES S2	814	138134	35200	25.5	230.4	41.2	17.9
AYRES S2T	58	40706	10074	24.7	701.8	173.7	24.7
BAG B206	32	3292	760	23.1	137.0	23.5	17.2
BALWKSFIREFY	1095	34391	5696	16.6	33.5	5.2	15.5
BEECH 17	188	4011	407	10.1	43.2	2.8	6.6
BEECH 18	885	147671	13068	8.8	314.6	23.8	7.6
BEECH 200	815	358817	36350	10.1	440.3	44.6	10.1
BEECH 23	2826	381224	75157	19.7	140.7	27.4	19.5
BEECH 33	1668	232122	40505	17.4	145.6	24.8	17.0
BEECH 35	6849	667238	52701	7.9	106.1	7.8	7.4
BEECH 36	1940	382774	43136	11.3	197.7	22.2	11.2
BEECH 45	286	6117	3991	65.2	50.2	23.6	47.0
BEECH 50	337	22674	8532	37.6	119.1	21.5	18.0

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 55	2246	383561	63437	16.5	178.1	28.9	16.3
BEECH 58	1427	400339	59033	14.7	281.5	41.4	14.7
BEECH 60	429	64018	7895	12.3	150.5	18.1	12.1
BEECH 65	137	17809	3562	20.0	153.5	27.8	18.1
BEECH 77	238	57362	7148	12.5	246.9	22.2	9.0
BEECH 80	187	25162	3598	14.3	198.8	24.6	12.4
BEECH 90	1070	333581	35536	10.7	311.8	33.2	10.7
BEECH 95	460	34397	5551	16.1	74.8	12.1	16.1
BELL 204	159	13801	2448	17.7	125.7	20.1	16.0
BELL 206	2177	902758	94039	10.4	430.4	43.2	10.0
BELL 222	54	21639	2884	13.3	422.5	51.3	12.1
BELL 47	1417	161751	36616	22.6	233.1	39.3	16.9
BLANCA11	891	19713	9748	49.4	57.6	20.5	35.5
BLANCA1413	264	4790	821	17.1	40.6	5.4	13.4
BLANCA1419	273	11695	2621	22.4	59.9	12.7	21.1
BLANCA17	1052	72103	16846	23.4	82.9	16.8	20.3
BLANCA7	5801	396046	35298	8.9	100.1	8.1	8.1
BLANCA8	704	84699	28070	33.1	149.7	45.1	30.1
BNORM BN2	120	30038	28080	93.5	250.3	234.0	93.5
BNORM BN2MK3	11	7998	2162	27.0	727.1	196.5	27.0
BOEING75	1911	57635	16176	28.1	59.9	12.8	21.4

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BOEINGC97	18	286	50	17.4	41.2	5.3	13.0
BUKER 131	32	410	151	36.7	36.1	5.6	15.5
CAMRONMODELO	152	4678	1067	22.8	48.4	6.6	13.7
CESSNA120	869	26973	3622	13.4	43.7	4.9	11.3
CESSNA140	2327	83628	16853	20.2	54.3	8.4	15.4
CESSNA150	19623	3857891	296593	7.7	216.4	16.1	7.4
CESSNA170	2436	124949	16526	13.2	60.8	7.3	12.0
CESSNA172	24908	4111048	290782	7.1	178.0	12.3	6.9
CESSNA175	1301	61525	8886	14.4	63.1	7.7	12.2
CESSNA177	2903	441916	85323	19.3	156.3	29.9	19.1
CESSNA180	2673	247893	68420	27.6	122.8	32.2	26.2
CESSNA182	13769	1447023	114256	7.9	112.8	8.6	7.7
CESSNA185	1592	284064	103343	36.4	178.8	65.0	36.4
CESSNA188	1859	313815	49272	15.7	193.2	26.4	13.7
CESSNA205	246	11611	3779	32.5	47.2	15.4	32.5
CESSNA206	3011	575280	104301	18.1	200.2	35.6	17.8
CESSNA207	391	116976	45234	38.7	418.9	138.8	33.1
CESSNA210	6174	841747	74935	8.9	142.0	12.3	8.6
CESSNA305	273	51214	18710	36.5	187.6	68.5	36.5
CESSNA310	3224	442604	85131	19.2	163.5	30.3	18.5
CESSNA320	329	21617	17223	79.7	67.9	53.8	79.2

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA335	50	8994	1376	15.3	179.9	27.5	15.3
CESSNA337	1247	150743	20552	13.6	132.2	16.7	12.6
CESSNA340	951	166869	23779	14.3	181.8	24.4	13.4
CESSNA401	243	61258	19732	32.2	256.9	81.1	31.6
CESSNA402	742	439523	88453	20.1	600.4	119.6	19.9
CESSNA411	169	18836	3344	17.8	155.4	18.1	11.6
CESSNA414	779	189858	39783	21.0	243.7	51.1	21.0
CESSNA421	1321	350786	44687	12.7	280.0	33.2	11.9
CESSNA425	130	32919	6924	21.0	255.9	53.5	20.9
CESSNA441	231	78900	24769	31.4	341.6	107.2	31.4
CESSNA500	537	225542	35929	15.9	441.0	64.6	14.6
CESSNAT50	69	436	175	40.2	24.4	4.9	20.1
COMWTH185	106	1196	213	17.8	36.6	5.0	13.7
CONAERLA4	467	47114	9309	19.8	111.7	19.3	17.3
CURTISC46	45	5876	2236	38.1	194.5	63.6	32.7
CURTISTRVAIR	189	2413	387	16.0	64.9	7.6	11.7
CVAC 240	37	421	165	39.2	66.7	12.5	18.8
CVAC 340	20	1384	691	50.0	185.9	33.1	17.8
CVAC BT13	97	1218	130	10.7	41.2	2.8	6.8
CVAC P4Y	8	459	0	0.0	73.7	0.0	0.0
DHAV DHC1	84	5309	1135	21.4	90.3	18.3	20.2

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
DHAV DHC2	291	43747	6868	15.7	245.1	29.9	12.2
DHAV DHC3	21	7501	3692	49.2	476.3	198.0	41.6
DHAV DHC6	88	85828	32549	37.9	1062.6	373.4	35.1
DHAVXXDH82	79	2668	377	14.1	52.4	5.4	10.2
DOUG A26	26	483	123	25.5	42.4	6.7	15.9
DOUG DC3	377	36508	8164	22.4	204.7	30.4	14.8
DOUG DC4	79	929	487	52.4	55.8	18.9	33.9
DOUG DC6	85	3881	3073	79.2	117.1	84.8	72.4
DOUG DC7	37	5666	1651	29.1	216.6	55.9	25.8
EAGLE DW	72	5854	2086	35.6	95.1	28.0	29.5
EIRVON20	112	6357	588	9.3	65.7	5.5	8.3
EMAIR MA1	22	8130	2424	29.8	418.3	107.2	25.6
ENSTRMF28	319	32243	14977	46.4	116.2	50.9	43.8
FLEET 16B	25	255	49	19.0	28.4	3.1	10.9
FOMOC04AT	6	0	0	0.0	0.0	0.0	0.0
FRCHLD24	288	3229	514	15.9	37.0	4.5	12.1
FRCHLDC119	34	1264	303	24.0	75.0	4.1	5.5
FRCHLDM62	222	3927	481	12.2	40.8	4.3	10.6
GLASFLH301	114	4966	657	13.2	58.9	6.6	11.2
GRUMAVAA1	578	34295	13785	40.2	85.7	20.7	24.2
GRUMAVAA5	326	27882	9399	33.7	113.3	13.9	12.3

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GRUMAVG164	656	153070	38328	25.0	233.3	58.4	25.0
GRUMAVTBM	34	324	136	41.9	30.9	7.3	23.5
GULSTM112	704	61933	11333	18.3	98.4	15.6	15.9
GULSTM500	330	74521	43092	57.8	240.2	137.1	57.1
GULSTM680	328	44764	15092	33.7	206.7	64.5	31.2
GULSTM680TP	123	10540	1477	14.0	85.7	12.0	14.0
GULSTM690TP	476	105069	18130	17.3	220.7	38.1	17.3
GULSTMAA1	601	31450	15101	48.0	71.3	30.3	42.5
GULSTMAA5	1372	129142	23108	17.9	104.2	17.3	16.6
GULSTMG1159	178	93466	11354	12.1	525.1	63.8	12.1
GULSTMG159	132	58086	6907	11.9	440.0	52.3	11.9
HELIO H391	24	639	194	30.3	65.3	16.7	25.5
HILLERFH1100	76	1347	768	57.0	66.4	12.2	18.3
HILLERUH12	620	133976	18586	13.9	316.9	37.5	11.8
HUGHES269	732	159299	24003	15.1	298.5	40.3	13.5
HUGHES369	645	216391	111470	51.5	371.6	182.5	49.1
HWKSLYDH104	33	0	0	0.0	0.0	0.0	0.0
HWKSLYDH114	7	2105	0	0.0	1654.0	0.0	0.0
HWKSLYDH125	189	60002	14008	23.3	317.5	74.1	23.3
INTRCP200	30	1656	178	10.7	59.4	5.8	9.8
ISRAEL1124	176	49076	2996	6.1	278.8	17.0	6.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
JBMSTRDGA15	82	606	146	24.1	32.6	4.2	12.8
LAIKFN10	36	250	91	36.3	40.5	10.9	27.0
LEAR 35	354	158374	19340	12.2	447.4	54.6	12.2
LKHEED1329	95	22076	5139	23.3	292.2	39.4	13.5
LKHEED18	68	510	281	55.1	30.0	7.8	26.1
LKHEEDT33	47	11	7	66.7	5.0	0.0	0.0
LUSCOM8	2144	115280	44253	38.4	88.7	32.8	36.9
MARTIN404	22	0	0	0.0	0.0	0.0	0.0
MAULE M5	421	33253	9712	29.2	97.3	26.4	27.1
MCLISHFUNKB	139	2502	388	15.5	39.5	4.6	11.7
MNCOUP90	68	504	206	40.9	25.9	8.4	32.5
MNMITEM18	150	1664	450	27.1	23.2	3.5	15.1
MOONEYM20	5923	637207	49096	7.7	116.4	8.3	7.1
MTSBSIMU2	365	70490	18866	26.8	200.1	51.5	25.8
MULTECD16	46	2139	259	12.1	67.2	5.9	8.8
NAMER F51	136	2960	925	31.2	56.0	8.6	15.4
NAMER NA260	56	1959	374	19.1	49.6	7.4	15.0
NAMER T6	517	25266	4197	16.6	61.8	9.5	15.4
NAVIONNAVION	575	17438	5690	32.6	49.3	10.5	21.2
NORD SV4	44	1000	163	16.3	34.6	4.7	13.6
NORWST65	58	930	116	12.5	41.4	3.9	9.5

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
ORLHELH19	75	2542	2237	88.0	203.4	40.4	19.9
PICARDAX8	153	6389	2770	43.4	51.2	21.9	42.9
PIPER 600	388	97318	17377	17.9	250.8	44.8	17.9
PIPER J2	53	288	51	17.9	20.9	2.7	13.1
PIPER J3	4093	113794	23227	20.4	46.3	8.3	18.0
PIPER J4	239	1994	687	34.4	31.8	7.2	22.5
PIPER J5	339	3086	3178	103.0	38.7	9.0	23.2
PIPER PA12	1312	56061	20506	36.6	67.6	21.6	32.0
PIPER PA15	185	3339	1180	35.3	37.8	10.6	27.9
PIPER PA16	355	5613	1792	31.9	24.2	6.4	26.4
PIPER PA17	110	2437	248	10.2	35.2	2.5	7.0
PIPER PA18	3491	453794	79023	17.4	173.4	27.2	15.7
PIPER PA20	447	22171	3762	17.0	68.5	10.1	14.8
PIPER PA22	4829	277666	96352	34.7	85.8	28.2	32.8
PIPER PA23	3501	587562	91419	15.6	200.9	29.4	14.6
PIPER PA24	3180	284764	31967	11.2	96.4	10.1	10.5
PIPER PA25	1329	167772	34736	20.7	174.0	26.1	15.0
PIPER PA28	22239	2967320	228673	7.7	141.4	10.8	7.7
PIPER PA30	1276	144765	26889	18.6	137.0	22.1	16.1
PIPER PA31	2125	768363	147035	19.1	410.1	80.5	19.6
PIPER PA31T	587	174793	30010	17.2	308.3	51.4	16.7

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PIPER PA32	4098	737525	105191	14.3	185.0	26.1	14.1
PIPER PA34	2206	543032	60496	11.1	246.2	27.4	11.1
PIPER PA36	411	59378	17681	29.8	145.6	43.1	29.6
PIPER PA38	1578	456237	100082	21.9	304.4	65.1	21.4
PIPER PA44	346	124216	62577	50.4	410.9	195.6	47.6
PROPJT200	65	3755	433	11.5	72.4	7.0	9.7
RAVEN S50	87	1010	353	34.9	27.0	8.5	31.6
RAVEN S55	707	32872	13089	39.8	52.7	20.8	39.5
RKWELL700	22	2893	666	23.0	151.4	30.6	20.2
RKWELLNA265	337	130221	24961	19.2	386.4	74.1	19.2
ROBSINR22	218	67570	7013	10.4	399.3	35.7	8.9
RYAN ST3	161	2002	673	33.6	28.4	6.0	21.1
RYAN STA	34	212	41	19.2	19.6	1.9	9.7
SCWZERG164	881	289889	118827	41.0	365.6	145.0	39.6
SCWZERSG1	751	40437	6648	16.4	68.6	10.6	15.4
SCWZERSG2	561	108353	26938	24.9	228.9	50.6	22.1
SEMCO CLNGER	27	761	104	13.6	40.7	4.5	11.1
SKRSKYS55	32	2018	678	33.6	146.0	27.4	18.8
SKRSKYS58	56	3540	1867	52.7	159.3	28.8	18.1
SMITH 600	383	51570	23692	45.9	165.0	68.3	41.4
SNIAS 350	234	62526	16226	26.0	276.0	70.0	25.4

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
STNSON10	163	1377	243	17.6	31.3	3.5	11.3
STNSONL5	128	1524	327	21.5	43.0	5.4	12.5
STNSONV77	104	1581	324	20.5	44.4	6.9	15.6
STOLAMRC3	212	3897	765	19.6	46.8	7.8	16.7
TCRAFKD	273	2009	1181	58.8	16.6	5.2	31.5
TCRAFTA	29	238	55	23.0	25.4	3.8	14.8
TCRAFTBC	1814	40127	6370	15.9	45.9	6.1	13.3
TCRAFTBL	223	3731	622	16.7	54.2	5.5	10.1
THUNDRAX7	49	1330	194	14.6	31.9	4.2	13.2
TMPSONNAVION	643	85695	33002	38.5	166.7	61.6	36.9
TRYTEK65	347	4201	879	20.9	34.2	4.1	11.9
UNIVACGC1	655	27734	10416	37.6	57.7	19.1	33.0
UNIVAR108	1991	62799	6155	9.8	54.2	4.6	8.4
UNIVAR415	2375	76818	18882	24.6	45.1	10.0	22.1
VARGA 2150	131	7801	1062	13.6	64.6	8.5	13.1
WACO ASO	30	286	104	36.2	32.2	7.6	23.5
WACO UPF7	163	4971	1808	36.4	64.3	18.3	28.4
WACO YK	56	373	144	38.8	31.4	10.1	32.2
TOTAL	260505	35249171	712026	2.0	164.0	3.2	1.96

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT
BY
TYPE OF AIRCRAFT
1983

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	84221	59199	976	1.6	70.3	1.2
1 ENG: 4+ SEATS	119549	107228	778	0.7	89.7	0.7
1 ENGINE: TOTAL	203770	166427	1248	0.8	81.7	0.6
2 ENG: 1-6 SEATS	18691	16249	315	1.9	86.9	1.7
2 ENG: 7+ SEATS	10130	8660	150	1.7	85.5	1.5
2 ENGINE: TOTAL	28821	24910	349	1.4	86.4	1.2
PISTON: OTHER	327	143	14	10.0	43.8	4.4
PISTON: TOTAL	232918	191480	1296	0.7	82.2	0.6
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4868	4733	72	1.5	97.2	1.5
2 ENG: 13+ SEATS	669	578	48	8.3	86.4	7.2
2 ENGINE: TOTAL	5537	5311	87	1.6	95.9	1.6
TURBOPROP: OTHER	204	142	38	26.7	69.6	18.5
TURBOPROP: TOTAL	5741	5453	95	1.7	95.0	1.6

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT
BY
TYPE OF AIRCRAFT
1983

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3655	3447	92	2.7	94.3	2.5
TURBOJET: OTHER	720	451	91	20.2	62.7	12.7
TURBOJET: TOTAL	4375	3898	130	3.3	89.1	3.0
FIXED WING: TOTAL	243034	200831	1306	0.7	82.6	0.5
ROTORCRAFT						
PISTON	5413	2541	191	7.5	47.0	3.5
TURBINE	4582	3998	153	3.8	87.3	3.3
ROTORCRAFT: TOTAL	9995	6540	245	3.7	65.4	2.5
OTHER	7476	5923	207	3.5	79.2	2.8
TOTAL	260505	213293	1345	0.6	81.9	0.5

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	2987	438	2594	416	86.9	18.9
ALASKA	7588	670	6075	598	80.1	10.6
ARIZONA	6381	639	4737	562	74.2	11.5
ARKANSAS	3088	460	2977	459	96.4	20.7
CALIFORNIA	34829	1406	29236	1321	83.9	5.1
COLORADO	5441	588	4407	532	81.0	13.1
CONNECTICUT	1893	348	1426	311	75.3	21.5
DELAWARE	868	243	809	237	93.2	37.8
DC	60	47	58	47	96.3	108.3
FLORIDA	14745	950	12688	896	86.0	8.2
GEORGIA	5649	608	4955	578	87.7	13.9
HAWAII	584	187	381	152	65.3	33.4
IDAHO	2670	418	2146	378	80.4	18.9
ILLINOIS	9401	774	7700	706	81.9	10.1
INDIANA	4732	552	4207	530	88.9	15.3
IOWA	3872	508	3165	469	81.7	16.2
KANSAS	5050	580	4519	555	89.5	15.1
KENTUCKY	2107	370	1752	338	83.1	21.7
LOUISIANA	4491	550	3972	520	88.4	15.9
MAINE	1413	301	1263	288	89.4	27.9
MARYLAND	3507	489	3116	467	88.9	18.2

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MASSACHUSETTS	3337	475	2737	432	82.0	17.4
MICHIGAN	8714	743	7079	677	81.2	10.4
MINNESOTA	5738	611	4733	563	82.5	13.2
MISSISSIPPI	2918	453	2706	441	92.7	20.9
MISSOURI	4749	555	3858	507	81.2	14.3
MONTANA	3033	455	2538	418	83.7	18.7
NEBRASKA	1309	300	1178	290	89.9	30.3
NEVADA	2699	425	2288	396	84.8	19.9
NEW HAMPSHIRE	1654	326	1430	313	86.5	25.5
NEW JERSEY	4605	555	4021	525	87.3	15.5
NEW MEXICO	2892	435	2387	396	82.5	18.5
NEW YORK	7866	705	6045	626	76.8	10.5
NORTH CAROLINA	5012	572	4344	537	86.7	14.6
NORTH DAKOTA	1888	354	1734	341	91.8	24.9
OHIO	8943	747	7478	693	83.6	10.4
OKLAHOMA	6325	657	5634	626	89.1	13.5
OREGON	5735	604	4689	552	81.8	12.9
PENNSYLVANIA	7564	699	6174	643	81.6	11.4
RHODE ISLAND	568	204	510	197	89.8	47.4
SOUTH CAROLINA	1869	351	1686	337	90.2	24.8

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1983

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SOUTH DAKOTA	1734	345	1360	306	78.4	23.6
TENNESSEE	3332	459	2935	431	88.1	17.7
TEXAS	23804	1195	20414	1117	85.8	6.4
UTAH	1626	327	1440	311	88.6	26.2
VERMONT	714	225	660	218	92.4	42.2
VIRGINIA	3282	469	2554	419	77.8	16.9
WASHINGTON	7550	693	5645	605	74.8	10.5
WEST VIRGINIA	1442	307	1229	286	85.2	26.9
WISCONSIN	5099	572	3782	495	74.2	12.8
WYOMING	1365	300	1192	285	87.3	28.4
PUERTO RICO	415	170	362	161	87.3	52.8
OTHER U.S. TERRITORIES	199	120	183	115	91.9	80.1
FOREIGN	1057	236	938	226	88.7	29.1
TOTAL	260505		213293	1345	81.9	0.5

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 8

GENERAL AVIATION ACTIVE AIRCRAFT
BY
REGION OF BASED AIRCRAFT
1983

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	7588	670	6075	598	80.1	10.6
CENTRAL	14981	975	12720	915	84.9	8.2
EASTERN	29193	1316	24006	1219	82.2	5.6
EUROPEAN OFFICE	543	157	508	153	93.5	39.1
GREAT LAKES	46249	1580	38072	1472	82.3	4.2
NEW ENGLAND	9578	786	8025	733	83.8	10.3
NORTHWEST MT.	27432	1271	22064	1160	80.4	5.6
SOUTHERN	39431	1482	34356	1412	87.1	4.9
SOUTHWESTERN	40703	1517	35478	1438	87.2	4.8
WESTERN-PACIFIC	44695	1555	36820	1454	82.4	4.3
TOTAL	260505		213293	1345	81.9	0.5

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE		ACTIVE USE											
	TOTAL ACTIVE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIV
FIXED WING													
FIXED WING - PISTON													
1 ENG: 1-3 SEATS													
EST.NO.ACT.	59199	108	3336	35650	8223	5814	1605	1254	0	111	1369	1728	25022
% STD. ERROR	A	D	B	A	A	B	B	C	A	D	C	B	
EST. % ACT.	70.3												
1 ENG: 4+ SEATS													
EST.NO.ACT.	107228	3044	29838	58047	5438	98	1516	371	318	2152	1301	5105	12321
% STD. ERROR	A	B	A	A	B	D	C	D	D	B	C	B	
EST. % ACT.	89.7												
1 ENGINE: TOTAL													
EST.NO.ACT.	166427	3152	33173	93698	13662	5912	3120	1625	318	2263	2671	6833	37343
% STD. ERROR	A	B	A	A	A	A	B	B	D	B	B	A	
EST. % ACT.	81.7												
2 ENG: 1-6 SEATS													
EST.NO.ACT.	16249	2263	8122	2636	534	124	178	1	257	1337	406	390	2442
% STD. ERROR	A	B	A	B	D	D	D	D	D	B	D	D	
EST. % ACT.	86.9												

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	ACTIVE USE												
	TOTAL ACTIVE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIV
2 ENG: 7+ SEATS													
EST.NO.ACT.	8660	3135	2279	211	201	128	113	28	589	1509	345	120	1470
% STD. ERROR	A	B	B	D	D	D	D	D	C	B	D	D	
EST. % ACT.	85.5												
2 ENGINE: TOTAL													
EST.NO.ACT.	24910	5398	10401	2848	735	252	291	29	847	2847	751	510	3911
% STD. ERROR	A	A	A	B	C	D	D	D	C	B	C	D	
EST. % ACT.	86.4												
PISTON: OTHER													
EST.NO.ACT.	143	3	7	0	0	57	1	5	10	4	32	25	184
% STD. ERROR	A	D	D	A	A	C	D	D	D	D	D	D	
EST. % ACT.	43.8												
PISTON: TOTAL													
EST.NO.ACT.	191480	8552	43581	96545	14396	6220	3413	1659	1175	5114	3454	7369	41438
% STD. ERROR	A	A	A	A	A	A	B	B	C	B	B	A	
EST. % ACT.	82.2												
FIXED WING - TURBOPROP													
2 ENG: 1-12 SEATS													
EST.NO.ACT.	4733	3027	775	57	0	0	0	38	0	547	252	37	135
% STD. ERROR	A	A	C	D	A	A	A	D	A	C	D	D	
EST. % ACT.	97.2												
2 ENG: 13+ SEATS													
EST.NO.ACT.	578	276	0	3	0	0	0	0	281	0	18	0	91
% STD. ERROR	A	C	A	D	A	A	A	A	C	A	D	A	
EST. % ACT.	86.4												

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE		ACTIVE USE										
	TOTAL ACTIVE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIV
2 ENGINE: TOTAL													
EST.NO.ACT.	5311	3304	775	60	0	0	0	38	281	547	269	37	226
% STD. ERROR	A	A	C	D	A	A	A	D	C	C	D	D	
EST. % ACT.	95.9												
TURBOPROP: OTHER													
EST.NO.ACT.	142	4	0	1	0	116	4	0	5	3	9	0	62
% STD. ERROR	A	D	A	D	A	B	D	A	D	D	D	A	
EST. % ACT.	69.6												
TURBOPROP: TOTAL													
EST.NO.ACT.	5453	3308	775	62	0	116	4	38	286	551	279	37	288
% STD. ERROR	A	A	C	D	A	B	D	D	C	C	D	D	
EST. % ACT.	95.0												
FIXED WING - TURBOJET													
2 ENGINE TURBOJET													
EST.NO.ACT.	3447	3116	156	25	0	0	25	0	0	45	78	0	208
% STD. ERROR	A	A	D	D	A	A	D	A	A	D	D	A	
EST. % ACT.	94.3												
TURBOJET: OTHER													
EST.NO.ACT.	451	309	61	50	0	0	0	0	0	0	31	0	269
% STD. ERROR	A	B	D	D	A	A	A	A	A	A	D	A	
EST. % ACT.	62.7												
TURBOJET: TOTAL													
EST.NO.ACT.	3898	3425	217	75	0	0	25	0	0	45	110	0	477
% STD. ERROR	A	A	D	D	A	A	D	A	A	D	D	A	
EST. % ACT.	89.1												

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT
BY AIRCRAFT TYPE AND PRIMARY USE
1983

AIRCRAFT TYPE	ACTIVE USE												
	TOTAL ACTIVE	EXECU-TIVE	BUSI-NESS	PERSO-NAL	INSTRUC-TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIV
FIXED WING: TOTAL													
EST.NO.ACT.	200831	15285	44573	96682	14396	6336	3442	1697	1461	5710	3842	7406	42203
% STD. ERROR	A	A	A	A	A	A	B	B	B	A	B	A	
EST. % ACT.	82.6												
ROTORCRAFT													
PISTON													
EST.NO.ACT.	2541	35	179	539	354	675	391	150	2	32	176	8	2872
% STD. ERROR	A	D	D	C	C	B	C	D	D	D	D	D	
EST. % ACT.	47.0												
TURBINE													
EST.NO.ACT.	3998	1677	203	22	127	40	72	369	17	1105	367	0	582
% STD. ERROR	A	B	D	D	D	C	D	D	D	B	D	A	
EST. % ACT.	87.3												
ROTORCRAFT: TOTAL													
EST.NO.ACT.	6540	1711	383	562	481	715	463	519	18	1137	543	8	3453
% STD. ERROR	A	B	C	C	C	B	C	C	D	B	C	D	
EST. % ACT.	65.4												
OTHER													
EST.NO.ACT.	5923	68	69	4240	572	0	118	177	0	11	406	261	1553
% STD. ERROR	A	D	D	A	C	A	D	D	A	D	C	D	
EST. % ACT.	79.2												
TOTAL													
EST.NO.ACT.	213293	17064	45025	101484	15450	7051	4023	2392	1479	6857	4791	7674	47086
% STD. ERROR	A	A	A	A	A	A	B	B	B	A	B	A	A
EST. % ACT.	81.9												

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1983

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	2964	B	5.0	2899	B	97.8
1 ENG: 4+ SEATS	50552	A	47.1	50412	A	99.7
1 ENGINE: TOTAL	53516	A	32.2	53311	A	99.6
2 ENG: 1-6 SEATS	14709	A	90.5	14709	A	100.0
2 ENG: 7+ SEATS	8504	A	98.2	8463	A	99.5
2 ENGINE: TOTAL	23213	A	93.2	23213	A	100.0
PISTON: OTHER	128	C	89.0	114	C	89.5
PISTON: TOTAL	76857	A	40.1	76651	A	99.7
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4733	A	100.0	4733	A	100.0
2 ENG: 13+ SEATS	578	A	100.0	578	A	100.0
2 ENGINE: TOTAL	5311	A	100.0	5311	A	100.0
TURBOPROP: OTHER	24	D	17.1	24	D	100.0
TURBOPROP: TOTAL	5336	A	97.8	5336	A	100.0

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT
IFR FLOWN AND TRANSPONDER EQUIPPED
1983

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3447	A	100.0	3447	A	100.0
TURBOJET: OTHER	451	A	100.0	451	A	100.0
TURBOJET: TOTAL	3898	A	100.0	3898	A	100.0
FIXED WING: TOTAL	86090	A	42.9	86090	A	100.0
ROTORCRAFT						
PISTON	15	D	0.6	10	D	67.0
TURBINE	286	D	7.2	286	D	100.0
ROTORCRAFT: TOTAL	301	D	4.6	301	D	100.0
OTHER	41	D	0.7	18	D	43.1
TOTAL	86432	A	40.5	86432	A	100.0

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 01	13748	6889	462	6.7	50.1	3.4
OTHER 02	3292	2358	250	10.6	71.6	7.6
OTHER 03	1190	398	167	41.9	33.4	14.0
OTHER 04	658	435	104	23.9	66.1	15.8
OTHER 05	76	40	9	21.2	52.9	11.2
OTHER 06	1047	921	85	9.2	87.9	8.1
OTHER 07	449	342	58	17.0	76.2	13.0
OTHER 08	133	44	30	69.0	33.0	22.8
OTHER 09	1547	1307	104	7.9	84.5	6.7
OTHER 10	490	246	115	46.6	50.3	23.4
OTHER 11	1904	422	122	29.0	22.2	6.4
OTHER 12	1180	838	133	15.8	71.0	11.2
OTHER 13	3606	2658	179	6.7	73.7	5.0
AERORSJ2	33	9	2	22.3	28.3	6.3
AGUSTAA109	42	32	3	11.0	75.6	8.3
AIRPTSA	235	140	26	18.5	59.8	11.1
AIRSPC18	22	9	2	23.0	41.7	9.6
AIRTRCAT300	362	362	0	0.0	100.0	0.0
AMD FALC10	136	136	0	0.0	100.0	0.0
AMD FALC20	201	201	0	0.0	100.0	0.0
AMD FALC50	88	88	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AMTR TMK	27	2	1	62.8	8.3	5.2
ARCTICS1A	91	37	4	9.9	40.1	4.0
ARCTICS1B1	23	10	2	24.2	44.2	10.7
ARONCA15	201	104	50	47.7	51.8	24.7
ARONCA58	149	61	27	45.1	40.9	18.4
ARONCA65	138	76	14	17.9	55.0	9.8
ARONCAC3	59	13	2	11.5	22.7	2.6
AVIANWFALCON	26	21	1	6.2	79.0	4.9
AYRES S2	814	600	109	18.2	73.7	13.4
AYRES S2T	58	58	0	0.0	100.0	0.0
BAG B206	32	24	4	15.4	75.1	11.6
BALWKSFIREFY	1095	1025	59	5.7	93.6	5.4
BEECH 17	188	93	7	7.7	49.4	3.8
BEECH 18	885	450	22	4.9	50.8	2.5
BEECH 200	815	815	0	0.0	100.0	0.0
BEECH 23	2826	2709	80	3.0	95.9	2.8
BEECH 33	1668	1595	61	3.8	95.6	3.7
BEECH 35	6849	6289	175	2.8	91.8	2.6
BEECH 36	1940	1936	16	0.8	99.8	0.8
BEECH 45	286	122	55	45.2	42.6	19.3
BEECH 50	337	190	63	33.0	56.5	18.7

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 55	2246	2154	66	3.1	95.9	2.9
BEECH 58	1427	1422	15	1.1	99.7	1.1
BEECH 60	429	425	11	2.6	99.2	2.6
BEECH 65	137	116	10	8.4	84.7	7.1
BEECH 77	238	232	20	8.6	97.6	8.4
BEECH 80	187	127	9	7.2	67.7	4.9
BEECH 90	1070	1070	0	0.0	100.0	0.0
BEECH 95	460	460	0	0.0	100.0	0.0
BELL 204	159	110	8	7.6	69.0	5.3
BELL 206	2177	2097	58	2.8	96.3	2.7
BELL 222	54	51	3	5.5	94.8	5.2
BELL 47	1417	694	105	15.1	49.0	7.4
BLANCA11	891	342	118	34.4	38.4	13.2
BLANCA1413	264	118	13	10.8	44.7	4.8
BLANCA1419	273	195	15	7.5	71.5	5.3
BLANCA17	1052	870	101	11.6	82.7	9.6
BLANCA7	5801	3953	146	3.7	68.1	2.5
BLANCA8	704	566	78	13.8	80.4	11.1
BNORM BN2	120	120	0	0.0	100.0	0.0
BNORM BN2MK3	11	11	0	0.0	100.0	0.0
BOEING75	1911	963	175	18.2	50.4	9.2

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BOEINGC97	18	7	1	11.6	38.6	4.5
BUKER 131	32	11	4	33.2	35.5	11.8
CAMRONMODELO	152	97	18	18.2	63.5	11.6
CESSNA120	869	617	45	7.3	71.0	5.2
CESSNA140	2327	1540	199	12.9	66.2	8.6
CESSNA150	19623	17831	339	1.9	90.9	1.7
CESSNA170	2436	2056	112	5.5	84.4	4.6
CESSNA172	24908	23098	349	1.5	92.7	1.4
CESSNA175	1301	975	76	7.8	74.9	5.8
CESSNA177	2903	2828	74	2.6	97.4	2.5
CESSNA180	2673	2019	173	8.6	75.5	6.5
CESSNA182	13769	12829	245	1.9	93.2	1.8
CESSNA185	1592	1589	16	1.0	99.8	1.0
CESSNA188	1859	1625	125	7.7	87.4	6.7
CESSNA205	246	246	0	0.0	100.0	0.0
CESSNA206	3011	2874	103	3.6	95.4	3.4
CESSNA207	391	279	56	19.9	71.4	14.2
CESSNA210	6174	5929	130	2.2	96.0	2.1
CESSNA305	273	273	0	0.0	100.0	0.0
CESSNA310	3224	2707	139	5.1	84.0	4.3
CESSNA320	329	318	27	8.6	96.8	8.3

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA335	50	50	0	0.0	100.0	0.0
CESSNA337	1247	1140	58	5.1	91.4	4.7
CESSNA340	951	918	44	4.8	96.5	4.6
CESSNA401	243	238	15	6.3	98.1	6.2
CESSNA402	742	732	21	2.9	98.7	2.8
CESSNA411	169	121	16	13.4	71.7	9.6
CESSNA414	779	779	0	0.0	100.0	0.0
CESSNA421	1321	1253	58	4.6	94.8	4.4
CESSNA425	130	129	3	2.3	98.9	2.3
CESSNA441	231	231	0	0.0	100.0	0.0
CESSNA500	537	511	32	6.3	95.2	6.0
CESSNAT50	69	18	6	34.8	25.9	9.0
COMWTH185	106	33	4	11.4	30.8	3.5
CONAERLA4	467	422	40	9.6	90.3	8.7
CURTISC46	45	30	6	19.5	67.1	13.1
CURTISTRVAIR	189	37	4	10.9	19.6	2.1
CVAC 240	37	6	2	34.4	17.1	5.9
CVAC 340	20	7	3	46.7	37.2	17.4
CVAC BT13	97	30	2	8.2	30.4	2.5
CVAC P4Y	8	6	0	0.0	77.8	0.0
DHAV DHC1	84	59	4	7.0	70.0	4.9

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
DHAV DHC2	291	178	18	10.4	61.1	6.3
DHAV DHC3	21	16	4	26.4	75.0	19.8
DHAV DHC6	88	81	12	14.3	91.8	13.1
DHAVXXDH82	79	51	5	9.7	64.4	6.3
DOUG A26	26	11	2	20.0	43.8	8.7
DOUG DC3	377	178	30	16.7	47.3	7.9
DOUG DC4	79	17	7	39.9	21.1	8.4
DOUG DC6	85	33	11	32.0	39.0	12.5
DOUG DC7	37	26	4	13.5	70.7	9.6
EAGLE DW	72	62	12	20.1	85.5	17.1
EIRVON20	112	97	4	4.0	86.4	3.4
EMAIR MA1	22	19	3	15.2	88.4	13.5
ENSTRMF28	319	278	43	15.3	87.0	13.3
FLEET 16B	25	9	1	15.6	36.0	5.6
FOMOCO4AT	6	0	0	0.0	0.0	0.0
FRCHLD24	288	88	9	9.9	30.4	3.0
FRCHLDC119	34	17	4	23.3	49.6	11.6
FRCHLDM62	222	96	6	6.1	43.4	2.6
GLASFLH301	114	84	6	7.0	73.9	5.2
GRUMAVAA1	578	400	128	32.1	69.2	22.2
GRUMAVAA5	326	246	77	31.4	75.5	23.7

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GRUMAVG164	656	656	0	0.0	100.0	0.0
GRUMAVTBM	34	10	4	34.6	30.9	10.7
GULSTM112	704	630	57	9.1	89.4	8.2
GULSTM500	330	310	29	9.2	94.0	8.7
GULSTM680	328	217	28	12.8	66.0	8.4
GULSTM680TP	123	123	0	0.0	100.0	0.0
GULSTM690TP	476	476	0	0.0	100.0	0.0
GULSTMAA1	601	441	99	22.3	73.4	16.4
GULSTMAA5	1372	1239	84	6.8	90.3	6.1
GULSTMG1159	178	178	0	0.0	100.0	0.0
GULSTMG159	132	132	0	0.0	100.0	0.0
HELIO H391	24	10	2	16.4	40.8	6.7
HILLERFH1100	76	20	11	54.0	26.7	14.4
HILLERUH12	620	423	31	7.2	68.3	4.9
HUGHES269	732	534	36	6.7	72.9	4.9
HUGHES369	645	582	91	15.6	90.3	14.1
HWKSLYDH104	33	0	0	0.0	0.0	0.0
HWKSLYDH114	7	1	0	0.0	18.2	0.0
HWKSLYDH125	189	189	0	0.0	100.0	0.0
INTRCP200	30	28	1	4.2	93.0	3.9
ISRAEL1124	176	176	0	0.0	100.0	0.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
JBMSTRDGA15	82	19	4	20.4	22.7	4.6
LAIKFN10	36	6	1	24.3	17.1	4.2
LEAR 35	354	354	0	0.0	100.0	0.0
LKHEED1329	95	76	14	19.0	79.5	15.1
LKHEED18	68	17	8	48.5	25.0	12.1
LKHEEDT33	47	2	1	66.7	4.7	3.1
LUSCOM8	2144	1299	135	10.4	60.6	6.3
MARTIN404	22	0	0	0.0	0.0	0.0
MAULE M5	421	342	37	10.8	81.2	8.8
MCLISHFUNKB	139	63	6	10.2	45.5	4.7
MNCOUP90	68	19	5	24.7	28.6	7.1
MNMITEM18	150	72	16	22.5	47.9	10.8
MOONEYM20	5923	5475	165	3.0	92.4	2.8
MTSBSIMU2	365	352	26	7.3	96.5	7.0
MULTECD16	46	32	3	8.3	69.2	5.8
NAMER F51	136	53	14	27.2	38.9	10.6
NAMER NA260	56	40	5	11.8	70.5	8.3
NAMER T6	517	409	25	6.2	79.1	4.9
NAVIONNAVION	575	353	88	24.8	61.5	15.3
NORD SV4	44	29	3	9.1	65.7	5.9
NORWST65	58	22	2	8.1	38.8	3.1

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ORLHELH19	75	13	11	85.7	16.7	14.3
PICARDAX6	153	125	8	6.3	81.6	5.1
PIPER 600	388	388	0	0.0	100.0	0.0
PIPER J2	53	14	2	12.1	26.0	3.1
PIPER J3	4093	2458	236	9.6	60.0	5.8
PIPER J4	239	63	16	26.0	26.3	6.8
PIPER J5	339	80	80	100.3	23.6	23.6
PIPER PA12	1312	829	147	17.8	63.2	11.2
PIPER PA15	185	88	19	21.7	47.7	10.3
PIPER PA16	355	232	42	18.0	65.2	11.7
PIPER PA17	110	69	5	7.3	63.0	4.6
PIPER PA18	3491	2617	199	7.6	75.0	5.7
PIPER PA20	447	323	27	8.3	72.4	6.0
PIPER PA22	4829	3201	278	8.7	66.3	5.8
PIPER PA23	3501	2924	156	5.3	83.5	4.5
PIPER PA24	3180	2953	118	4.0	92.9	3.7
PIPER PA25	1329	964	138	14.3	72.5	10.4
PIPER PA28	22239	21142	274	1.3	95.1	1.2
PIPER PA30	1276	1057	98	9.2	82.8	7.6
PIPER PA31	2125	1967	80	4.1	92.5	3.8
PIPER PA31T	587	567	24	4.2	96.6	4.0

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA32	4098	3986	88	2.2	97.3	2.1
PIPER PA34	2206	2206	0	0.0	100.0	0.0
PIPER PA36	411	408	13	3.2	99.2	3.2
PIPER PA38	1578	1499	74	5.0	95.0	4.7
PIPER PA44	346	302	50	16.5	87.4	14.4
PROPJT200	65	52	3	6.3	79.8	5.0
RAVEN S50	87	37	6	15.0	43.0	6.5
RAVEN S55	707	624	30	4.8	88.2	4.2
RKWELL700	22	19	2	11.0	86.8	9.6
RKWELLNA265	337	337	0	0.0	100.0	0.0
ROBSINR22	218	169	9	5.3	77.6	4.1
RYAN ST3	161	71	18	26.2	43.8	11.5
RYAN STA	34	11	2	16.6	31.7	5.3
SCWZERG164	881	793	83	10.4	90.0	9.4
SCWZERSG1	751	590	33	5.6	78.5	4.4
SCWZERSG2	561	473	54	11.4	84.4	9.6
SEMCO CLNGER	27	19	1	7.9	69.3	5.5
SKRSKYS55	32	14	4	27.8	43.2	12.0
SKRSKYS58	56	22	11	49.6	39.7	19.7
SMITH 600	383	312	62	20.0	81.6	16.3
SNIAS 350	234	227	12	5.5	96.8	5.3

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
STNSON10	163	44	6	13.5	27.0	3.6
STNSONL5	128	35	6	17.5	27.7	4.8
STNSONV77	104	36	5	13.3	34.2	4.5
STOLAMRC3	212	83	9	10.4	39.3	4.1
TCRAFKD	273	121	60	49.6	44.3	22.0
TCRAFTA	29	9	2	17.6	32.3	5.7
TCRAFTBC	1814	875	76	8.7	48.2	4.2
TCRAFTBL	223	69	9	13.2	30.9	4.1
THUNDRAX7	49	42	3	6.3	85.2	5.4
TMPSONNAVION	643	514	56	10.9	79.9	8.7
TRYTEK65	347	123	21	17.2	35.4	6.1
UNIVACGC1	655	480	86	17.9	73.3	13.1
UNIVAR108	1991	1159	58	5.0	58.2	2.9
UNIVAR415	2375	1703	182	10.7	71.7	7.7
VARGA 2150	131	121	4	3.7	92.1	3.4
WACO ASO	30	9	2	27.6	29.6	8.2
WACO UPF7	163	77	18	22.7	47.4	10.8
WACO YK	56	12	3	21.6	21.2	4.6
TOTAL	260505	213293	1345	0.6	81.9	0.5

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	IMC DAY				IMC NIGHT				TOTALS			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
FIXED WING												
PISTON - 1 ENGINE												
1-3 SEATS	2847	461	68773	22734	1508	346	24035	8167	3024	474	92811	28094
4+ SEATS	43638	1398	1256862	85500	24842	1211	390256	55190	44274	1400	1647345	117170
TOTAL 1 ENGINE	46484	1472	1325635	88471	26350	1260	414291	55791	47298	1479	1740156	120491
PISTON - 2 ENGINES												
1-6 SEATS	11748	446	568730	59984	9890	485	361215	67662	12149	432	931790	115211
7+ SEATS	7169	252	564738	107913	6667	284	334434	72579	7282	243	905229	166846
TOTAL 2 ENGINE	18917	512	1133468	123464	16557	562	695649	99226	19430	495	1837020	202759
OTHER PISTON	69	10	6484	2885	53	10	4465	1267	69	10	10948	4053
TOTAL PISTON	65470	1558	2465587	151917	42960	1379	1114405	113843	66797	1559	3588124	235894
TURBOPROPS - 2 ENGINES												
1-12 SEATS	4542	96	359537	49720	4336	132	152421	20830	4542	96	514089	64481
13+ SEATS	551	27	175318	69096	551	27	73614	20735	551	27	248932	87987
TOTAL 2 ENGINE	5093	100	534856	85125	4887	135	226035	29391	5093	100	763021	109085
OTHER TURBOPRP	39	16	978	263	15	13	114	95	39	16	1092	333
TOTAL TURBOPRP	5132	101	535834	85126	4902	135	226149	29391	5132	101	764113	109085

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	IMC DAY NUMBER ACTIVE AIRCRAFT	IMC DAY STD ERROR	IMC DAY HOURS FLOWN	IMC DAY STD ERROR	IMC NIGHT NUMBER ACTIVE AIRCRAFT	IMC NIGHT STD ERROR	IMC NIGHT HOURS FLOWN	IMC NIGHT STD ERROR	TOTALS NUMBER ACTIVE AIRCRAFT	TOTALS STD ERROR	TOTALS HOURS FLOWN	TOTALS STD ERROR
FIXED WING - CONTINUED												
TURBOJETS												
2 ENGINE	3395	49	344009	46022	3304	81	173655	26066	3395	49	517622	66362
OTHER TURBOJET	451	0	19069	8319	410	42	11417	4416	451	0	30487	12077
TOTAL TURBOJET	3847	49	363078	46768	3714	91	185072	26437	3847	49	548108	67452
ALL FIXED WING	74448	1562	3364499	180312	51576	1389	1525627	120511	75776	1563	4900346	268506
ROTORCRAFT												
PISTON	7	3	156	84	0	0	0	0	7	3	156	84
TURBINE	249	99	6967	2613	91	27	4206	2253	256	99	11121	3687
TOTAL ROTOR	256	99	7123	2614	91	27	4206	2253	263	99	11277	3688
OTHER AIRCRAFT	102	69	2738	1874	0	0	0	0	102	69	2738	1874
TOTALS	74806	1567	3352432	180340	51666	1389	1519891	120532	76141	1568	4879824	268537

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VMC DAY				VMC NIGHT				TOTALS			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
FIXED WING												
PISTON - 1 ENGINE												
1-3 SEATS	58543	217	7336152	356869	19633	980	552763	72945	58990	123	7885496	388780
4+ SEATS	106331	260	11919976	405702	68224	1367	1376667	77835	106780	181	13296067	442249
TOTAL 1 ENGINE	164874	339	19256128	540324	87856	1682	1929430	106674	165770	219	21181563	588841
PISTON - 2 ENGINES												
1-6 SEATS	15899	146	1845675	107386	12120	435	462867	54211	16054	106	2308240	133315
7+ SEATS	8510	79	1562053	155046	7246	247	477167	72977	8635	8	2048488	188038
TOTAL 2 ENGINE	24410	166	3407728	188603	19366	500	940034	90909	24688	106	4356728	230502
OTHER PISTON	139	4	26730	5531	81	11	7916	1673	143	0	34630	6533
TOTAL PISTON	189422	377	22690586	572321	107303	1755	2877380	140166	190602	243	25572920	632383
TURBOPROPS - 2 ENGINES												
1-12 SEATS	4462	112	744945	64133	3895	184	199614	30672	4462	112	947336	75507
13+ SEATS	532	35	312084	75979	436	55	68893	17393	532	35	384468	82602
TOTAL 2 ENGINE	4995	117	1057029	99428	4331	192	268507	35260	4995	117	1331804	111912
OTHER TURBOPRP	142	0	42117	7709	73	20	1077	354	142	0	43109	7629
TOTAL TURBOPRP	5137	117	1099147	99726	4404	193	269585	35262	5137	117	1374913	112172

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VMC DAY NUMBER ACTIVE AIRCRAFT	VMC DAY STD ERROR	VMC DAY HOURS FLOWN	VMC DAY STD ERROR	VMC NIGHT NUMBER ACTIVE AIRCRAFT	VMC NIGHT STD ERROR	VMC NIGHT HOURS FLOWN	VMC NIGHT STD ERROR	TOTALS NUMBER ACTIVE AIRCRAFT	TOTALS STD ERROR	TOTALS HOURS FLOWN	TOTALS STD ERROR
FIXED WING - CONTINUED												
TURBOJETS												
2 ENGINE	3049	130	648649	67021	2775	161	174696	24623	3049	130	823175	81736
OTHER TURBOJET	427	32	63666	13538	388	51	18347	7076	427	32	82013	17027
TOTAL TURBOJET	3476	134	712314	68374	3163	169	193043	25620	3476	134	905188	83491
ALL FIXED WING	198035	417	24502047	584954	114870	1773	3340008	146787	199215	301	27853022	647658
ROTORCRAFT												
PISTON	2522	13	533590	43269	1060	136	71191	14436	2537	3	599150	48333
TURBINE	3951	53	1567902	132183	2078	240	156093	42473	3998	0	1727431	139983
TOTAL ROTOR	6473	55	2101492	139085	3138	276	227283	44859	6535	3	2326581	148093
OTHER AIRCRAFT	5777	83	402738	46904	197	93	1975	1289	5872	52	404685	46955
TOTALS	210285	429	26830778	603089	118205	1797	3546071	153494	211622	306	30369347	666031

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	DAY - TOTAL				NIGHT - TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
FIXED WING								
PISTON - 1 ENGINE								
1-3 SEATS	58640	202	7405444	359257	19960	984	577009	74359
4+ SEATS	106792	187	13176713	430923	69443	1355	1767173	102755
TOTAL 1 ENGINE	165432	276	20582158	561035	89403	1675	2344182	126838
PISTON - 2 ENGINES								
1-6 SEATS	16107	97	2421124	140481	12678	416	823805	113945
7+ SEATS	8585	50	2125895	195009	7540	220	811414	128670
TOTAL 2 ENGINE	24692	109	4547019	240340	20217	471	1635219	171871
OTHER PISTON	143	0	33214	7459	81	11	12380	2600
TOTAL PISTON	190268	296	25162391	610393	109700	1740	3991781	213622
TURBOPROPS - 2 ENGINES								
1-12 SEATS	4733	0	1103655	76294	4451	115	352035	41110
13+ SEATS	578	0	494293	93559	551	27	142468	32085
TOTAL 2 ENGINE	5311	0	1597948	120723	5003	118	494504	52148
OTHER TURBOPRP	142	0	43162	7578	73	20	1230	461
TOTAL TURBOPRP	5453	0	1641109	120960	5076	119	495733	52150

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	DAY - TOTAL NUMBER ACTIVE AIRCRAFT	DAY - TOTAL STD ERROR	DAY - TOTAL HOURS FLOWN	DAY - TOTAL STD ERROR	NIGHT - TOTAL NUMBER ACTIVE AIRCRAFT	NIGHT - TOTAL STD ERROR	NIGHT - TOTAL HOURS FLOWN	NIGHT - TOTAL STD ERROR
FIXED WING - CONTINUED								
TURBOJETS								
2 ENGINE	3447	0	991877	66203	3316	78	348037	35754
OTHER TURBOJET	451	0	82735	14628	410	42	29765	10058
TOTAL TURBOJET	3898	0	1074612	67800	3726	88	377802	37142
ALL FIXED WING	199619	296	27878113	625945	118502	1746	4865316	223010
ROTORCRAFT								
PISTON	2527	12	534081	43266	1060	136	71191	14436
TURBINE	3951	53	1574906	131978	2087	240	160193	42526
TOTAL ROTOR	6478	55	2108987	138889	3148	276	231384	44910
OTHER AIRCRAFT	5828	66	405533	46736	197	93	1975	1289
TOTALS	211925	309	30185282	642870	121847	1770	5063890	227490

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF AIRCRAFT BASE
1983

REGION	IMC DAY				IMC NIGHT				TOTALS			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	837	248	38162	18689	548	189	37159	13204	983	268	75321	32132
CENTRAL	3407	489	170567	37184	2524	422	100229	37779	3535	499	270796	65905
EASTERN	9499	818	451424	62962	6833	694	221811	39984	9602	823	674425	97657
EUROPEAN OFFICE	288	129	33833	17783	285	129	10796	8309	288	129	44629	23380
GREAT LAKES	14045	971	709977	102783	9362	783	303784	60969	14291	980	1013690	157485
NEW ENGLAND	2484	436	124205	37368	1867	375	72459	33512	2486	436	196479	65945
NORTHWEST MT.	5452	607	235866	46311	4075	536	131523	49506	5750	625	368441	76089
SOUTHERN	15895	1016	805330	114228	11495	858	319499	58058	15969	1017	1124819	156038
SOUTHWESTERN	11739	880	366470	38769	8359	725	182194	35735	11844	884	551921	66251
WESTERN-PACIFIC	11707	902	476579	90897	7051	697	188166	50495	11951	911	664742	138091
TOTALS	74806	1567	3352432	180340	51666	1389	1519891	120532	76141	1568	4879824	268537

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF AIRCRAFT BASE
1983

	VMC DAY				VMC NIGHT				TOTALS			
REGION	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	6001	623	906673	103446	1945	347	69092	22123	6001	623	975803	114038
CENTRAL	12096	928	1237676	149234	6745	712	219614	36221	12159	930	1457290	172789
EASTERN	23092	1245	3067467	261668	14077	1008	534543	73919	23248	1249	3601451	311164
EUROPEAN OFFICE	485	163	57117	16096	149	94	3447	2280	485	163	60564	17445
GREAT LAKES	37100	1503	4060936	275809	21577	1207	548972	55668	37180	1504	4607081	308254
NEW ENGLAND	7091	718	849410	138913	4356	578	138211	31304	7096	718	987010	160960
NORTHWEST MT.	22165	1210	2630314	218440	10906	870	236708	27599	22368	1214	2872371	232196
SOUTHERN	33287	1436	4773745	330477	20892	1177	643703	56053	33617	1442	5415847	364434
SOUTHWESTERN	34111	1462	5137792	383542	18279	1110	673673	108562	34326	1466	5816749	431073
WESTERN-PACIFIC	35010	1473	4334432	208581	20688	1184	539395	51629	35242	1477	4873418	245206
TOTALS	210285	429	26830778	603089	118205	1797	3546071	153494	211622	306	30369347	666031

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY REGION OF AIRCRAFT BASE
1983

REGION	DAY - TOTAL				NIGHT - TOTAL			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ALASKAN	6001	623	944835	110478	2201	375	106251	34315
CENTRAL	12171	929	1408254	166581	6811	714	319843	59888
EASTERN	23437	1251	3523613	292893	14666	1024	755454	101249
EUROPEAN OFFICE	512	167	99275	36304	293	131	14244	8972
GREAT LAKES	37463	1507	4768767	309910	22312	1222	852067	104269
NEW ENGLAND	7100	718	972836	159845	4412	582	210289	58744
NORTHWEST MT.	22259	1212	2866192	231623	11221	882	368231	60368
SOUTHERN	33693	1443	5583151	369252	21666	1194	963769	100127
SOUTHWESTERN	34163	1462	5503805	393078	18644	1118	855867	131141
WESTERN-PACIFIC	35181	1476	4812875	229984	20955	1191	727800	94263
TOTALS	211925	309	30185282	642870	121847	1770	5063890	227490

NOTE: COULMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
OTHER 01	347	155	19757	13091	6797	81	394343	54943
OTHER 02	1032	246	19476	9871	2358	0	172752	41073
OTHER 03	66	69	8319	8665	398	0	23966	11833
OTHER 04	232	102	11058	5862	435	0	103351	51915
OTHER 05	19	7	2123	1309	40	0	8294	3410
OTHER 06	764	104	77873	23325	921	0	128441	32116
OTHER 07	307	33	242721	102965	276	43	393936	83433
OTHER 08	18	9	298	169	44	0	12916	3192
OTHER 09	1243	58	176569	34188	1136	91	277742	57301
OTHER 10	246	0	8292	9226	240	35	38534	10605
OTHER 11	0	0	0	0	422	0	7213	5342
OTHER 12	36	49	1396	1899	838	0	484976	62729
OTHER 13	92	68	2271	1851	2604	52	169094	26231
AERORSJ2	0	0	0	0	9	0	272	56
AGUSTAA109	12	3	519	150	32	0	3276	704
AIRPTSA	6	10	900	1515	135	10	16037	5326
AIRSPC18	0	0	0	0	9	0	197	37
AIRTRCAT300	0	0	0	0	362	0	131765	22096
AMD FALC10	136	0	12449	9273	118	19	22084	6519
AMD FALC20	201	0	29055	16376	201	0	60772	17152
AMD FALC50	88	0	8950	6731	71	17	6855	6319

TABLE 2 - 14

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
AMTR TMK	0	0	0	0	2	0	67	27
ARCTICS1A	0	0	0	0	37	0	2166	326
ARCTICS1B1	0	0	0	0	10	0	463	76
ARONCA15	0	0	0	0	104	0	12345	5457
ARONCA58	0	0	0	0	61	0	6411	3018
ARONCA65	0	0	0	0	76	0	2989	417
ARONCAC3	0	0	0	0	13	0	320	36
AVIANWFALCON	0	0	0	0	21	0	679	81
AYRES S2	0	0	0	0	600	0	153180	32695
AYRES S2T	0	0	0	0	58	0	17982	5598
BAG B206	21	3	598	157	24	0	2618	559
BALWKSFIREFY	0	0	0	0	1025	0	34942	5484
BEECH 17	10	3	190	109	91	1	3789	268
BEECH 18	240	19	32341	4798	441	5	115510	10722
BEECH 200	815	0	144709	36382	815	0	206564	36456
BEECH 23	734	192	61788	46949	2709	0	341336	78479
BEECH 33	1156	147	34324	27478	1594	9	211890	41477
BEECH 35	2962	352	114391	50553	6288	10	525822	36928
BEECH 36	1409	179	44674	11459	1936	0	316380	32356
BEECH 45	1	9	25	341	122	0	3163	1575
BEECH 50	0	0	0	0	190	0	17999	2059

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
BEECH 55	1993	103	175800	53746	2154	0	272296	34341
BEECH 58	1343	65	94849	14791	1422	0	321163	57296
BEECH 60	425	0	20998	4422	424	7	44396	6209
BEECH 65	77	13	4018	1428	113	5	15439	3064
BEECH 77	0	0	0	0	232	0	57363	5154
BEECH 80	116	5	8801	1349	127	0	20245	2994
BEECH 90	1070	0	107203	17300	1021	45	239634	32462
BEECH 95	228	106	3255	8057	460	0	32414	7791
BELL 204	0	0	0	0	110	0	12025	2121
BELL 206	97	69	3082	6288	2097	0	863651	92829
BELL 222	27	7	736	140	51	0	21744	2765
BELL 47	2	8	63	251	694	0	154644	26296
BLANCA11	0	0	0	0	342	0	19774	7080
BLANCA1413	2	3	10	86	118	0	4980	755
BLANCA1419	39	14	670	124	195	0	11363	3007
BLANCA17	524	145	9982	3838	870	0	69908	15208
BLANCA7	23	20	1391	407	3945	12	403333	35108
BLANCA8	0	0	0	0	566	0	89926	27834
BNORM BN2	0	0	0	0	120	0	29377	28898
BNORM BN2MK3	6	2	2383	1027	11	0	5629	1078
BOEING75	69	72	1373	0	894	72	49075	13430

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
BOEINGC97	6	0	42	7	7	0	243	31
BUKER 131	0	0	0	0	11	0	411	63
CAMRONMODELO	0	0	0	0	97	0	4848	704
CESSNA120	16	14	145	118	610	9	26253	3241
CESSNA140	70	73	546	0	1540	0	75680	12357
CESSNA150	1123	308	37302	20382	17831	0	3935457	315760
CESSNA170	147	77	2882	1175	2056	0	125478	15664
CESSNA172	8068	672	356802	54582	23019	82	3711296	294825
CESSNA175	70	42	885	1456	975	0	62619	8680
CESSNA177	1242	248	59461	30892	2828	0	396943	93527
CESSNA180	371	145	5732	6857	2019	0	249808	71035
CESSNA182	5295	502	161859	31010	12791	55	1311992	111239
CESSNA185	298	157	9557	8633	1589	0	294447	117147
CESSNA188	0	0	0	0	1625	0	311577	44097
CESSNA205	50	43	100	1325	246	0	11218	3545
CESSNA206	995	248	82665	19985	2761	102	494347	110872
CESSNA207	32	35	2202	750	279	0	105899	37790
CESSNA210	4566	305	164427	28190	5762	120	662725	63243
CESSNA305	0	0	0	0	273	0	51235	18703
CESSNA310	1863	168	129112	41830	2571	79	340961	63684
CESSNA320	228	28	7502	1498	302	13	37033	6765

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
CESSNA335	50	0	2216	584	50	0	6536	1201
CESSNA337	914	88	30827	8634	1132	18	128959	19564
CESSNA340	918	0	41720	15841	918	0	136955	25634
CESSNA401	238	0	13623	5827	238	0	52196	18661
CESSNA402	724	20	118986	26685	732	0	325923	77496
CESSNA411	110	11	4944	1403	121	0	14504	1704
CESSNA414	721	69	56203	36960	779	0	128192	35610
CESSNA421	1250	15	110787	22027	1249	18	225018	34076
CESSNA425	129	0	11152	4112	122	6	22393	4096
CESSNA441	231	0	32416	23632	231	0	45142	10955
CESSNA500	511	0	64563	16959	511	0	172427	32680
CESSNAT50	0	0	0	0	18	0	299	96
COMWTH185	0	0	0	0	33	0	1218	176
CONAERLA4	93	56	4359	7126	422	0	40600	6410
CURTISC46	21	5	2652	1068	30	0	3821	1018
CURTISTRVAIR	2	1	54	0	34	1	2464	293
CVAC 240	5	1	46	43	6	0	364	67
CVAC 340	7	0	689	374	4	2	693	233
CVAC BT13	0	0	0	0	30	0	1233	97
CVAC P4Y	0	0	0	0	6	0	218	0
DHAV DHC1	4	2	190	81	57	1	5562	1341

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
DHAV DHC2	23	5	1284	921	178	0	42128	5859
DHAV DHC3	9	4	278	0	16	0	7216	2985
DHAV DHC6	80	5	36250	20811	81	0	49144	14956
DHAVXXDH82	0	0	0	0	51	0	2814	266
DOUG A26	0	0	0	0	11	0	481	77
DOUG DC3	51	11	6464	1856	176	3	35361	5972
DOUG DC4	0	0	0	0	17	0	1415	77
DOUG DC6	20	8	2316	3913	33	0	3798	2264
DOUG DC7	11	4	1128	231	26	0	4467	1028
EAGLE DW	0	0	0	0	62	0	6535	1761
EIRVON20	0	0	0	0	97	0	6333	545
EMAIR MA1	0	0	0	0	19	0	0	0
ENSTRMF28	0	0	0	0	278	0	45348	21587
FLEET 16B	0	0	0	0	9	0	349	39
FOMOC04AT	0	0	0	0	0	0	0	0
FRCHLD24	0	0	0	0	88	0	3318	409
FRCHLDC119	17	0	134	10	17	0	1202	92
FRCHLDM62	0	0	0	0	96	0	3657	429
GLASFLH301	0	0	0	0	84	0	4772	609
GRUMAVAA1	195	118	1530	203	400	0	32360	6879
GRUMAVAA5	140	83	689	55	246	0	27542	3427

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
GRUMAVG164	0	0	0	0	656	0	92217	12252
GRUMAVTBM	0	0	0	0	10	0	324	76
GULSTM112	252	99	7959	2386	630	0	57131	10468
GULSTM500	264	32	82883	38709	308	8	41911	12933
GULSTM680	148	29	9187	2110	217	0	39589	12761
GULSTM680TP	123	0	4382	1951	123	0	6164	2357
GULSTM690TP	420	48	30511	11569	419	49	81570	18390
GULSTMAA1	10	29	294	85	441	0	30776	12943
GULSTMAA5	556	149	12311	5197	1239	0	119035	22852
GULSTMG1159	178	0	46661	18201	133	34	41543	12408
GULSTMG159	131	3	20065	3959	132	0	37752	6392
HELIO H391	0	0	0	0	10	0	348	65
HILLERFH1100	0	0	0	0	20	0	1346	245
HILLERUH12	0	0	0	0	423	0	136172	17692
HUGHES269	0	0	0	0	534	0	162573	23236
HUGHES369	0	0	0	0	582	0	287756	141069
HWKSLYDH104	0	0	0	0	0	0	0	0
HWKSLYDH114	1	0	211	0	1	0	1895	0
HWKSLYDH125	189	0	32948	14238	108	40	27056	9980
INTRCP200	4	2	147	47	28	0	1552	144
ISRAEL1124	176	0	14780	5236	176	0	33111	3949

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
JBMSTRDGA15	1	1	0	0	19	0	605	77
LAIKFN10	0	0	0	0	6	0	280	85
LEAR 35	354	0	78267	26902	327	32	76843	20696
LKHEED1329	76	0	4941	889	76	0	17372	2716
LKHEED18	0	0	0	0	17	0	622	108
LKHEEDT33	2	0	11	0	0	0	0	0
LUSCOM8	0	0	0	0	1299	0	83949	14073
MARTIN404	0	0	0	0	0	0	0	0
MAULE M5	44	33	1267	251	342	0	24590	4903
MCLISHFUNKB	0	0	0	0	63	0	2539	312
MNCOUP90	0	0	0	0	19	0	742	146
MNMITEM18	0	0	0	0	72	0	1782	271
MOONEYM20	3090	326	71552	12617	5475	0	530008	37203
MTSBSIMU2	352	0	23290	10226	266	64	46833	10358
MULTECD16	8	2	76	14	32	0	2244	209
NAMER F51	4	3	26	84	53	0	2771	483
NAMER NA260	5	3	44	4	40	0	1788	317
NAMER T6	49	16	555	301	406	4	22909	2629
NAVIONNAVION	68	57	226	0	353	0	17212	3759
NORD SV4	0	0	0	0	29	0	1031	141
NORWST65	0	0	0	0	22	0	952	98

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
ORLHELH19	0	0	0	0	13	0	2757	587
PICARDAX8	0	0	0	0	125	0	6664	2943
PIPER 600	388	0	25320	5877	388	0	66390	13729
PIPER J2	0	0	0	0	14	0	384	53
PIPER J3	0	0	0	0	2458	0	107013	20809
PIPER J4	0	0	0	0	63	0	2136	510
PIPER J5	0	0	0	0	80	0	3084	716
PIPER PA12	0	0	0	0	829	0	53677	19982
PIPER PA15	0	0	0	0	88	0	3215	1042
PIPER PA16	0	0	0	0	232	0	6923	1562
PIPER PA17	0	0	0	0	69	0	2390	184
PIPER PA18	0	0	0	0	2617	0	430891	80189
PIPER PA20	8	9	98	81	323	0	21715	3785
PIPER PA22	2	11	6	0	3201	0	279403	117682
PIPER PA23	1791	200	189385	49661	2883	48	430604	52922
PIPER PA24	1296	255	31615	7114	2953	0	256614	34582
PIPER PA25	0	0	0	0	964	0	188439	30581
PIPER PA28	8237	636	296371	42038	21077	75	2575694	210541
PIPER PA30	599	127	25990	6476	1057	0	126738	19892
PIPER PA31	1636	124	322122	119998	1965	11	508975	96639
PIPER PA31T	547	24	62900	21493	507	40	111919	21524

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
PIPER PA32	2536	280	136595	36415	3986	0	646528	111796
PIPER PA34	1805	152	156464	31463	2206	0	439354	66155
PIPER PA36	0	0	0	0	408	0	66158	20091
PIPER PA38	249	131	5858	3297	1499	0	479950	108460
PIPER PA44	225	63	57162	31630	302	0	67029	23495
PROPJT200	31	4	389	186	52	0	3343	397
RAVEN S50	0	0	0	0	37	0	1007	332
RAVEN S55	0	0	0	0	624	0	29154	4515
RKWELL700	19	0	959	173	18	2	1934	684
RKWELLNA265	337	0	35720	15604	337	0	94495	24119
ROBSINR22	3	2	83	115	167	2	69105	6297
RYAN ST3	0	0	0	0	71	0	2006	435
RYAN STA	0	0	0	0	11	0	226	22
SCWZERG164	0	0	0	0	793	0	192251	41779
SCWZERSG1	14	12	519	3052	590	0	40891	6818
SCWZERSG2	0	0	0	0	473	0	103663	25799
SEMCO CLNGER	0	0	0	0	19	0	743	95
SKRSKYS55	2	2	0	0	12	2	2165	464
SKRSKYS58	0	0	0	0	22	0	2995	560
SMITH 600	312	0	33308	0	312	0	7312	0
SNIAS 350	53	22	3066	890	227	0	78072	11883

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	IMC NUMBER ACTIVE AIRCRAFT	IMC STD ERROR	IMC HOURS FLOWN	IMC STD ERROR	VMC NUMBER ACTIVE AIRCRAFT	VMC STD ERROR	VMC HOURS FLOWN	VMC STD ERROR
STNSON10	0	0	0	0	44	0	1444	171
STNSONL5	0	0	0	0	35	0	1475	186
STNSONV77	0	0	0	0	36	0	1200	145
STOLAMRC3	2	2	7	68	83	0	3924	697
TCRAFKD	0	0	0	0	121	0	2009	633
TCRAFTA	0	0	0	0	9	0	237	35
TCRAFTBC	0	0	0	0	875	0	38785	4776
TCRAFTBL	0	0	0	0	69	0	3899	441
THUNDRAX7	1	1	94	130	40	1	1273	187
TMPSONNAVION	35	35	257	2045	514	0	94612	36549
TRYTEK65	0	0	0	0	123	0	4215	521
UNIVACGC1	41	53	1857	0	480	0	27754	9053
UNIVAR108	24	15	675	102	1154	7	58097	5147
UNIVAR415	15	38	73	142	1703	0	78074	18976
VARGA 2150	15	6	282	89	115	4	7442	1081
WACO ASO	0	0	0	0	9	0	218	42
WACO UPF7	0	0	0	0	77	0	5424	1538
WACO YK	6	2	168	0	6	2	66	113
TOTALS	76141	1568	4879824	268537	211622	306	30369347	666031

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
OTHER 01	6702	115	393279	56144	450	175	20914	9660
OTHER 02	2252	103	168801	45882	1332	246	23427	7260
OTHER 03	398	0	25704	13895	203	93	6580	7137
OTHER 04	435	0	101649	50666	296	95	12761	7126
OTHER 05	40	0	6337	2731	30	6	4080	1994
OTHER 06	921	0	137007	33303	819	87	59902	18324
OTHER 07	342	0	532238	70923	307	33	108483	26796
OTHER 08	44	0	12830	3231	18	9	375	222
OTHER 09	1307	0	332177	50165	1243	58	122134	21753
OTHER 10	248	0	42043	8777	246	0	4782	1271
OTHER 11	422	0	7202	5287	3	16	10	55
OTHER 12	838	0	452530	61835	375	120	33842	21696
OTHER 13	2572	66	169965	25950	86	66	1403	1240
AERORSJ2	9	0	272	56	0	0	0	0
AGUSTAA109	32	0	3411	700	12	3	385	118
AIRPTSA	140	0	16726	5059	11	13	211	259
AIRSPC18	9	0	197	37	0	0	0	0
AIRTRCAT300	362	0	131765	22096	0	0	0	0
AMD FALC10	136	0	25606	6747	116	20	8928	2735
AMD FALC20	201	0	62407	11085	201	0	27420	8256
AMD FALC50	88	0	10765	6323	54	21	5039	2766

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

	DAY				NIGHT			
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
AMTR TMK	2	0	67	27	0	0	0	0
ARCTICS1A	37	0	2099	300	3	1	67	32
ARCTICS1B1	10	0	463	76	0	0	0	0
ARONCA15	104	0	11869	5093	48	36	476	364
ARONCA58	61	0	6411	3018	0	0	0	0
ARONCA65	76	0	2989	417	0	0	0	0
ARONCAC3	13	0	320	36	0	0	0	0
AVIANWFALCON	21	0	679	81	0	0	0	0
AYRES S2	600	0	149035	30830	23	54	4145	9745
AYRES S2T	58	0	17745	5451	31	13	327	140
BAG B206	24	0	2658	558	24	0	559	132
BALWKSFIREFY	1025	0	34799	5481	71	61	144	124
BEECH 17	93	0	3694	242	33	5	285	60
BEECH 18	445	4	102895	9694	295	18	45322	4691
BEECH 200	815	0	272786	31202	815	0	78488	18693
BEECH 23	2709	0	329292	75306	1468	215	74335	95888
BEECH 33	1595	0	182736	19784	1175	145	63499	36287
BEECH 35	6285	18	582317	50916	4110	336	57995	20146
BEECH 36	1936	0	323008	36671	1483	170	38046	11707
BEECH 45	122	0	3173	1627	3	12	14	173
BEECH 50	190	0	17710	2355	40	48	289	1221

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
BEECH 55	2100	61	301902	29709	1884	129	146194	62307
BEECH 58	1422	0	335201	56223	1337	67	80810	13632
BEECH 60	425	0	51847	7785	387	39	13551	4572
BEECH 65	116	0	15433	2706	90	12	4466	1501
BEECH 77	232	0	54083	4455	156	63	3280	2268
BEECH 80	127	0	22423	2907	117	4	6622	1087
BEECH 90	1070	0	281505	32214	1070	0	65332	10604
BEECH 95	460	0	30877	6860	316	98	4792	5685
BELL 204	106	3	10440	1994	47	8	1495	796
BELL 206	2062	42	786142	86605	1097	163	78250	25407
BELL 222	51	0	20721	2609	41	5	1758	300
BELL 47	692	8	142614	24650	318	70	12009	11683
BLANCA11	342	0	19774	7080	0	0	0	0
BLANCA1413	118	0	4575	725	58	11	415	428
BLANCA1419	193	4	11100	2961	81	18	877	169
BLANCA17	870	0	72021	15987	314	142	7869	1904
BLANCA7	3940	16	392300	33982	873	111	12433	2625
BLANCA8	566	0	88642	27585	202	88	1284	2229
BNORM BN2	120	0	25842	22825	25	39	3535	1515
BNORM BN2MK3	11	0	6085	1739	6	2	1927	66
BOEING75	877	79	44429	14426	88	80	6004	986

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY NUMBER ACTIVE AIRCRAFT	DAY STD ERROR	DAY HOURS FLOWN	DAY STD ERROR	NIGHT NUMBER ACTIVE AIRCRAFT	NIGHT STD ERROR	NIGHT HOURS FLOWN	NIGHT STD ERROR
BOEINGC97	7	0	144	29	4	1	141	86
BUKER 131	11	0	411	63	0	0	0	0
CAMRONMODELO	97	0	4800	694	17	7	48	482
CESSNA120	612	8	25411	2965	139	38	987	1385
CESSNA140	1540	0	70649	11001	696	176	5577	1783
CESSNA150	17825	23	3652766	295249	11473	607	321398	32610
CESSNA170	2016	41	119612	15384	1146	149	8747	1993
CESSNA172	22992	95	3625067	292363	15133	670	438616	48029
CESSNA175	975	0	55803	6659	581	81	7701	3379
CESSNA177	2824	18	374276	77535	1819	239	82128	31640
CESSNA180	1952	67	235241	69194	929	187	20299	8727
CESSNA182	12824	19	1298114	109673	8010	494	175894	24029
CESSNA185	1589	0	292260	117215	611	196	11744	10352
CESSNA188	1454	120	282382	47581	350	162	35015	10714
CESSNA205	246	0	10494	3444	145	53	824	1175
CESSNA206	2874	0	532277	111466	1536	260	44879	12293
CESSNA207	279	0	95184	33539	178	52	12976	9204
CESSNA210	5929	0	695871	56715	4777	287	131246	36039
CESSNA305	273	0	50975	18844	77	68	260	1993
CESSNA310	2658	49	329305	56747	1938	164	144888	48675
CESSNA320	318	0	37517	6894	223	26	6975	1756

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY NUMBER ACTIVE AIRCRAFT	DAY STD ERROR	DAY HOURS FLOWN	DAY STD ERROR	NIGHT NUMBER ACTIVE AIRCRAFT	NIGHT STD ERROR	NIGHT HOURS FLOWN	NIGHT STD ERROR
CESSNA335	50	0	7351	1256	48	2	1402	432
CESSNA337	1136	13	129345	19321	979	77	30441	10223
CESSNA340	918	0	146804	21850	918	0	31870	9231
CESSNA401	238	0	46937	15497	238	0	18882	8483
CESSNA402	732	0	299904	73528	732	0	145002	58529
CESSNA411	121	0	14800	1768	110	11	4662	1094
CESSNA414	779	0	152328	42862	721	69	32067	12566
CESSNA421	1253	0	250952	35216	1238	33	84854	16124
CESSNA425	129	0	25420	4802	123	6	8124	3342
CESSNA441	231	0	60253	20431	193	43	17305	10128
CESSNA500	511	0	176807	24338	511	0	60183	15048
CESSNAT50	18	0	293	101	6	5	6	333
COMWTH185	33	0	1164	150	3	2	54	137
CONAERLA4	422	0	41218	7913	292	63	3742	7470
CURTISC46	30	0	5187	1574	22	5	1285	534
CURTISTRVAIR	36	0	2518	297	0	0	0	0
CVAC 240	6	0	337	76	5	1	68	16
CVAC 340	7	0	930	170	7	0	452	80
CVAC BT13	30	0	1229	97	5	1	4	0
CVAC P4Y	6	0	218	0	0	0	0	0
DHAV DHC1	59	0	5730	1303	11	3	122	47

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
DHAV DHC2	178	0	42707	5878	46	8	717	514
DHAV DHC3	16	0	6242	2558	9	4	1251	3
DHAV DHC6	81	0	57810	16533	80	5	27695	15555
DHAVXXDH82	51	0	2814	266	0	0	0	0
DOUG A26	11	0	461	75	4	1	20	21
DOUG DC3	163	7	35977	6613	60	12	6051	1299
DOUG DC4	17	0	1393	96	10	4	38	563
DOUG DC6	33	0	3832	2253	11	8	2281	2770
DOUG DC7	26	0	3700	809	14	4	1895	528
EAGLE DW	62	0	6535	1761	0	0	0	0
EIRVON20	97	0	6333	545	0	0	0	0
EMAIR MA1	19	0	0	0	0	0	0	0
ENSTRMF28	278	0	26595	9362	154	81	18753	17812
FLEET 16B	5	2	248	221	4	2	101	207
FOMOC04AT	0	0	0	0	0	0	0	0
FRCHLD24	85	2	3118	404	7	3	201	41
FRCHLDC119	17	0	1163	128	17	0	172	26
FRCHLDM62	93	2	3550	414	9	3	107	308
GLASFLH301	84	0	4772	609	0	0	0	0
GRUMAVAA1	400	0	30298	6286	364	67	3592	1657
GRUMAVAA5	246	0	27780	2729	110	84	451	4176

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY NUMBER ACTIVE AIRCRAFT	DAY STD ERROR	DAY HOURS FLOWN	DAY STD ERROR	NIGHT NUMBER ACTIVE AIRCRAFT	NIGHT STD ERROR	NIGHT HOURS FLOWN	NIGHT STD ERROR
GRUMAVG164	656	0	92217	12252	0	0	0	0
GRUMAVTBM	10	0	324	76	0	0	0	0
GULSTM112	630	0	59787	11553	450	91	5303	1943
GULSTM500	248	36	36275	10351	282	26	77077	35132
GULSTM680	187	21	22407	6287	111	31	26913	7872
GULSTM680TP	123	0	7920	980	123	0	2625	1146
GULSTM690TP	476	0	89532	17419	420	48	22549	3819
GULSTMAA1	441	0	28306	11158	291	94	2750	2162
GULSTMAA5	1239	0	121194	23738	851	139	10152	3178
GULSTMG1159	178	0	60377	7105	178	0	27827	9246
GULSTMG159	132	0	39399	5385	131	3	18418	5667
HELIO H391	10	0	339	62	3	1	10	23
HILLERFH1100	20	0	1330	238	2	2	17	127
HILLERUH12	423	0	131079	17476	110	30	5020	1643
HUGHES269	521	12	130977	16300	339	38	36935	9316
HUGHES369	582	0	230503	95358	238	191	57252	29883
HWKSLYDH104	0	0	0	0	0	0	0	0
HWKSLYDH114	1	0	1832	0	1	0	274	0
HWKSLYDH125	189	0	47630	11346	158	30	12372	4525
INTRCP200	27	1	1537	320	13	2	180	98
ISRAEL1124	176	0	38107	2692	176	0	9785	2745

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
JBMSTRDGA15	19	0	591	74	4	2	14	197
LAIKFN10	6	0	280	85	0	0	0	0
LEAR 35	354	0	112020	22082	354	0	42501	10560
LKHEED1329	76	0	15998	2483	76	0	6316	2289
LKHEED18	17	0	570	133	11	5	51	424
LKHEEDT33	2	0	11	0	0	0	0	0
LUSCOM8	1258	40	82030	16417	178	78	1936	4402
MARTIN404	0	0	0	0	0	0	0	0
MAULE M5	342	0	23791	4668	212	47	2066	716
MCLISHFUNKB	63	0	2518	311	5	2	22	298
MNCOUP90	19	0	740	144	3	2	3	153
MNMITEM18	72	0	1772	260	1	3	10	16
MOONEYM20	5475	0	516848	38700	4644	236	85459	11050
MTSBSIMU2	352	0	45056	15100	352	0	25067	5840
MULTECD16	32	0	2159	200	17	3	175	24
NAMER F51	53	0	2782	491	1	2	15	17
NAMER NA260	40	0	1810	314	5	3	22	13
NAMER T6	403	6	22410	2590	81	19	1029	375
NAVIONNAVION	353	0	16759	3256	106	66	679	519
NORD SV4	29	0	1029	141	1	1	2	18
NORWST65	22	0	952	98	0	0	0	0

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY				NIGHT			
	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS FLOWN	STD ERROR
ORLHELH19	13	0	2585	527	5	2	171	39
PICARDAX6	125	0	6664	2943	0	0	0	0
PIPER 600	388	0	74670	14310	319	47	17040	4161
PIPER J2	14	0	384	53	0	0	0	0
PIPER J3	2456	11	106955	20822	7	21	59	135
PIPER J4	63	0	2136	510	0	0	0	0
PIPER J5	80	0	3084	716	0	0	0	0
PIPER PA12	829	0	50297	20206	302	131	3380	4695
PIPER PA15	88	0	3215	1042	0	0	0	0
PIPER PA16	232	0	6808	1532	33	27	108	1435
PIPER PA17	69	0	2378	185	6	3	11	5
PIPER PA18	2617	0	420068	80521	559	185	10816	5098
PIPER PA20	323	0	21471	3736	76	26	343	232
PIPER PA22	3201	0	255379	105744	1204	268	25576	12000
PIPER PA23	2891	43	429487	54147	2034	189	190209	53233
PIPER PA24	2953	0	260613	32671	1626	255	27069	5136
PIPER PA25	964	0	188439	30581	0	0	0	0
PIPER PA28	21047	90	2510070	226987	14488	618	361993	33486
PIPER PA30	1057	0	124604	17659	656	124	28125	9011
PIPER PA31	1987	0	581049	113906	1576	133	240304	67507
PIPER PA31T	567	0	120662	21021	495	43	54157	16832

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY NUMBER ACTIVE AIRCRAFT	DAY STD ERROR	DAY HOURS FLOWN	DAY STD ERROR	NIGHT NUMBER ACTIVE AIRCRAFT	NIGHT STD ERROR	NIGHT HOURS FLOWN	NIGHT STD ERROR
PIPER PA32	3986	0	661446	94818	3029	248	121639	25560
PIPER PA34	2206	0	438574	58114	2005	113	157245	31361
PIPER PA36	404	18	65189	20136	18	38	968	860
PIPER PA38	1499	0	396062	72353	1085	157	89746	49959
PIPER PA44	302	0	102266	46380	261	49	21925	12530
PROPJT200	52	0	3261	369	38	4	471	135
RAVEN S50	37	0	1007	332	0	0	0	0
RAVEN S55	621	6	29107	4641	3	6	48	709
RKWELL700	19	0	2178	453	19	0	715	179
RKWELLNA265	337	0	109423	20191	337	0	20792	6310
ROBSINR22	169	0	64865	5967	105	8	4323	787
RYAN ST3	71	0	2006	435	0	0	0	0
RYAN STA	11	0	226	22	0	0	0	0
SCWZERG164	793	0	192251	41779	0	0	0	0
SCWZERSG1	583	8	41161	7380	7	8	323	702
SCWZERSG2	472	7	103610	25806	1	7	54	83
SEMCO CLNGER	19	0	733	95	2	1	11	0
SKRSKYS55	14	0	2339	455	9	2	165	87
SKRSKYS58	22	0	2986	563	3	2	9	92
SMITH 600	312	0	36558	0	312	0	4062	0
SNIAS 350	224	5	70257	10371	186	20	10882	2879

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	DAY NUMBER ACTIVE AIRCRAFT	DAY STD ERROR	DAY HOURS FLOWN	DAY STD ERROR	NIGHT NUMBER ACTIVE AIRCRAFT	NIGHT STD ERROR	NIGHT HOURS FLOWN	NIGHT STD ERROR
STNSON10	42	2	1427	172	6	3	19	4
STNSONL5	35	0	1442	174	6	2	33	11
STNSONV77	36	0	1168	138	7	2	33	3
STOLAMRC3	82	2	3741	676	14	5	184	246
TCRAFKD	121	0	2009	633	0	0	0	0
TCRAFTA	9	0	237	35	0	0	0	0
TCRAFTBC	873	5	38407	4790	15	14	369	389
TCRAFTBL	69	0	3899	441	0	0	0	0
THUNDRAX7	38	2	1359	296	4	2	8	27
TMPSONNAVION	514	0	91912	36692	208	69	2956	4172
TRYTEK65	123	0	4210	521	2	3	5	9
UNIVACGC1	480	0	28303	9704	294	93	1931	1774
UNIVAR108	1159	0	55050	4610	315	48	3706	685
UNIVAR415	1703	0	72417	19324	186	121	5730	2734
VARGA 2150	121	0	7346	1045	34	8	354	107
WACO ASO	9	0	218	42	0	0	0	0
WACO UPF7	75	4	5160	1557	3	4	263	85
WACO YK	12	0	234	39	0	0	0	0
TOTALS	211925	309	30185282	642870	121847	1770	5063890	227490

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS												
ESTIMATED POPULATION	39279	17659	9503	29663	21977	3690	62244	13898	7725	4730	230	69205
% STANDARD ERROR	A	A	A	A	A	B	A	A	A	B	D	A
ESTIMATED % OF TYPE	46.6	21.0	11.3	35.2	26.1	4.4	73.9	16.5	9.2	5.6	0.3	82.2
1 ENG: 4+ SEATS												
ESTIMATED POPULATION	58753	66521	84853	4115	102895	47742	16654	86495	84083	73021	440	28125
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF TYPE	49.1	55.6	71.0	3.4	86.1	39.9	13.9	72.4	70.3	61.1	0.4	23.5
1 ENGINE: TOTAL												
ESTIMATED POPULATION	98032	84180	94356	33778	124872	51432	78898	100393	91808	77751	670	97330
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF TYPE	48.1	41.3	46.3	16.6	61.3	25.2	38.7	49.3	45.1	38.2	0.3	47.8
2 ENG: 1-6 SEATS												
ESTIMATED POPULATION	6438	13897	16356	349	18099	14640	592	17952	17767	17028	77	709
% STANDARD ERROR	A	A	A	D	A	A	C	A	A	A	D	C
ESTIMATED % OF TYPE	34.4	74.3	87.5	1.9	96.8	78.3	3.2	96.0	95.1	91.1	0.4	3.8
2 ENG: 7+ SEATS												
ESTIMATED POPULATION	3255	7507	8545	396	9435	8521	695	9469	9360	9368	23	589
% STANDARD ERROR	A	A	A	B	A	A	B	A	A	A	D	B
ESTIMATED % OF TYPE	32.1	74.1	84.4	3.9	93.1	84.1	6.9	93.5	92.4	92.5	0.2	5.8

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL												
ESTIMATED POPULATION	9693	21404	24901	745	27533	23161	1288	27421	27127	26396	100	1298
% STANDARD ERROR	A	A	A	C	A	A	B	A	A	A	D	B
ESTIMATED % OF TYPE	33.6	74.3	86.4	2.6	95.5	80.4	4.5	95.1	94.1	91.6	0.3	4.5
PISTON: OTHER												
ESTIMATED POPULATION	88	206	196	42	254	129	73	226	222	217	0	101
% STANDARD ERROR	B	A	A	D	A	B	C	A	A	A	A	B
ESTIMATED % OF TYPE	26.8	63.1	59.8	12.9	77.8	39.6	22.2	69.0	67.9	66.4	0.0	31.0
PISTON: TOTAL												
ESTIMATED POPULATION	107812	105790	119453	34565	152659	74722	80259	128040	119157	104364	769	98730
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF TYPE	46.3	45.4	51.3	14.8	65.5	32.1	34.5	55.0	51.2	44.8	0.3	42.4
FIXED WING-TURBOPROP												
2 ENG: 1-12 SEATS												
ESTIMATED POPULATION	754	4518	4572	9	4867	4778	1	4830	4830	4764	44	38
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	15.5	92.8	93.9	0.2	100.0	98.1	0.0	99.2	99.2	97.9	0.9	0.8
2 ENG: 13+ SEATS												
ESTIMATED POPULATION	25	635	608	8	660	564	8	640	640	640	0	28
% STANDARD ERROR	D	A	A	D	A	A	D	A	A	A	A	D
ESTIMATED % OF TYPE	3.8	94.9	90.8	1.1	98.7	84.2	1.1	95.7	95.7	95.7	0.0	4.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL												
ESTIMATED POPULATION	779	5153	5180	16	5527	5341	9	5470	5470	5404	44	66
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	14.1	93.1	93.5	0.3	99.8	96.5	0.2	98.8	98.8	97.6	0.8	1.2
TURBOPROP: OTHER												
ESTIMATED POPULATION	68	48	87	99	87	64	117	93	80	87	19	111
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF TYPE	33.5	23.7	42.4	48.7	42.4	31.5	57.6	45.5	39.1	42.4	9.2	54.5
TURBOPROP: TOTAL												
ESTIMATED POPULATION	847	5202	5266	115	5614	5405	126	5563	5550	5490	63	177
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	14.8	90.6	91.7	2.0	97.8	94.2	2.2	96.9	96.7	95.6	1.1	3.1
FIXED WING-TURBOJET												
2 ENGINE TURBOJET												
ESTIMATED POPULATION	326	3343	3335	89	3608	3516	47	3655	3655	3583	207	0
% STANDARD ERROR	D	A	A	D	A	A	D	A	A	A	D	A
ESTIMATED % OF TYPE	8.9	91.5	91.3	2.4	98.7	96.2	1.3	100.0	100.0	98.0	5.7	0.0
TURBOJET: OTHER												
ESTIMATED POPULATION	41	648	627	32	679	668	41	681	679	676	0	39
% STANDARD ERROR	D	A	A	D	A	A	D	A	A	A	A	D
ESTIMATED % OF TYPE	5.8	90.0	87.0	4.5	94.3	92.8	5.7	94.6	94.3	94.0	0.0	5.4

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
TURBOJET: TOTAL												
ESTIMATED POPULATION	367	3990	3962	122	4287	4184	88	4336	4334	4260	207	39
% STANDARD ERROR	D	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	8.4	91.2	90.6	2.8	98.0	95.6	2.0	99.1	99.1	97.4	4.7	0.9
FIXED WING: TOTAL												
ESTIMATED POPULATION	109027	114982	128681	34802	162560	84311	80473	137939	129041	114114	1039	98945
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF TYPE	44.9	47.3	52.9	14.3	66.9	34.7	33.1	56.8	53.1	47.0	0.4	40.7
ROTORCRAFT												
PISTON												
ESTIMATED POPULATION	1516	1078	381	2861	1024	76	4389	189	16	74	0	5222
% STANDARD ERROR	B	B	C	A	B	D	A	D	D	D	A	A
ESTIMATED % OF TYPE	28.0	19.9	7.0	52.8	18.9	1.4	81.1	3.5	0.3	1.4	0.0	96.5
TURBINE												
ESTIMATED POPULATION	798	3674	2435	267	3503	1580	1077	1937	1225	1356	2	2643
% STANDARD ERROR	C	A	B	D	A	B	B	B	B	B	D	A
ESTIMATED % OF TYPE	17.4	80.2	53.1	5.8	76.4	34.5	23.5	42.3	26.7	29.6	0.0	57.7
ROTORCRAFT: TOTAL												
ESTIMATED POPULATION	2313	4752	2816	3128	4527	1656	5466	2127	1241	1431	2	7864
% STANDARD ERROR	B	A	A	A	A	B	A	B	B	B	D	A
ESTIMATED % OF TYPE	23.1	47.5	28.2	31.3	45.3	16.6	54.7	21.3	12.4	14.3	0.0	78.7

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
OTHER												
ESTIMATED POPULATION	2475	1137	149	3906	288	60	7188	33	0	0	0	7443
% STANDARD ERROR	B	B	D	A	D	D	A	D	A	A	A	A
ESTIMATED % OF TYPE	33.1	15.2	2.0	52.3	3.9	0.8	96.1	0.4	0.0	0.0	0.0	99.6
TOTAL												
ESTIMATED POPULATION	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
FIXED WING											
FIXED WING - PISTON											
1 ENG: 1-3 SEATS											
ESTIMATED POPULATION	29638	20291	9215	7671	2307	817	450	311	92	144	35876
% STANDARD ERROR	A	A	A	A	B	C	D	D	D	D	A
ESTIMATED % OF TYPE	35.2	24.1	10.9	9.1	2.7	1.0	0.5	0.4	0.1	0.2	42.6
1 ENG: 4+ SEATS											
ESTIMATED POPULATION	42648	77916	89188	85681	47422	10835	2876	5724	3608	807	4370
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	B
ESTIMATED % OF TYPE	35.7	65.2	74.6	71.7	39.7	9.1	2.4	4.8	3.0	0.7	3.7
1 ENGINE: TOTAL											
ESTIMATED POPULATION	72286	98207	98403	93352	49729	11652	3326	6035	3701	951	40246
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	A
ESTIMATED % OF TYPE	35.5	48.2	48.3	45.8	24.4	5.7	1.6	3.0	1.8	0.5	19.8
2 ENG: 1-6 SEATS											
ESTIMATED POPULATION	5517	14033	17176	17341	15728	7106	872	5578	3815	994	341
% STANDARD ERROR	A	A	A	A	A	A	C	A	B	C	D
ESTIMATED % OF TYPE	29.5	75.1	91.9	92.8	84.1	38.0	4.7	29.8	20.4	5.3	1.8
2 ENG: 7+ SEATS											
ESTIMATED POPULATION	2343	7926	9010	9279	8768	4485	428	3429	3023	853	456
% STANDARD ERROR	B	A	A	A	A	A	D	A	B	C	B
ESTIMATED % OF TYPE	23.1	78.2	88.9	91.6	86.6	44.3	4.2	33.9	29.8	8.4	4.5

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
2 ENGINE: TOTAL											
ESTIMATED POPULATION	7859	21959	26186	26620	24496	11591	1300	9007	6838	1847	797
% STANDARD ERROR	A	A	A	A	A	A	B	A	A	B	B
ESTIMATED % OF TYPE	27.3	76.2	90.9	92.4	85.0	40.2	4.5	31.3	23.7	6.4	2.8
PISTON: OTHER											
ESTIMATED POPULATION	40	254	210	226	135	31	18	11	40	0	44
% STANDARD ERROR	D	A	A	A	B	D	D	D	D	A	C
ESTIMATED % OF TYPE	12.2	77.6	64.2	69.2	41.1	9.6	5.5	3.4	12.4	0.0	13.5
PISTON: TOTAL											
ESTIMATED POPULATION	80185	120420	124799	120198	74359	23274	4644	15054	10579	2798	41088
% STANDARD ERROR	A	A	A	A	A	A	B	A	A	B	A
ESTIMATED % OF TYPE	34.4	51.7	53.6	51.6	31.9	10.0	2.0	6.5	4.5	1.2	17.6
FIXED WING-TURBOPROP											
2 ENG: 1-12 SEATS											
ESTIMATED POPULATION	349	4524	4735	4756	4798	3844	610	4402	4208	339	0
% STANDARD ERROR	D	A	A	A	A	A	C	A	A	D	A
ESTIMATED % OF TYPE	7.2	92.9	97.3	97.7	98.6	79.0	12.5	90.4	86.4	7.0	0.0
2 ENG: 13+ SEATS											
ESTIMATED POPULATION	35	605	640	659	603	311	141	302	421	46	8
% STANDARD ERROR	D	A	A	A	A	C	D	C	B	D	D
ESTIMATED % OF TYPE	5.2	90.5	95.7	98.5	90.2	46.5	21.0	45.2	63.0	6.8	1.1

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
2 ENGINE: TOTAL											
ESTIMATED POPULATION	383	5129	5375	5415	5402	4156	751	4704	4629	385	8
% STANDARD ERROR	D	A	A	A	A	A	C	A	A	D	D
ESTIMATED % OF TYPE	6.9	92.6	97.1	97.8	97.6	75.1	13.6	85.0	83.6	6.9	0.1
TURBOPROP: OTHER											
ESTIMATED POPULATION	63	47	76	93	71	8	10	55	17	9	103
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF TYPE	31.0	22.8	37.3	45.5	34.6	3.8	5.0	26.8	8.5	4.2	50.6
TURBOPROP: TOTAL											
ESTIMATED POPULATION	447	5176	5451	5508	5472	4163	761	4759	4647	393	111
% STANDARD ERROR	C	A	A	A	A	A	C	A	A	D	D
ESTIMATED % OF TYPE	7.8	90.2	95.0	95.9	95.3	72.5	13.3	82.9	80.9	6.8	1.9
FIXED WING-TURBOJET											
2 ENGINE TURBOJET											
ESTIMATED POPULATION	359	3443	3560	3560	3608	1929	2343	3595	3546	942	47
% STANDARD ERROR	D	A	A	A	A	B	A	A	A	B	D
ESTIMATED % OF TYPE	9.8	94.2	97.4	97.4	98.7	52.8	64.1	98.4	97.0	25.8	1.3
TURBOJET: OTHER											
ESTIMATED POPULATION	54	627	627	681	679	235	567	666	602	244	35
% STANDARD ERROR	D	A	A	A	A	D	B	A	B	D	D
ESTIMATED % OF TYPE	7.5	87.1	87.1	94.6	94.3	32.7	78.8	92.5	83.6	34.0	4.8

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
TURBOJET: TOTAL											
ESTIMATED POPULATION	413	4071	4188	4241	4287	2164	2911	4261	4148	1187	81
% STANDARD ERROR	D	A	A	A	A	B	A	A	A	B	D
ESTIMATED % OF TYPE	9.4	93.0	95.7	96.9	98.0	49.5	66.5	97.4	94.8	27.1	1.9
FIXED WING: TOTAL											
ESTIMATED POPULATION	81045	129667	134438	129947	84119	29602	8316	24073	19374	4378	41280
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF TYPE	33.3	53.4	55.3	53.5	34.6	12.2	3.4	9.9	8.0	1.8	17.0
ROTORCRAFT											
PISTON											
ESTIMATED POPULATION	346	189	19	121	0	2	52	0	4	2	4769
% STANDARD ERROR	C	D	D	D	A	D	D	A	D	D	A
ESTIMATED % OF TYPE	6.4	3.5	0.3	2.2	0.0	0.0	1.0	0.0	0.1	0.0	88.1
TURBINE											
ESTIMATED POPULATION	1126	2550	1249	2947	1322	913	1026	106	590	9	587
% STANDARD ERROR	B	A	B	A	B	C	C	D	C	D	C
ESTIMATED % OF TYPE	24.6	55.6	27.3	64.3	28.8	19.9	22.4	2.3	12.9	0.2	12.8
ROTORCRAFT: TOTAL											
ESTIMATED POPULATION	1472	2739	1268	3068	1322	916	1078	106	594	11	5356
% STANDARD ERROR	B	A	B	A	B	C	C	D	C	D	A
ESTIMATED % OF TYPE	14.7	27.4	12.7	30.7	13.2	9.2	10.8	1.1	5.9	0.1	53.6

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1983

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
OTHER											
ESTIMATED POPULATION	72	112	14	37	24	57	0	0	5	61	7179
% STANDARD ERROR	D	D	D	D	D	D	A	A	D	D	A
ESTIMATED % OF TYPE	1.0	1.5	0.2	0.5	0.3	0.8	0.0	0.0	0.1	0.8	96.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
ALABAMA												
ESTIMATED POPULATION	1111	1549	1775	690	2218	1150	855	1734	1599	1453	0	1339
% STANDARD ERROR	C	C	B	D	B	C	C	B	C	C	A	C
ESTIMATED % OF STATE	37.2	51.9	59.4	23.1	74.3	38.5	28.6	58.1	53.5	48.6	0.0	44.8
ALASKA												
ESTIMATED POPULATION	4364	2520	2159	934	2877	580	4688	2474	2141	1975	0	4854
% STANDARD ERROR	B	B	B	C	B	D	B	B	B	B	A	B
ESTIMATED % OF STATE	57.5	33.2	28.5	12.3	37.9	7.6	61.8	32.6	28.2	26.0	0.0	64.0
ARIZONA												
ESTIMATED POPULATION	1532	3386	3135	1121	3928	2015	1910	2947	2925	2512	0	2699
% STANDARD ERROR	C	B	B	C	B	B	B	B	B	B	A	B
ESTIMATED % OF STATE	24.0	53.1	49.1	17.6	61.6	31.6	29.9	46.2	45.8	39.4	0.0	42.3
ARKANSAS												
ESTIMATED POPULATION	1277	970	1415	826	1672	726	1224	1341	1480	1227	5	1402
% STANDARD ERROR	C	C	C	D	C	C	C	C	C	C	D	C
ESTIMATED % OF STATE	41.3	31.4	45.8	26.7	54.1	23.5	39.6	43.4	47.9	39.7	0.2	45.4
CALIFORNIA												
ESTIMATED POPULATION	15057	17709	18119	4826	24394	13249	10904	20413	19075	16393	91	13719
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	43.2	50.8	52.0	13.9	70.0	38.0	31.3	58.6	54.8	47.1	0.3	39.4

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
COLORADO												
ESTIMATED POPULATION	3048	2293	2619	559	3472	1521	2053	2604	2316	1954	157	2528
% STANDARD ERROR	B	B	B	D	B	C	B	B	B	B	D	B
ESTIMATED % OF STATE	56.0	42.1	48.1	10.3	63.8	28.0	37.7	47.8	42.6	35.9	2.9	46.5
CONNECTICUT												
ESTIMATED POPULATION	692	725	963	366	987	426	775	956	944	933	0	740
% STANDARD ERROR	D	D	C	D	C	D	C	C	C	C	A	C
ESTIMATED % OF STATE	36.6	38.3	50.9	19.3	52.2	22.5	41.0	50.5	49.9	49.3	0.0	39.1
DELAWARE												
ESTIMATED POPULATION	254	567	686	87	723	433	126	694	662	591	0	155
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	29.2	65.3	79.0	10.0	83.2	49.8	14.5	79.9	76.3	68.0	0.0	17.8
DC												
ESTIMATED POPULATION	1	59	60	1	60	58	1	59	60	59	0	1
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	2.0	97.7	99.6	2.0	99.6	96.0	2.0	97.7	99.6	97.7	0.0	2.0
FLORIDA												
ESTIMATED POPULATION	6640	7491	7813	1967	10662	5783	4409	9004	8578	7214	0	5601
% STANDARD ERROR	A	A	A	B	A	B	B	A	A	A	A	B
ESTIMATED % OF STATE	45.0	50.8	53.0	13.3	72.3	39.2	29.9	61.1	58.2	48.9	0.0	38.0

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
GEORGIA												
ESTIMATED POPULATION	2086	3020	2954	1025	3882	1894	1938	3314	2686	2642	6	2486
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	36.9	53.5	52.3	18.1	68.7	33.5	34.3	58.7	47.5	46.8	0.1	44.0
HAWAII												
ESTIMATED POPULATION	251	231	175	66	440	82	104	225	160	161	0	313
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	42.9	39.5	29.9	11.3	75.3	14.1	17.8	38.6	27.4	27.6	0.0	53.6
IDAHO												
ESTIMATED POPULATION	1004	1128	962	455	1503	853	1031	1192	1042	1095	0	1327
% STANDARD ERROR	C	C	C	D	C	C	C	C	C	C	A	C
ESTIMATED % OF STATE	37.6	42.2	36.0	17.0	56.3	31.9	38.6	44.7	39.0	41.0	0.0	49.7
ILLINOIS												
ESTIMATED POPULATION	3789	4771	5583	1441	6691	3174	2665	5556	5056	4465	76	3708
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	40.3	50.7	59.4	15.3	71.2	33.8	28.3	59.1	53.8	47.5	0.8	39.4
INDIANA												
ESTIMATED POPULATION	2184	2434	2731	627	3229	1698	1525	2929	2781	2328	0	1672
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A	B
ESTIMATED % OF STATE	46.2	51.4	57.7	13.3	68.2	35.9	32.2	61.9	58.8	49.2	0.0	35.3

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
IOWA												
ESTIMATED POPULATION	1766	1563	2111	811	2250	938	1646	2200	1946	1621	67	1553
% STANDARD ERROR	C	C	B	C	B	C	C	B	B	C	D	C
ESTIMATED % OF STATE	45.6	40.4	54.5	20.9	58.1	24.2	42.5	56.8	50.3	41.9	1.7	40.1
KANSAS												
ESTIMATED POPULATION	1956	2489	2568	848	3174	1492	1799	2753	2710	2347	0	1980
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A	B
ESTIMATED % OF STATE	38.7	49.3	50.8	16.8	62.8	29.5	35.6	54.5	53.7	46.5	0.0	39.2
KENTUCKY												
ESTIMATED POPULATION	897	1159	1065	269	1402	736	733	1178	1104	930	0	920
% STANDARD ERROR	C	C	C	D	C	C	C	C	C	C	A	C
ESTIMATED % OF STATE	42.6	55.0	50.5	12.7	66.5	34.9	34.8	55.9	52.4	44.1	0.0	43.7
LOUISIANA												
ESTIMATED POPULATION	1402	2719	2197	813	3347	1579	1305	2211	2007	1909	0	2435
% STANDARD ERROR	C	B	B	D	B	C	C	B	B	B	A	B
ESTIMATED % OF STATE	31.2	60.5	48.9	18.1	74.5	35.2	29.1	49.2	44.7	42.5	0.0	54.2
MAINE												
ESTIMATED POPULATION	619	524	484	395	675	349	729	501	499	354	4	864
% STANDARD ERROR	D	D	D	D	D	D	C	D	D	D	D	C
ESTIMATED % OF STATE	43.8	37.1	34.3	27.9	47.8	24.7	51.6	35.4	35.3	25.1	0.3	61.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
MARYLAND												
ESTIMATED POPULATION	1621	1652	2100	550	2646	1545	959	2163	1937	1718	0	1348
% STANDARD ERROR	C	C	B	D	B	C	C	B	B	C	A	C
ESTIMATED % OF STATE	46.2	47.1	59.9	15.7	75.4	44.1	27.4	61.7	55.2	49.0	0.0	38.4
MASSACHUSETTS												
ESTIMATED POPULATION	1511	1557	1786	594	2035	1190	1346	1973	1798	1532	0	1405
% STANDARD ERROR	C	C	C	D	B	C	C	B	C	C	A	C
ESTIMATED % OF STATE	45.3	46.7	53.5	17.8	61.0	35.7	40.3	59.1	53.9	45.9	0.0	42.1
MICHIGAN												
ESTIMATED POPULATION	4450	3526	4184	1403	4819	2473	3834	4044	3961	2901	93	4143
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	51.1	40.5	48.0	16.1	55.3	28.4	44.0	46.4	45.5	33.3	1.1	47.6
MINNESOTA												
ESTIMATED POPULATION	2448	2173	2328	1457	3044	1209	2869	2470	2194	2003	0	3353
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A	B
ESTIMATED % OF STATE	42.7	37.9	40.6	25.4	53.1	21.1	50.0	43.0	38.2	34.9	0.0	58.4
MISSISSIPPI												
ESTIMATED POPULATION	1009	1409	1219	598	1964	1176	964	1504	1454	1371	0	1381
% STANDARD ERROR	C	C	C	D	B	C	C	C	C	C	A	C
ESTIMATED % OF STATE	34.6	48.3	41.8	20.5	67.3	40.3	33.0	51.6	49.8	47.0	0.0	47.3

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
MISSOURI												
ESTIMATED POPULATION	2171	2302	2087	622	2630	1122	1940	2279	1834	1688	25	2196
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	C	D	B
ESTIMATED % OF STATE	45.7	48.5	43.9	13.1	55.4	23.6	40.8	48.0	38.6	35.6	0.5	46.2
MONTANA												
ESTIMATED POPULATION	1350	1189	995	565	1782	533	1313	882	1092	847	0	1977
% STANDARD ERROR	C	C	C	D	C	D	C	C	C	C	A	B
ESTIMATED % OF STATE	44.5	39.2	32.8	18.6	58.8	17.6	43.3	29.1	36.0	27.9	0.0	65.2
NEBRASKA												
ESTIMATED POPULATION	706	314	487	346	711	160	649	465	369	229	0	752
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	C
ESTIMATED % OF STATE	53.9	24.0	37.2	26.4	54.3	12.2	49.6	35.5	28.2	17.5	0.0	57.5
NEVADA												
ESTIMATED POPULATION	1329	1135	1573	385	1863	1336	868	1817	1787	1727	0	910
% STANDARD ERROR	C	C	C	D	B	C	C	C	C	C	A	C
ESTIMATED % OF STATE	49.2	42.0	58.3	14.3	69.0	49.5	32.2	67.3	66.2	64.0	0.0	33.7
NEW HAMPSHIRE												
ESTIMATED POPULATION	688	789	914	264	1139	697	551	1054	897	736	0	633
% STANDARD ERROR	D	D	C	D	C	D	D	C	C	D	A	D
ESTIMATED % OF STATE	41.6	47.7	55.3	16.0	68.9	42.2	33.3	63.7	54.2	44.5	0.0	38.3

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
NEW JERSEY												
ESTIMATED POPULATION	2363	2080	2419	664	3042	1938	1522	2645	2468	2420	0	1910
% STANDARD ERROR	B	B	B	C	B	B	C	B	B	B	A	B
ESTIMATED % OF STATE	51.3	45.2	52.5	14.4	66.1	42.1	33.0	57.4	53.6	52.6	0.0	41.5
NEW MEXICO												
ESTIMATED POPULATION	906	1535	1131	401	1991	1034	833	1675	1377	1333	0	1145
% STANDARD ERROR	C	C	C	D	B	C	C	C	C	C	A	C
ESTIMATED % OF STATE	31.3	53.1	39.1	13.9	68.8	35.8	28.8	57.9	47.6	46.1	0.0	39.6
NEW YORK												
ESTIMATED POPULATION	3971	3085	3241	1261	4395	2336	3442	3982	3543	3040	181	3850
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	50.5	39.2	41.2	16.0	55.9	29.7	43.8	50.6	45.0	38.7	2.3	49.0
NORTH CAROLINA												
ESTIMATED POPULATION	2596	2016	2878	848	3477	1618	1434	3015	2941	2550	2	1795
% STANDARD ERROR	B	B	B	C	B	B	C	B	B	B	D	B
ESTIMATED % OF STATE	51.8	40.2	57.4	16.9	69.4	32.3	28.6	60.1	58.7	50.9	0.0	35.8
NORTH DAKOTA												
ESTIMATED POPULATION	880	635	739	480	951	480	953	702	664	666	0	1114
% STANDARD ERROR	C	D	D	D	C	D	C	D	D	D	A	C
ESTIMATED % OF STATE	46.6	33.6	39.1	25.4	50.4	25.4	50.4	37.2	35.2	35.3	0.0	59.0

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
OHIO												
ESTIMATED POPULATION	4239	4091	4963	1649	5511	2821	3789	4733	4558	4017	0	4353
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	A	B
ESTIMATED % OF STATE	47.4	45.7	55.5	18.4	61.6	31.5	42.4	52.9	51.0	44.9	0.0	48.7
OKLAHOMA												
ESTIMATED POPULATION	3013	2897	3154	922	4046	2266	2170	3159	2806	2755	0	2946
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	A	B
ESTIMATED % OF STATE	47.6	45.8	49.9	14.6	64.0	35.8	34.3	49.9	44.4	43.6	0.0	46.6
OREGON												
ESTIMATED POPULATION	2992	2228	2996	598	3755	1946	1806	2925	3005	2471	1	2295
% STANDARD ERROR	B	B	B	D	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	52.2	38.9	52.2	10.4	65.5	33.9	31.5	51.0	52.4	43.1	0.0	40.0
PENNSYLVANIA												
ESTIMATED POPULATION	2882	3960	3691	969	4785	3097	2573	4074	4025	3630	3	3170
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF STATE	38.1	52.4	48.8	12.8	63.3	40.9	34.0	53.9	53.2	48.0	0.0	41.9
RHODE ISLAND												
ESTIMATED POPULATION	358	263	277	45	459	232	108	296	269	261	0	266
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	63.0	46.3	48.8	7.8	80.7	40.8	19.0	52.0	47.4	45.9	0.0	46.8

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
SOUTH CAROLINA												
ESTIMATED POPULATION	635	904	981	364	1272	485	616	1122	1052	867	3	765
% STANDARD ERROR	D	C	C	D	C	D	D	C	C	C	D	C
ESTIMATED % OF STATE	34.0	48.4	52.5	19.5	68.1	25.9	33.0	60.1	56.3	46.4	0.2	41.0
SOUTH DAKOTA												
ESTIMATED POPULATION	805	400	501	449	626	127	1021	454	379	427	0	1137
% STANDARD ERROR	D	D	D	D	D	D	C	D	D	D	A	C
ESTIMATED % OF STATE	46.4	23.1	28.9	25.9	36.1	7.3	58.9	26.2	21.9	24.7	0.0	65.6
TENNESSEE												
ESTIMATED POPULATION	1227	1919	2071	466	2396	1574	1039	2131	1984	1892	28	1304
% STANDARD ERROR	C	B	B	D	B	C	C	B	B	B	D	C
ESTIMATED % OF STATE	36.8	57.6	62.1	14.0	71.9	47.2	31.2	63.9	59.5	56.8	0.8	39.1
TEXAS												
ESTIMATED POPULATION	9352	11518	13596	3835	16203	9246	7422	14126	12658	11930	57	9370
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF STATE	39.3	48.4	57.1	16.1	68.1	38.8	31.2	59.3	53.2	50.1	0.2	39.4
UTAH												
ESTIMATED POPULATION	764	795	730	180	1029	550	651	723	709	649	0	953
% STANDARD ERROR	D	C	D	D	C	D	D	D	D	D	A	C
ESTIMATED % OF STATE	47.0	48.9	44.9	11.1	63.3	33.8	40.0	44.5	43.6	39.9	0.0	58.6

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
VERMONT												
ESTIMATED POPULATION	327	328	242	84	509	283	222	349	180	169	0	378
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	45.8	45.9	33.9	11.8	71.3	39.7	31.1	48.9	25.3	23.6	0.0	52.9
VIRGINIA												
ESTIMATED POPULATION	1440	1503	1693	411	2357	725	802	1797	1451	1392	6	1272
% STANDARD ERROR	C	C	C	D	B	D	C	C	C	C	D	C
ESTIMATED % OF STATE	43.9	45.8	51.6	12.5	71.8	22.1	24.5	54.8	44.2	42.4	0.2	38.8
WASHINGTON												
ESTIMATED POPULATION	4300	2367	3114	1347	4300	1323	3371	2937	2910	2465	0	4469
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A	B
ESTIMATED % OF STATE	57.0	31.4	41.2	17.8	57.0	17.5	44.7	38.9	38.5	32.6	0.0	59.2
WEST VIRGINIA												
ESTIMATED POPULATION	626	852	907	129	1115	614	361	971	912	821	3	499
% STANDARD ERROR	D	C	C	D	C	D	D	C	C	C	D	D
ESTIMATED % OF STATE	43.4	59.1	62.9	8.9	77.3	42.6	25.1	67.4	63.3	57.0	0.2	34.6
WISCONSIN												
ESTIMATED POPULATION	2317	1749	2027	1109	2744	966	2245	2344	2070	1578	155	2572
% STANDARD ERROR	B	B	B	C	B	C	B	B	B	C	D	B
ESTIMATED % OF STATE	45.4	34.3	39.8	21.7	53.8	18.9	44.0	46.0	40.6	30.9	3.0	50.4

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
WYOMING												
ESTIMATED POPULATION	553	717	545	101	809	469	485	656	615	530	2	567
% STANDARD ERROR	D	D	D	D	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	40.5	52.5	39.9	7.4	59.2	34.3	35.5	48.1	45.1	38.8	0.2	41.6
PUERTO RICO												
ESTIMATED POPULATION	132	294	293	32	327	45	95	307	286	286	0	114
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	31.9	70.7	70.7	7.7	78.8	10.9	22.8	74.1	68.8	68.8	0.0	27.6
OTHER U.S. TERRITORIES												
ESTIMATED POPULATION	55	147	138	20	155	42	50	155	141	135	72	47
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	27.5	73.8	69.4	9.9	78.0	20.9	24.9	77.7	71.1	68.1	36.0	23.7
FOREIGN												
ESTIMATED POPULATION	310	899	1073	8	1093	704	108	1019	1019	1001	6	172
% STANDARD ERROR	D	C	C	D	C	C	D	C	C	C	D	D
ESTIMATED % OF STATE	29.3	85.0	101.5	0.8	103.3	66.6	10.2	96.4	96.4	94.7	0.6	16.3
TOTAL												
ESTIMATED POPULATION	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
ALABAMA											
ESTIMATED POPULATION	916	1571	1730	1636	944	487	184	652	258	32	799
% STANDARD ERROR	C	C	B	C	C	D	D	D	D	D	C
ESTIMATED % OF STATE	30.7	52.6	57.9	54.8	31.6	16.3	6.2	21.8	8.6	1.1	26.8
ALASKA											
ESTIMATED POPULATION	3542	2412	1958	3659	1214	209	119	264	177	0	1484
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	A	B
ESTIMATED % OF STATE	46.7	31.8	25.8	48.2	16.0	2.8	1.6	3.5	2.3	0.0	19.6
ARIZONA											
ESTIMATED POPULATION	1194	3600	3313	3056	1977	550	84	529	192	1	1201
% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	18.7	56.4	51.9	47.9	31.0	8.6	1.3	8.3	3.0	0.0	18.8
ARKANSAS											
ESTIMATED POPULATION	624	1511	1415	1276	955	335	40	267	144	106	858
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	C
ESTIMATED % OF STATE	20.2	48.9	45.8	41.3	30.9	10.9	1.3	8.6	4.7	3.4	27.8
CALIFORNIA											
ESTIMATED POPULATION	10611	19247	19479	16879	10609	3266	1001	2656	1830	406	6673
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A
ESTIMATED % OF STATE	30.5	55.3	55.9	48.5	30.5	9.4	2.9	7.6	5.3	1.2	19.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
COLORADO											
ESTIMATED POPULATION	2200	2032	2616	2666	1649	644	139	467	324	164	1449
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	40.4	37.3	48.1	49.0	30.3	11.8	2.6	8.6	6.0	3.0	26.6
CONNECTICUT											
ESTIMATED POPULATION	569	741	960	822	423	166	31	154	161	0	465
% STANDARD ERROR	D	D	C	C	D	D	D	D	D	A	D
ESTIMATED % OF STATE	30.1	39.1	50.7	43.4	22.4	8.8	1.6	8.1	8.5	0.0	24.6
DELAWARE											
ESTIMATED POPULATION	207	559	629	654	516	161	68	121	74	1	86
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	23.9	64.4	72.4	75.4	59.4	18.5	7.8	13.9	8.5	0.2	9.9
DC											
ESTIMATED POPULATION	0	60	57	59	56	55	52	54	53	0	1
% STANDARD ERROR	A	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	0.0	99.6	95.7	97.9	93.8	92.0	86.2	89.9	88.0	0.0	2.0
FLORIDA											
ESTIMATED POPULATION	4826	8182	8047	7916	5766	1694	516	1473	1248	236	2384
% STANDARD ERROR	B	A	A	A	B	B	D	C	C	D	B
ESTIMATED % OF STATE	32.7	55.5	54.6	53.7	39.1	11.5	3.5	10.0	8.5	1.6	16.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
GEORGIA											
ESTIMATED POPULATION	1681	3233	3073	3140	2055	476	330	603	435	42	1007
% STANDARD ERROR	C	B	B	B	B	D	D	C	D	D	C
ESTIMATED % OF STATE	29.8	57.2	54.4	55.6	36.4	8.4	5.8	10.7	7.7	0.7	17.8
HAWAII											
ESTIMATED POPULATION	235	205	189	134	73	8	10	7	8	0	114
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	40.3	35.1	32.4	23.0	12.4	1.4	1.7	1.2	1.4	0.0	19.5
IDAHO											
ESTIMATED POPULATION	828	1164	981	1016	606	267	33	167	157	18	618
% STANDARD ERROR	C	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	31.0	43.6	36.7	38.1	22.7	10.0	1.3	6.3	5.9	0.7	23.1
ILLINOIS											
ESTIMATED POPULATION	2645	5166	6009	5371	3601	1049	228	969	920	129	1851
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	28.1	55.0	63.9	57.1	38.3	11.2	2.4	10.3	9.8	1.4	19.7
INDIANA											
ESTIMATED POPULATION	1344	2740	2719	2713	1842	541	176	451	494	69	754
% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	28.4	57.9	57.5	57.3	38.9	11.4	3.7	9.5	10.4	1.5	15.9

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
IOWA											
ESTIMATED POPULATION	1492	1781	1925	2040	1156	222	123	126	246	8	936
% STANDARD ERROR	C	C	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	38.5	46.0	49.7	52.7	29.8	5.7	3.2	3.2	6.4	0.2	24.2
KANSAS											
ESTIMATED POPULATION	1382	2694	2743	2669	1586	611	77	491	195	0	939
% STANDARD ERROR	C	B	B	B	C	D	D	D	D	A	C
ESTIMATED % OF STATE	27.4	53.4	54.3	52.8	31.4	12.1	1.5	9.7	3.9	0.0	18.6
KENTUCKY											
ESTIMATED POPULATION	682	1220	1053	1132	804	339	146	334	365	46	309
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	32.4	57.9	50.0	53.7	38.2	16.1	6.9	15.9	17.3	2.2	14.6
LOUISIANA											
ESTIMATED POPULATION	984	2362	2129	2839	1812	663	666	456	237	3	1123
% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	21.9	52.6	47.4	63.2	40.3	14.8	14.8	10.1	5.3	0.1	25.0
MAINE											
ESTIMATED POPULATION	430	596	483	528	320	126	42	105	64	98	447
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	30.5	42.2	34.2	37.4	22.6	8.9	3.0	7.4	4.5	6.9	31.6

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
MARYLAND											
ESTIMATED POPULATION	1387	1670	2128	1833	1477	282	158	342	353	6	683
% STANDARD ERROR	C	C	B	B	C	D	D	D	D	D	D
ESTIMATED % OF STATE	39.5	47.6	60.7	52.3	42.1	8.0	4.5	9.7	10.1	0.2	19.5
MASSACHUSETTS											
ESTIMATED POPULATION	1032	2019	1807	1597	829	333	84	248	352	51	613
% STANDARD ERROR	C	B	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	30.9	60.5	54.2	47.8	24.8	10.0	2.5	7.4	10.5	1.5	18.4
MICHIGAN											
ESTIMATED POPULATION	2833	4201	4129	3717	2661	1213	283	883	776	198	2005
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	32.5	48.2	47.4	42.7	30.5	13.9	3.3	10.1	8.9	2.3	23.0
MINNESOTA											
ESTIMATED POPULATION	1960	2362	2381	2494	1221	585	142	412	342	98	1711
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	B
ESTIMATED % OF STATE	34.2	41.2	41.5	43.5	21.3	10.2	2.5	7.2	6.0	1.7	29.8
MISSISSIPPI											
ESTIMATED POPULATION	748	1506	1422	1545	1021	443	4	153	153	21	677
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	25.6	51.6	48.7	52.9	35.0	15.2	0.2	5.2	5.2	0.7	23.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
MISSOURI											
ESTIMATED POPULATION	1947	2044	2214	2122	1326	472	133	275	329	118	827
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	41.0	43.0	46.6	44.7	27.9	9.9	2.8	5.8	6.9	2.5	17.4
MONTANA											
ESTIMATED POPULATION	1257	1289	1355	1849	647	139	5	131	160	17	681
% STANDARD ERROR	C	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	41.4	42.5	44.7	61.0	21.3	4.6	0.2	4.3	5.3	0.5	22.5
NEBRASKA											
ESTIMATED POPULATION	476	532	339	557	298	188	0	89	137	48	351
% STANDARD ERROR	D	D	D	D	D	D	A	D	D	D	D
ESTIMATED % OF STATE	36.3	40.6	25.9	42.5	22.8	14.4	0.0	6.8	10.5	3.7	26.8
NEVADA											
ESTIMATED POPULATION	768	1576	1724	1766	1499	439	230	368	271	122	509
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	28.4	58.4	63.9	65.4	55.5	16.3	8.5	13.6	10.0	4.5	18.9
NEW HAMPSHIRE											
ESTIMATED POPULATION	580	814	896	910	757	412	17	223	63	0	324
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	A	D
ESTIMATED % OF STATE	35.1	49.3	54.2	55.0	45.8	24.9	1.0	13.5	3.8	0.0	19.6

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
NEW JERSEY											
ESTIMATED POPULATION	1939	2374	2587	2212	1760	495	94	231	180	217	676
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	42.1	51.5	56.2	48.0	38.2	10.7	2.0	5.0	3.9	4.7	14.7
NEW MEXICO											
ESTIMATED POPULATION	606	1761	1359	1594	1100	344	4	72	61	0	454
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	A	D
ESTIMATED % OF STATE	21.0	60.9	47.0	55.1	38.0	11.9	0.1	2.5	2.1	0.0	15.7
NEW YORK											
ESTIMATED POPULATION	2895	3512	3890	3569	2060	1033	363	749	595	131	1834
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	36.8	44.7	49.5	45.4	26.2	13.1	4.6	9.5	7.6	1.7	23.3
NORTH CAROLINA											
ESTIMATED POPULATION	1707	2749	3119	2753	1772	782	135	754	595	133	903
% STANDARD ERROR	C	B	B	B	B	C	D	C	C	D	C
ESTIMATED % OF STATE	34.0	54.8	62.2	54.9	35.3	15.6	2.7	15.0	11.9	2.6	18.0
NORTH DAKOTA											
ESTIMATED POPULATION	838	515	737	847	478	142	4	91	89	1	556
% STANDARD ERROR	C	D	D	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	44.4	27.3	39.0	44.9	25.3	7.5	0.2	4.8	4.7	0.1	29.4

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
OHIO											
ESTIMATED POPULATION	3038	4412	5272	4478	2421	986	263	1030	866	194	2239
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	34.0	49.3	59.0	50.1	27.1	11.0	2.9	11.5	9.7	2.2	25.0
OKLAHOMA											
ESTIMATED POPULATION	1865	3589	3289	3166	2181	1100	170	613	664	95	995
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	C
ESTIMATED % OF STATE	29.5	56.8	52.0	50.1	34.5	17.4	2.7	9.7	10.5	1.5	15.7
OREGON											
ESTIMATED POPULATION	2809	2037	2822	2855	1918	494	213	407	283	100	844
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	49.0	35.5	49.2	49.8	33.4	8.6	3.7	7.1	4.9	1.7	14.7
PENNSYLVANIA											
ESTIMATED POPULATION	1751	4142	4143	3964	2876	1381	273	993	883	189	1601
% STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	23.1	54.8	54.8	52.4	38.0	18.3	3.6	13.1	11.7	2.5	21.2
RHODE ISLAND											
ESTIMATED POPULATION	330	270	279	274	119	66	7	39	27	3	57
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	58.2	47.5	49.2	48.3	20.9	11.6	1.2	6.9	4.8	0.5	10.0

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

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GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
SOUTH CAROLINA											
ESTIMATED POPULATION	562	995	1069	1255	694	338	26	98	183	25	397
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	30.1	53.3	57.2	67.2	37.2	18.1	1.4	5.3	9.8	1.3	21.2
SOUTH DAKOTA											
ESTIMATED POPULATION	591	458	492	566	191	91	71	75	5	2	543
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	34.1	26.4	28.4	32.6	11.0	5.2	4.1	4.3	0.3	0.1	31.3
TENNESSEE											
ESTIMATED POPULATION	1164	1722	2098	1989	1684	1065	323	624	648	80	483
% STANDARD ERROR	C	B	B	B	B	C	D	C	C	D	D
ESTIMATED % OF STATE	34.9	51.7	63.0	59.7	50.5	31.9	9.7	18.7	19.4	2.4	14.5
TEXAS											
ESTIMATED POPULATION	6810	13066	13969	13711	9580	4399	1326	3433	3085	947	4554
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	C	B
ESTIMATED % OF STATE	28.6	54.9	58.7	57.6	40.2	18.5	5.6	14.4	13.0	4.0	19.1
UTAH											
ESTIMATED POPULATION	540	862	667	666	434	125	31	87	60	3	332
% STANDARD ERROR	D	C	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	33.2	53.0	41.0	40.9	26.7	7.7	1.9	5.4	3.7	0.2	20.4

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
VERMONT											
ESTIMATED POPULATION	251	353	250	273	219	45	6	5	6	0	121
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED % OF STATE	35.2	49.5	35.1	38.2	30.6	6.3	0.9	0.7	0.9	0.0	16.9
VIRGINIA											
ESTIMATED POPULATION	1177	1701	1634	1478	1015	244	58	27	105	60	531
% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	35.9	51.8	49.8	45.0	30.9	7.4	1.8	0.8	3.2	1.8	16.2
WASHINGTON											
ESTIMATED POPULATION	2821	2909	3004	2753	1293	267	189	326	192	40	2113
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	D	B
ESTIMATED % OF STATE	37.4	38.5	39.8	36.5	17.1	3.5	2.5	4.3	2.5	0.5	28.0
WEST VIRGINIA											
ESTIMATED POPULATION	468	927	908	964	612	258	41	259	142	67	126
% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	D
ESTIMATED % OF STATE	32.5	64.3	63.0	66.9	42.5	17.9	2.8	18.0	9.9	4.6	8.7
WISCONSIN											
ESTIMATED POPULATION	1555	2378	1928	1975	1201	451	38	361	178	2	1269
% STANDARD ERROR	C	B	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	30.5	46.6	37.8	38.7	23.6	8.8	0.8	7.1	3.5	0.0	24.9

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
BY
STATE OF BASED AIRCRAFT
1983

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
WYOMING											
ESTIMATED POPULATION	394	814	642	721	304	161	5	163	100	67	158
% STANDARD ERROR	D	C	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	28.9	59.6	47.1	52.8	22.3	11.8	0.4	11.9	7.3	4.9	11.6
PUERTO RICO											
ESTIMATED POPULATION	111	292	289	320	122	46	2	26	6	2	41
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	26.8	70.4	69.5	77.0	29.4	11.1	0.4	6.2	1.5	0.4	9.8
OTHER U.S. TERRITORIES											
ESTIMATED POPULATION	28	151	133	161	108	19	2	11	19	3	26
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
ESTIMATED % OF STATE	14.1	75.7	66.8	81.1	54.3	9.5	1.0	5.4	9.5	1.6	13.1
FOREIGN											
ESTIMATED POPULATION	106	1020	816	1038	793	159	320	319	397	199	88
% STANDARD ERROR	D	C	C	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	10.0	96.4	77.1	98.2	75.0	15.1	30.3	30.2	37.6	18.8	8.3
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF BASED AIRCRAFT
1983

REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
ALASKAN												
ESTIMATED POPULATION	4364	2520	2159	934	2877	580	4688	2474	2141	1975	0	4854
% STANDARD ERROR	B	B	B	C	B	D	B	B	B	B	A	B
ESTIMATED % OF REGION	57.5	33.2	28.5	12.3	37.9	7.6	61.8	32.6	28.2	26.0	0.0	64.0
CENTRAL												
ESTIMATED POPULATION	6599	6668	7252	2627	8765	3712	6034	7696	6859	5885	92	6482
% STANDARD ERROR	B	B	A	B	A	B	B	A	B	B	D	A
ESTIMATED % OF REGION	44.0	44.5	48.4	17.5	58.5	24.8	40.3	51.4	45.8	39.3	0.6	43.3
EASTERN												
ESTIMATED POPULATION	13157	13757	14799	4071	19122	10744	9787	16386	15057	13672	193	12204
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	45.1	47.1	50.7	13.9	65.5	36.8	33.5	56.1	51.6	46.8	0.7	41.8
EUROPEAN OFFICE												
ESTIMATED POPULATION	154	496	617	4	617	442	25	613	613	613	2	29
% STANDARD ERROR	D	D	C	D	C	D	D	C	C	C	D	D
ESTIMATED % OF REGION	28.4	91.3	113.7	0.7	113.6	81.3	4.6	112.7	112.7	112.7	0.4	5.4
GREAT LAKES												
ESTIMATED POPULATION	21112	19779	23055	8614	27615	12948	18900	23232	21664	18385	324	22051
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	45.6	42.8	49.8	18.6	59.7	28.0	40.9	50.2	46.8	39.8	0.7	47.7
NEW ENGLAND												
ESTIMATED POPULATION	4195	4186	4667	1748	5803	3178	3732	5128	4587	3985	4	4285
% STANDARD ERROR	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED % OF REGION	43.8	43.7	48.7	18.2	60.6	33.2	39.0	53.5	47.9	41.6	0.0	44.7

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF BASED AIRCRAFT
1983

REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
NORTHWEST MT.												
ESTIMATED POPULATION	14012	10722	11967	3808	16654	7199	10712	11924	11693	10016	161	14120
% STANDARD ERROR	A	A	A	B	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	51.1	39.1	43.6	13.9	60.7	26.2	39.0	43.5	42.6	36.5	0.6	51.5
SOUTHERN												
ESTIMATED POPULATION	16507	19995	21344	6275	27923	14607	12170	23556	21919	19430	111	15862
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	41.9	50.7	54.1	15.9	70.8	37.0	30.9	59.7	55.6	49.3	0.3	40.2
SOUTHWESTERN												
ESTIMATED POPULATION	15952	19739	21589	6799	27354	14852	12963	22609	20423	19247	65	17303
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	39.2	48.5	53.0	16.7	67.2	36.5	31.8	55.5	50.2	47.3	0.2	42.5
WESTERN-PACIFIC												
ESTIMATED POPULATION	18202	22670	23198	6401	30833	16836	13819	25616	24158	20993	91	17668
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF REGION	40.7	50.7	51.9	14.3	69.0	37.7	30.9	57.3	54.0	47.0	0.2	39.5
TOTAL												
ESTIMATED POPULATION	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF BASED AIRCRAFT
1983

REGION	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
ALASKAN											
ESTIMATED POPULATION	3542	2412	1958	3659	1214	209	119	264	177	0	1484
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	A	B
ESTIMATED % OF REGION	46.7	31.8	25.8	48.2	16.0	2.8	1.6	3.5	2.3	0.0	19.6
CENTRAL											
ESTIMATED POPULATION	5296	7051	7221	7387	4366	1492	333	981	907	175	3053
% STANDARD ERROR	B	A	A	A	B	C	D	C	C	D	B
ESTIMATED % OF REGION	35.4	47.1	48.2	49.3	29.1	10.0	2.2	6.5	6.1	1.2	20.4
EASTERN											
ESTIMATED POPULATION	9823	14945	15977	14733	10374	3908	1106	2775	2386	671	5537
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A
ESTIMATED % OF REGION	33.6	51.2	54.7	50.5	35.5	13.4	3.8	9.5	8.2	2.3	19.0
EUROPEAN OFFICE											
ESTIMATED POPULATION	19	620	414	622	490	113	174	173	214	53	16
% STANDARD ERROR	D	C	D	C	D	D	D	D	D	D	D
ESTIMATED % OF REGION	3.4	114.1	76.2	114.4	90.1	20.7	31.9	31.8	39.4	9.7	2.9
GREAT LAKES											
ESTIMATED POPULATION	14803	22233	23667	22162	13615	5057	1206	4272	3670	694	10928
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	C	A
ESTIMATED % OF REGION	32.0	48.1	51.2	47.9	29.4	10.9	2.6	9.2	7.9	1.5	23.6
NEW ENGLAND											
ESTIMATED POPULATION	3193	4793	4676	4403	2666	1148	187	775	673	152	2026
% STANDARD ERROR	B	B	B	B	B	C	D	C	D	D	B
ESTIMATED % OF REGION	33.3	50.0	48.8	46.0	27.8	12.0	2.0	8.1	7.0	1.6	21.2

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 17

GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF BASED AIRCRAFT
1983

REGION	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
NORTHWEST MT.											
ESTIMATED POPULATION	10849	11112	12091	12531	6852	2098	616	1749	1275	408	6197
% STANDARD ERROR	A	A	A	A	A	B	C	B	C	D	A
ESTIMATED % OF REGION	39.5	40.5	44.1	45.7	25.0	7.6	2.2	6.4	4.6	1.5	22.6
SOUTHERN											
ESTIMATED POPULATION	12494	21711	22147	21944	15081	5697	1667	4727	3909	619	7078
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	A
ESTIMATED % OF REGION	31.7	55.1	56.2	55.7	38.2	14.4	4.2	12.0	9.9	1.6	17.9
SOUTHWESTERN											
ESTIMATED POPULATION	10889	22388	22258	22682	15631	6841	2206	4840	4191	1152	7987
% STANDARD ERROR	A	A	A	A	A	A	B	B	B	C	A
ESTIMATED % OF REGION	26.8	55.0	54.7	55.7	38.4	16.8	5.4	11.9	10.3	2.8	19.6
WESTERN-PACIFIC											
ESTIMATED POPULATION	12826	24836	24891	22052	14345	4300	1473	3706	2484	676	8511
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	C	A
ESTIMATED % OF REGION	28.7	55.6	55.7	49.3	32.1	9.6	3.3	8.3	5.6	1.5	19.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
EXECUTIVE												
ESTIMATED POPULATION	4158	14523	15276	264	17188	15567	407	16130	15747	15448	151	1286
% STANDARD ERROR	B	A	A	D	A	A	D	A	A	A	D	C
ESTIMATED % OF USE	24.4	85.1	89.5	1.5	100.7	91.2	2.4	94.5	92.3	90.5	0.9	7.5
BUSINESS												
ESTIMATED POPULATION	19367	29984	36657	1281	42917	28034	3803	38736	38149	35839	373	6785
% STANDARD ERROR	A	A	A	C	A	A	B	A	A	A	D	A
ESTIMATED % OF USE	43.0	66.6	81.4	2.8	95.3	62.3	8.4	86.0	84.7	79.6	0.8	15.1
PERSONAL												
ESTIMATED POPULATION	60128	42183	51384	12645	66160	23605	40753	49776	46485	37491	414	53131
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED % OF USE	59.2	41.6	50.6	12.5	65.2	23.3	40.2	49.0	45.8	36.9	0.4	52.4
INSTRUCTIONAL												
ESTIMATED POPULATION	7198	9016	5560	896	11842	3948	4590	8888	5902	5285	3	7364
% STANDARD ERROR	A	A	B	C	A	B	B	A	B	B	D	A
ESTIMATED % OF USE	46.6	58.4	36.0	5.8	76.6	25.6	29.7	57.5	38.2	34.2	0.0	47.7
AERIAL APPLICATION												
ESTIMATED POPULATION	893	711	422	5392	480	180	6498	442	439	318	2	6413
% STANDARD ERROR	C	C	D	B	D	D	A	D	D	D	D	A
ESTIMATED % OF USE	12.7	10.1	6.0	76.5	6.8	2.5	92.2	6.3	6.2	4.5	0.0	90.9

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
AERIAL OBSERVATION												
ESTIMATED POPULATION	1845	2181	1929	415	2738	759	1572	2233	1718	1774	3	2065
% STANDARD ERROR	B	B	B	D	B	C	B	B	B	B	D	B
ESTIMATED % OF USE	45.9	54.2	48.0	10.3	68.1	18.9	39.1	55.5	42.7	44.1	0.1	51.3
OTHER WORK USE												
ESTIMATED POPULATION	1221	1145	407	254	1026	170	1490	338	290	213	4	2103
% STANDARD ERROR	C	C	D	D	C	D	B	D	D	D	D	B
ESTIMATED % OF USE	51.0	47.9	17.0	10.6	42.9	7.1	62.3	14.1	12.1	8.9	0.2	87.9
COMMUTER AIR CARRIER												
ESTIMATED POPULATION	149	1475	1174	6	1547	1283	38	1557	1547	1347	0	29
% STANDARD ERROR	D	B	B	D	B	B	D	B	B	B	A	D
ESTIMATED % OF USE	10.0	99.7	79.4	0.4	104.6	86.7	2.6	105.2	104.6	91.0	0.0	1.9
AIR TAXI												
ESTIMATED POPULATION	1373	6172	5510	17	6276	4758	985	5885	5529	5606	39	1377
% STANDARD ERROR	B	A	A	D	A	B	C	A	A	A	D	B
ESTIMATED % OF USE	20.0	90.0	80.3	0.2	91.5	69.4	14.4	85.8	80.6	81.8	0.6	20.1
OTHER												
ESTIMATED POPULATION	1750	3157	2565	728	3477	2025	1710	2616	2325	2099	17	2571
% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED % OF USE	36.5	65.9	53.5	15.2	72.6	42.3	35.7	54.6	48.5	43.8	0.3	53.7

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MRKR BEC	GLIDE SLOPE	MLS	NO ILS
RENTAL												
ESTIMATED POPULATION	2536	5314	5076	476	6444	3280	1593	6448	5892	5520	0	1585
% STANDARD ERROR	B	B	B	D	B	B	C	B	B	B	A	B
ESTIMATED % OF USE	33.1	69.2	66.1	6.2	84.0	42.7	20.8	84.0	76.8	71.9	0.0	20.6
INACTIVE												
ESTIMATED POPULATION	13305	5138	5850	19046	7682	2523	29286	7226	6368	4670	53	29293
% STANDARD ERROR	A	A	A	A	A	B	A	A	A	A	D	A
ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL												
ESTIMATED POPULATION	113815	120870	131646	41836	167375	86027	93127	140099	130282	115545	1041	114253
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	C	A
ESTIMATED % OF POP	43.7	46.4	50.5	16.1	64.3	33.0	35.7	53.8	50.0	44.4	0.4	43.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
EXECUTIVE											
ESTIMATED POPULATION	3153	14538	15631	16745	15256	9327	4241	9702	9160	1959	75
% STANDARD ERROR	B	A	A	A	A	A	A	A	A	B	D
ESTIMATED % OF USE	18.5	85.2	91.6	98.1	89.4	54.7	24.9	56.9	53.7	11.5	0.4
BUSINESS											
ESTIMATED POPULATION	14557	33758	38758	39073	29540	11183	1749	7345	4855	1526	1386
% STANDARD ERROR	A	A	A	A	A	A	B	A	B	B	C
ESTIMATED % OF USE	32.3	75.0	86.1	86.8	65.6	24.8	3.9	16.3	10.8	3.4	3.1
PERSONAL											
ESTIMATED POPULATION	43031	49963	52860	46642	23632	5060	1324	3123	2222	414	18558
% STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A
ESTIMATED % OF USE	42.4	49.2	52.1	46.0	23.3	5.0	1.3	3.1	2.2	0.4	18.3
INSTRUCTIONAL											
ESTIMATED POPULATION	5329	9707	6090	6422	2980	722	290	367	183	2	1446
% STANDARD ERROR	B	A	B	B	B	C	D	D	D	D	B
ESTIMATED % OF USE	34.5	62.8	39.4	41.6	19.3	4.7	1.9	2.4	1.2	0.0	9.4
AERIAL APPLICATION											
ESTIMATED POPULATION	317	295	346	468	155	51	2	29	6	0	6352
% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	A
ESTIMATED % OF USE	4.5	4.2	4.9	6.6	2.2	0.7	0.0	0.4	0.1	0.0	90.1

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
AERIAL OBSERVATION											
ESTIMATED POPULATION	1524	2075	1827	1721	827	187	245	36	125	0	752
% STANDARD ERROR	B	B	B	B	C	D	D	D	D	A	C
ESTIMATED % OF USE	37.9	51.6	45.4	42.8	20.6	4.7	6.1	0.9	3.1	0.0	18.7
OTHER WORK USE											
ESTIMATED POPULATION	794	451	326	312	148	133	71	39	54	0	1273
% STANDARD ERROR	C	D	D	D	D	D	D	D	D	A	C
ESTIMATED % OF USE	33.2	18.8	13.6	13.0	6.2	5.6	3.0	1.6	2.3	0.0	53.2
COMMUTER AIR CARRIER											
ESTIMATED POPULATION	388	1228	1358	1545	1099	345	0	183	296	62	20
% STANDARD ERROR	D	B	B	B	C	D	A	D	D	D	D
ESTIMATED % OF USE	26.2	83.0	91.8	104.4	74.3	23.3	0.0	12.4	20.0	4.2	1.4
AIR TAXI											
ESTIMATED POPULATION	1013	5965	5348	6360	4834	2075	604	1703	1489	108	158
% STANDARD ERROR	C	A	A	A	B	B	C	B	B	D	D
ESTIMATED % OF USE	14.8	87.0	78.0	92.7	70.5	30.3	8.8	24.8	21.7	1.6	2.3
OTHER											
ESTIMATED POPULATION	1247	2715	2197	2755	1852	572	419	877	815	173	1299
% STANDARD ERROR	C	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF USE	26.0	56.7	45.9	57.5	38.7	11.9	8.8	18.3	17.0	3.6	27.1

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1983

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT	FLTMGT COMPTR	NO NAVEQ
RENTAL											
ESTIMATED POPULATION	2851	4989	5292	5515	2695	353	138	303	392	15	449
% STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	D
ESTIMATED % OF USE	37.2	65.0	69.0	71.9	35.1	4.6	1.8	4.0	5.1	0.2	5.9
INACTIVE											
ESTIMATED POPULATION	9093	6827	5779	5923	2817	840	327	571	478	34	21355
% STANDARD ERROR	A	A	A	A	B	C	D	B	C	D	A
ESTIMATED % OF USE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL											
ESTIMATED POPULATION	82589	132517	135720	133053	85465	30574	9393	24179	19973	4450	53815
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED % OF POP	31.7	50.9	52.1	51.1	32.8	11.7	3.6	9.3	7.7	1.7	20.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE
GREATER THAN	LESS THAN OR EQUAL TO	
0 %	10 %	A
10 %	20 %	B
20 %	30 %	C
30 %		D

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
OTHER 01	6269.5	805.1	12.8
OTHER 02	3237.6	395.6	12.2
OTHER 03	1227.5	231.7	18.9
OTHER 04	647.0	507.4	78.4
OTHER 05	30.6	17.6	57.6
OTHER 06	1344.4	384.0	28.6
OTHER 07	1375.1	166.4	12.1
OTHER 08	321.7	54.4	16.9
OTHER 09	2859.5	387.4	13.5
OTHER 10	1254.7	212.5	16.9
OTHER 11	202.3	42.8	21.2
OTHER 12	1501.0	351.0	23.4
OTHER 13	1582.1	206.6	13.1
AERORSJ2	7.5	1.0	13.9
AGUSTAA109	14.3	4.0	28.1
AIRPTSA	542.3	52.2	9.6
AIRSPC18	9.9	2.1	21.3
AIRTRCAT300	671.8	122.3	18.2
AMD FALC10	136.7	50.4	36.9
AMD FALC20	471.4	68.3	14.5
AMD FALC50	45.4	15.5	34.1

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
AMTR TMK	15.9	5.9	37.1
ARCTICS1A	207.2	10.5	5.1
ARCTICS1B1	26.8	4.3	16.0
ARONCA15	367.5	20.2	5.5
ARONCA58	423.2	60.3	14.3
ARONCA65	288.0	31.8	11.0
ARONCAC3	91.2	5.3	5.8
AVIANWFALCON	3.7	0.3	8.0
AYRES S2	2216.2	349.8	15.8
AYRES S2T	70.1	15.0	21.4
BAG B206	88.1	6.6	7.5
BALWKSFIREFY	118.2	23.8	20.1
BEECH 17	369.0	13.6	3.7
BEECH 18	2211.1	203.8	9.2
BEECH 200	1225.8	184.1	15.0
BEECH 23	5054.2	344.1	6.8
BEECH 33	2780.1	362.5	13.0
BEECH 35	17395.2	897.1	5.2
BEECH 36	2103.1	315.0	15.0
BEECH 45	516.8	208.8	40.4
BEECH 50	1236.7	69.2	5.6
BEECH 55	4327.1	427.0	9.9

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
BEECH 58	1277.4	174.9	13.7
BEECH 60	653.4	103.0	15.8
BEECH 65	390.2	45.1	11.6
BEECH 77	169.2	29.0	17.1
BEECH 80	465.7	44.9	9.6
BEECH 90	2183.4	249.6	11.4
BEECH 95	1174.8	93.5	8.0
BELL 204	527.5	18.5	3.5
BELL 206	3948.3	359.0	9.1
BELL 222	51.7	7.8	15.1
BELL 47	4263.8	563.5	13.2
BLANCA11	1311.8	142.8	10.9
BLANCA1413	465.3	28.8	6.2
BLANCA1419	483.7	23.3	4.8
BLANCA17	1143.3	125.1	10.9
BLANCA7	9190.3	357.5	3.9
BLANCA8	548.3	112.0	20.4
BNORM BN2	68.7	46.2	67.3
BNORM BN2MK3	8.4	0.1	1.0
BOEING75	4526.5	924.6	20.4
BUKER 131	53.6	10.3	19.2
CAMRONMODELO	29.6	3.2	10.8

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CESSNA120	2100.3	86.8	4.1
CESSNA140	4678.7	377.1	8.1
CESSNA150	42977.5	1399.9	3.3
CESSNA170	5538.4	288.1	5.2
CESSNA172	45204.8	1474.3	3.3
CESSNA175	2380.4	122.6	5.2
CESSNA177	4476.5	297.1	6.6
CESSNA180	5676.1	492.2	8.7
CESSNA182	23550.9	989.3	4.2
CESSNA185	1704.2	430.1	25.2
CESSNA188	3561.9	384.7	10.8
CESSNA205	545.4	105.8	19.4
CESSNA206	5383.9	514.2	9.6
CESSNA207	674.9	133.9	19.8
CESSNA210	8758.1	666.0	7.6
CESSNA305	514.3	7.0	1.4
CESSNA310	8102.8	438.4	5.4
CESSNA320	788.7	52.4	6.6
CESSNA335	27.4	3.3	12.1
CESSNA337	2065.1	196.9	9.5
CESSNA340	1556.3	165.6	10.6
CESSNA401	618.3	65.5	10.6

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
CESSNA402	908.0	213.5	23.5
CESSNA411	543.6	25.9	4.8
CESSNA414	1763.9	253.5	14.4
CESSNA421	2499.0	264.9	10.6
CESSNA425	63.7	9.9	15.6
CESSNA441	247.9	55.8	22.5
CESSNA500	1358.4	199.2	14.7
CESSNAT50	121.4	16.0	13.2
COMWTH185	167.6	5.3	3.1
CONAERLA4	185.4	50.3	27.1
CURTISTRVAIR	345.6	19.8	5.7
CVAC 240	30.7	0.0	0.0
CVAC BT13	265.8	8.0	3.0
CVAC P4Y	24.0	0.0	0.0
DHAV DHC1	238.1	13.4	5.6
DHAV DHC2	468.4	133.6	28.5
DHAVXXDH82	205.7	10.3	5.0
DOUG A26	72.8	5.1	7.0
DOUG DC3	328.7	159.0	48.4
EAGLE DW	14.1	7.3	51.6
EIRVON20	47.0	3.1	6.6
ENSTRMF28	262.0	49.0	18.7

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
FLEET 16B	45.0	2.5	5.5
FRCHLD24	452.2	20.1	4.5
FRCHLDM62	354.9	12.5	3.5
GLASFLH301	100.3	6.9	6.9
GRUMAVAA1	877.4	117.9	13.4
GRUMAVAA5	454.7	110.7	24.3
GRUMAVG164	1302.2	233.8	18.0
GRUMAVTBM	73.9	4.0	5.4
GULSTM112	805.1	92.8	11.5
GULSTM500	1053.5	67.1	6.4
GULSTM680	1031.6	85.5	8.3
GULSTM680TP	411.1	25.2	6.1
GULSTM690TP	711.1	152.5	21.4
GULSTMAA1	738.8	148.0	20.0
GULSTMAA5	1967.0	172.4	8.8
GULSTMG1159	164.3	33.5	20.4
HELIO H391	34.1	2.9	8.6
HILLERFH1100	149.5	21.5	14.4
HILLERUH12	1471.7	124.8	8.5
HUGHES269	1295.7	116.7	9.0
HUGHES369	683.3	101.1	14.8
HWKSLYDH104	108.9	0.0	0.0

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
HWKSLYDH125	299.6	36.0	12.0
INTRCP200	57.3	3.8	6.6
ISRAEL1124	215.7	55.9	25.9
JBMSTRDGA15	120.1	8.1	6.8
LAIKFN10	17.6	1.7	9.7
LEAR 35	589.5	108.3	18.4
LKHEED1329	261.9	31.7	12.1
LKHEED18	84.1	32.2	38.2
LUSCOM8	4762.3	234.4	4.9
MAULE M5	206.4	22.3	10.8
MCLISHFUNKB	215.0	7.7	3.6
MNCOUP90	81.0	6.6	8.2
MNMITEM18	218.6	23.1	10.6
MOONEYM20	10083.7	650.7	6.5
MTSBSIMU2	894.4	139.0	15.5
MULTECD16	93.5	7.3	7.8
NAMER F51	182.1	14.7	8.1
NAMER NA260	132.3	12.2	9.2
NAMER T6	1568.7	92.9	5.9
NAVIONNAVION	1217.4	256.4	21.1
NORD SV4	74.2	5.7	7.7
NORWST65	135.9	4.3	3.1

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
ORLHELH19	229.5	12.0	5.2
PICARDAX6	42.2	5.0	11.8
PIPER 600	192.1	20.1	10.5
PIPER J2	61.9	4.5	7.3
PIPER J3	7717.5	494.1	6.4
PIPER J4	431.6	37.1	8.6
PIPER J5	726.8	228.2	31.4
PIPER PA12	2595.6	288.1	11.1
PIPER PA15	285.8	42.5	14.9
PIPER PA16	629.0	53.6	8.5
PIPER PA17	182.4	10.5	5.7
PIPER PA18	6622.0	652.1	9.8
PIPER PA20	832.3	54.0	6.5
PIPER PA22	10280.7	486.2	4.7
PIPER PA23	9693.2	511.8	5.3
PIPER PA24	8531.4	363.3	4.3
PIPER PA25	3113.3	306.7	9.9
PIPER PA28	42284.4	1233.7	2.9
PIPER PA30	3709.6	238.8	6.4
PIPER PA31	4410.5	363.8	8.2
PIPER PA31T	875.3	128.1	14.6
PIPER PA32	6845.7	621.8	9.1

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
PIPER PA34	3156.1	279.1	8.8
PIPER PA36	589.1	102.1	17.3
PIPER PA38	1822.9	224.5	12.3
PIPER PA44	327.8	25.7	7.8
PROPJT200	99.2	5.5	5.6
RAVEN S50	20.1	1.4	7.1
RAVEN S55	142.7	14.8	10.3
RKWELL700	23.2	3.8	16.2
RKWELLNA265	1119.5	107.4	9.6
ROBSINR22	154.6	14.0	9.0
RYAN ST3	359.8	39.7	11.0
RYAN STA	51.9	5.8	11.2
SCWZERG164	2123.0	501.6	23.6
SCWZERSG1	626.8	61.1	9.7
SCWZERSG2	1233.5	156.2	12.7
SEMCO CLNGER	7.7	1.0	13.6
SKRSKYS55	111.0	6.1	5.5
SKRSKYS58	198.8	5.7	2.8
SMITH 600	402.9	106.1	26.3
SNIAS 350	166.6	48.6	29.2
STNSON10	301.2	14.3	4.7
STNSONL5	203.8	17.2	8.5

TABLE 2 - 19

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1983

MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	STANDARD ERROR (%)
STNSONV77	149.7	12.2	8.1
STOLAMRC3	221.8	16.5	7.5
TCRAFKD	422.1	79.9	18.9
TCRAFTA	52.2	7.2	13.8
TCRAFTBC	3399.1	182.3	5.4
TCRAFTBL	453.0	22.7	5.0
THUNDRAX7	9.6	1.1	11.5
TMPSONNAVION	1704.2	156.6	9.2
TRYTEK65	734.4	40.1	5.5
UNIVACGC1	1043.1	129.7	12.4
UNIVAR108	3899.2	87.8	2.3
UNIVAR415	3827.0	222.1	5.8
VARGA 2150	122.2	14.5	11.9
WACO ASO	66.6	12.3	18.5
WACO UPF7	506.6	49.9	9.9
WACO YK	101.8	5.9	5.8
TOTAL AIRCRAFT	451220.5	4626.9	1.0

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1983

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
AMTRMCMCCULH	103	49.58	22.70	36	46.19
CONT 6285	163	0.00	100.00	68	23.12
CONT A40	16	92.83	12.67	18	13.22
CONT A65	5239	6.05	54.29	62	15.49
CONT A75	1374	11.86	65.53	46	23.46
CONT A80	28	40.40	36.86	44	14.15
CONT C125	263	19.86	67.86	57	33.37
CONT C145	1795	7.07	80.03	56	10.95
CONT C85	3615	7.83	59.23	55	11.37
CONT C90	1760	8.66	68.47	51	12.14
CONT E185	1713	7.34	83.17	70	11.27
CONT E225	1282	7.55	85.17	110	13.08
CONT O200	13070	2.60	86.98	127	8.72
CONT O300	8700	3.18	86.68	79	7.92
CONT O360	3555	3.50	88.87	129	8.49
CONT O470	24202	1.58	89.85	117	6.57
CONT O520	28146	1.14	94.37	199	4.30
CONT R670	642	16.46	60.87	42	15.32
DHAVXXGIPSY	90	14.60	85.69	31	33.76
FCD 6440	144	8.33	42.15	36	9.75
FRNKLN4AC176	151	13.45	82.76	54	53.01
FRNKLN4AC199	28	26.49	17.85	21	12.75
FRNKLN6A4150	526	5.51	51.57	42	7.41
FRNKLN6A4165	691	7.81	61.02	59	14.07
FRNKLN6A4200	15	39.34	60.81	24	15.64
FRNKLN6A8215	84	9.96	41.45	46	17.38
FRNKLN6AV335	107	10.10	95.66	70	10.26
FRNKLN6AV350	64	110.87	28.54	175	12.42
FRNKLN6VS335	25	57.05	37.97	38	19.41
FRNKLNO3356	163	14.11	88.04	157	23.41
GE CF700	404	0.00	100.00	273	16.08
GE CJ610	437	27.23	48.61	405	11.96
GE CT58	26	0.00	100.00	791	0.00
GLADENR5	40	75.80	21.47	28	22.67
JACOBPR755	418	6.85	99.01	238	52.79
JACOBSR755	184	30.16	49.45	48	51.74

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1983

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
JACOBSR915	37	54.67	48.07	5	40.81
LYC 0540	7442	3.23	88.68	144	11.68
LYC LTS101	114	4.24	98.33	324	7.15
LYC 0145	327	19.31	39.14	36	12.25
LYC 0235	10166	3.24	83.35	282	8.99
LYC 0290	1867	11.49	57.15	48	13.49
LYC 0320	34956	1.52	87.65	166	5.21
LYC 0340	86	25.98	61.54	90	6.44
LYC 0360	25106	1.50	91.76	138	5.48
LYC 0435	635	16.82	40.80	196	22.94
LYC 0480	926	16.56	63.76	122	16.34
LYC 0540	13780	1.71	92.10	236	7.19
LYC 0541	1075	5.25	90.59	157	7.77
LYC 0720	200	6.55	79.38	280	6.33
LYC R680	392	19.63	59.97	67	29.53
LYC T53	43	14.10	83.33	204	28.25
MNASCOC4	2	216.47	8.73	24	11.79
ONAN B48	32622	2.47	70.67	310	4.62
PCKARDV1650	35	30.11	36.20	55	14.36
PWA JT12	252	27.53	53.53	351	9.11
PWA JT15	1000	0.00	100.00	392	12.70
PWA PT6	2796	1.78	97.76	448	10.21
PWA R1340	2063	6.00	88.46	260	11.30
PWA R1830	373	14.39	70.03	174	25.23
PWA R2000	26	31.38	16.57	33	29.17
PWA R2800	282	29.29	37.17	130	18.37
PWA R985	2190	7.52	57.98	234	12.29
RROYCEDART	436	0.00	100.00	440	8.39
ALL ENGINES	243314	0.14	81.97	182	1.73

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT LISTED IN THE TABLE, BUT ARE INCLUDED IN THE "ALL ENGINES" ESTIMATES.

TABLE 2 - 21

GENERAL AVIATION FUEL CONSUMPTION
BY AIRCRAFT TYPE
1983

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
FIXED WING			
PISTON			
1 ENG 1-3 SEATS	8.15	66.77	3.6
1 ENG 4+ SEATS	11.06	165.52	4.9
TOTAL 1 ENG	10.03	232.29	6.1
2 ENG 1-6 SEATS	26.91	81.09	5.4
2 ENG 7+ SEATS	35.77	97.17	8.8
TOTAL 2 ENG	31.11	178.26	10.3
OTHER PISTON	263.09	8.54	3.1
TOTAL PISTON	14.50	419.09	12.4
TURBOPROP			
2 ENG 1-12 SEATS	75.44	107.98	7.5
2 ENG 13+ SEATS	179.57	118.28	27.4
TOTAL 2 ENG	108.26	226.26	28.4
OTHER TURBOPROP	35.79	2.98	1.1
TOTAL TURBOPROP	105.48	229.24	28.4
TURBOJET			
2 ENG	211.05	284.83	24.2
OTHER	385.76	47.70	18.8
TOTAL TURBOJET	225.71	332.53	30.7
TOTAL FIXED WING	30.13	980.86	43.6
ROTORCRAFT			
PISTON	13.50	7.72	0.7
TURBINE	29.98	50.95	5.3
TOTAL ROTORCRAFT	25.83	58.67	5.4
OTHER	4.00	1.68	0.2
TOTAL AIRCRAFT	29.54	1041.21	43.9
TOTAL JET FUEL	114.61	612.72	42.1
TOTAL AVIATION GASOLINE	14.33	428.49	12.4

TABLE 2 - 22
GENERAL AVIATION MILES FLOWN
BY AIRCRAFT TYPE
NAUTICAL MILES (IN THOUSANDS)
1983

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS	1911	26082	214199	237692	123923	24558	23738	0	2919	5983	49800	710807
1 ENG: 4+ SEATS	43534	444992	590803	146053	11548	49925	11466	18300	71555	20513	141209	1549899
1 ENGINE: TOTAL	45446	471075	805003	383745	135471	74483	35205	18300	74475	26496	191009	2260706
2 ENG: 1-6 SEATS	75035	168331	35409	8909	2531	5576	74	31914	72012	4761	18034	422586
2 ENG: 7+ SEATS	134477	63623	3034	2171	1796	3667	1006	96473	74838	2395	5773	389255
2 ENG: TOTAL	209513	231954	38443	11080	4327	9243	1080	128388	146850	7156	23807	811840
PISTON OTHER	24	13	0	0	1001	6	506	1493	298	388	1966	5695
PISTON TOTAL	254982	703042	843446	394825	140798	83733	36791	148181	221622	34040	216782	3078241
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS	188577	36979	597	0	0	0	1872	0	36767	4419	1299	270511
2 ENG: 13+ SEATS	14653	0	38	0	0	0	0	135825	0	1477	0	151993
2 ENGINE: TOTAL	203231	36979	635	0	0	0	1872	135825	36767	5895	1299	422504
TURBOPROP: OTHER	164	0	23	0	14485	202	0	154	76	347	0	15452
TURBOPROP: TOTAL	203395	36979	658	0	14485	202	1872	135979	36843	6243	1299	437956

TABLE 2 - 22
GENERAL AVIATION MILES FLOWN
BY AIRCRAFT TYPE
NAUTICAL MILES (IN THOUSANDS)
1983

AIRCRAFT TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	COMM	TAXI	OTHER	RENTAL	TOTAL
FIXED WING - TURBOJET												
2 ENGINE TURBOJET	455334	39011	6994	0	0	0	0	0	9022	519	0	510880
TURBOJET: OTHER	38327	1733	6157	0	0	0	0	0	0	128	0	46344
TURBOJET: TOTAL	493661	40743	13151	0	0	0	0	0	9022	647	0	557224
FIXED WING: TOTAL	952038	780765	857254	394825	155283	83935	38663	284160	267487	40930	218081	4073421
ROTORCRAFT:												
PISTON	198	1738	1350	5050	12163	8523	2016	9	320	1277	179	32822
TURBINE	79789	3561	151	5460	699	3972	16875	429	23176	8260	0	142372
ROTORCRAFT: TOTAL	79987	5299	1501	10510	12862	12495	18890	437	23496	9536	179	175194
OTHER	122	13	8422	2416	0	0	0	0	0	340	1026	12339
TOTAL	1032148	786077	867177	407750	168145	96430	57554	284598	290984	50806	219286	4260954

TABLE 2-23

NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

1983

		1	2	3	4	5	6	7	8	TOTALS
L	ESTIMATE	90	220	3902	9190	0	9	1667	603	15681
	% STD ERR	*	49.5	11.8	8.3	0.0	*	19.8	32.7	6.1
	ROW %	0.6	1.4	24.9	58.6	0.0	0.1	10.6	3.8	
	COLUMN %	0.2	1.4	9.8	11.8	0.0	0.9	9.6	0.9	6.0
L,MB	ESTIMATE	219	32	1405	7999	0	2	948	1264	11868
	% STD ERR	*	*	21.0	8.9	0.0	*	23.5	21.0	7.1
	ROW %	1.8	0.3	11.8	67.4	0.0	0.0	8.0	10.7	
	COLUMN %	0.5	0.2	3.5	10.3	0.0	0.2	5.5	1.9	4.6
L,MB,GS	ESTIMATE	247	181	1008	32948	266	585	11464	46633	93332
	% STD ERR	*	*	22.1	4.0	48.6	32.4	7.1	3.0	1.7
	ROW %	0.3	0.2	1.1	35.3	0.3	0.6	12.3	50.0	
	COLUMN %	0.6	1.2	2.5	42.3	52.2	56.2	66.3	69.4	35.8
L,MB,GS,RA	ESTIMATE	0	0	33	832	77	93	442	17741	19217
	% STD ERR	0.0	0.0	*	26.3	*	*	38.4	4.0	3.9
	ROW %	0.0	0.0	0.2	4.3	0.4	0.5	2.3	92.3	
	COLUMN %	0.0	0.0	0.1	1.1	15.1	8.9	2.6	26.4	7.4
LRN	ESTIMATE	0	322	419	1737	9	35	579	6293	9393
	% STD ERR	0.0	43.4	37.6	19.3	*	*	32.4	7.5	6.7
	ROW %	0.0	3.4	4.5	18.5	0.1	0.4	6.2	67.0	
	COLUMN %	0.0	2.1	1.0	2.2	1.8	3.4	3.3	9.4	3.6
RA	ESTIMATE	7	63	74	946	77	115	569	18120	19973
	% STD ERR	*	*	44.3	24.5	*	*	34.2	3.9	3.8
	ROW %	0.0	0.3	0.4	4.7	0.4	0.6	2.8	90.7	
	COLUMN %	0.0	0.4	0.2	1.2	15.1	11.0	3.3	27.0	7.7
ML	ESTIMATE	0	7	65	408	0	0	4	556	1041
	% STD ERR	0.0	*	*	41.7	0.0	0.0	*	31.6	24.3
	ROW %	0.0	0.7	6.2	39.2	0.0	0.0	0.4	53.4	
	COLUMN %	0.0	0.0	0.2	0.5	0.0	0.0	0.0	0.8	0.4
L,MB,GS,ML	ESTIMATE	0	0	2	328	0	0	4	525	860
	% STD ERR	0.0	0.0	*	46.2	0.0	0.0	*	32.8	26.6
	ROW %	0.0	0.0	0.2	38.1	0.0	0.0	0.5	61.0	
	COLUMN %	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.8	0.3

TABLE 2-23

NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
LRN,ML	ESTIMATE	0	0	2	86	0	0	0	386	474
	% STD ERR	0.0	0.0	*	*	0.0	0.0	0.0	36.1	33.2
	ROW %	0.0	0.0	0.4	18.1	0.0	0.0	0.0	81.4	
	COLUMN %	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.2
NO GROUP	ESTIMATE	40764	14428	33189	26515	166	329	2644	822	118857
	% STD ERR	2.9	5.5	3.8	4.7	*	40.6	15.8	28.7	1.3
	ROW %	34.3	12.1	27.9	22.3	0.1	0.3	2.2	0.7	
	COLUMN %	98.6	94.6	83.1	34.0	32.5	31.6	15.3	1.2	45.6
ALL CRAFT	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS

2. TWO-WAY COMMUNICATIONS

3. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
VOR OR ADF OR RNAV

GROUP
4. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
4096 CODE TRANSPONDER
VOR OR RNAV

5. 4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

6. TWO-WAY COMMUNICATIONS
4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

GROUP
7. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

8. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT
4096 CODE TRANSPONDER
VOR OR RNAV
DME

GROUP

L: LOCALIZER

MB: MARKER BEACON

GS: GLIDE SLOPE

GROUP

RA: RADAR ALTIMETER

LRN: LONG RANGE RNAV

ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-24

HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

1983

		1	2	3	4	5	6	7	8	TOTALS
EXECUTIVE	ESTIMATE	104	68	521	1334	160	23	1097	14280	17587
	% STD ERR	*	*	35.8	20.7	*	*	21.5	4.6	4.3
	ROW %	0.6	0.4	3.0	7.6	0.9	0.1	6.2	81.2	
	COLUMN %	0.3	0.4	1.3	1.7	31.4	2.2	6.3	21.3	6.8
BUSINESS	ESTIMATE	1136	282	2654	14606	145	204	3458	24219	46705
	% STD ERR	23.0	33.7	14.9	6.4	*	*	13.2	4.5	3.1
	ROW %	2.4	0.6	5.7	31.3	0.3	0.4	7.4	51.9	
	COLUMN %	2.7	1.8	6.6	18.7	28.4	19.6	20.0	36.1	17.9
PERSONAL	ESTIMATE	12495	6607	22353	41808	131	217	7088	16163	106861
	% STD ERR	5.8	8.2	4.7	3.5	*	*	9.4	6.0	1.6
	ROW %	11.7	6.2	20.9	39.1	0.1	0.2	6.6	15.1	
	COLUMN %	30.2	43.3	55.9	53.6	25.7	20.8	41.0	24.1	41.0
INSTRUCT.	ESTIMATE	895	637	3457	7492	0	135	1818	1994	16429
	% STD ERR	23.2	26.0	13.8	9.6	0.0	*	19.8	18.1	6.1
	ROW %	5.4	3.9	21.0	45.6	0.0	0.8	11.1	12.1	
	COLUMN %	2.2	4.2	8.7	9.6	0.0	13.0	10.5	3.0	6.3
AERIAL AP.	ESTIMATE	5390	964	159	280	0	2	27	150	6972
	% STD ERR	10.8	22.6	*	45.2	0.0	*	31.5	*	9.1
	ROW %	77.3	13.8	2.3	4.0	0.0	0.0	0.4	2.2	
	COLUMN %	13.0	6.3	0.4	0.4	0.0	0.2	0.2	0.2	2.7
AERIAL OBS	ESTIMATE	414	562	942	1630	0	19	257	482	4307
	% STD ERR	33.6	26.0	25.1	20.0	0.0	*	47.0	33.4	11.4
	ROW %	9.6	13.0	21.9	37.8	0.0	0.4	6.0	11.2	
	COLUMN %	1.0	3.7	2.4	2.1	0.0	1.8	1.5	0.7	1.7
OTHER WORK	ESTIMATE	253	1010	453	628	0	9	55	106	2514
	% STD ERR	41.8	23.8	32.6	31.8	0.0	*	*	*	14.7
	ROW %	10.1	40.2	18.0	25.0	0.0	0.4	2.2	4.2	
	COLUMN %	0.6	6.6	1.1	0.8	0.0	0.9	0.3	0.2	1.0
COMMUTER	ESTIMATE	6	14	20	262	0	0	313	970	1585
	% STD ERR	*	*	29.9	42.2	0.0	0.0	44.0	21.8	17.2
	ROW %	0.4	0.9	1.3	16.5	0.0	0.0	19.7	61.2	
	COLUMN %	0.0	0.1	0.1	0.3	0.0	0.0	1.8	1.4	0.6

TABLE 2-24

HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
AIR TAXI	ESTIMATE	17	1320	160	1005	0	415	487	3853	7257
	% STD ERR	39.5	20.6	48.5	23.9	0.0	34.1	30.6	11.6	8.3
	ROW %	0.2	18.2	2.2	13.8	0.0	5.7	6.7	53.1	
	COLUMN %	0.0	8.7	0.4	1.3	0.0	39.9	2.8	5.7	2.8
OTHER	ESTIMATE	723	573	546	1316	3	13	451	1555	5180
	% STD ERR	27.6	28.4	31.6	21.0	*	33.6	36.5	18.0	10.1
	ROW %	14.0	11.1	10.5	25.4	0.1	0.3	8.7	30.0	
	COLUMN %	1.7	3.8	1.4	1.7	0.6	1.2	2.6	2.3	2.0
RENTAL	ESTIMATE	476	99	1115	3066	0	0	1489	1790	8035
	% STD ERR	34.0	49.1	25.5	15.4	0.0	0.0	21.1	18.7	9.0
	ROW %	5.9	1.2	13.9	38.2	0.0	0.0	18.5	22.3	
	COLUMN %	1.2	0.6	2.8	3.9	0.0	0.0	8.6	2.7	3.1
INACTIVE	ESTIMATE	19290	2840	7886	4921	5	20	519	2034	37515
	% STD ERR	4.8	13.2	8.2	11.0	*	*	30.7	15.7	3.4
	ROW %	51.4	7.6	21.0	13.1	0.0	0.1	1.4	5.4	
	COLUMN %	46.7	18.6	19.7	6.3	1.0	1.9	3.0	3.0	14.4
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS
2. TWO-WAY COMMUNICATIONS
3. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   VOR OR ADF OR RNAV

GROUP
4. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   4096 CODE TRANSPONDER
   VOR OR RNAV
5. 4096 CODE TRANSPONDER
   ALTITUDE ENCODING EQUIPMENT
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NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-25

HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP

1983

		1	2	3	4	5	6	7	8	TOTALS
1-49	ESTIMATE	10834	4616	14044	18659	216	145	2499	6076	57090
	% STD ERR	6.7	10.1	6.2	5.6	*	*	15.8	9.8	2.8
	ROW %	19.0	8.1	24.6	32.7	0.4	0.3	4.4	10.6	
	COLUMN %	26.2	30.3	35.1	23.9	42.4	13.9	14.4	9.0	21.9
50-99	ESTIMATE	3918	2384	9170	21332	50	215	4597	12487	54153
	% STD ERR	11.3	14.3	7.9	5.3	*	*	11.7	6.8	3.0
	ROW %	7.2	4.4	16.9	39.4	0.1	0.4	8.5	23.1	
	COLUMN %	9.5	15.6	23.0	27.4	9.8	20.7	26.6	18.6	20.8
100-149	ESTIMATE	1920	1094	3484	12538	5	182	3292	13115	35629
	% STD ERR	17.9	20.6	13.2	7.1	*	*	14.1	6.5	3.9
	ROW %	5.4	3.1	9.8	35.2	0.0	0.5	9.2	36.8	
	COLUMN %	4.6	7.2	8.7	16.1	1.0	17.5	19.0	19.5	13.7
150-199	ESTIMATE	1119	783	1082	5086	5	40	1362	7687	17164
	% STD ERR	24.0	25.0	24.8	11.4	*	*	20.7	8.7	5.8
	ROW %	6.5	4.6	6.3	29.6	0.0	0.2	7.9	44.8	
	COLUMN %	2.7	5.1	2.7	6.5	1.0	3.8	7.9	11.4	6.6
200-249	ESTIMATE	853	468	792	4374	97	94	610	6639	13928
	% STD ERR	28.2	34.9	27.5	12.5	*	*	31.2	9.2	6.5
	ROW %	6.1	3.4	5.7	31.4	0.7	0.7	4.4	47.7	
	COLUMN %	2.1	3.1	2.0	5.6	19.0	9.0	3.5	9.9	5.3
250-299	ESTIMATE	1019	340	856	2391	0	4	658	4346	9612
	% STD ERR	24.6	41.9	26.8	17.3	0.0	*	32.0	11.0	7.8
	ROW %	10.6	3.5	8.9	24.9	0.0	0.0	6.8	45.2	
	COLUMN %	2.5	2.2	2.1	3.1	0.0	0.4	3.8	6.5	3.7
300-349	ESTIMATE	789	376	589	1607	0	0	369	3475	7206
	% STD ERR	28.5	35.0	34.0	20.5	0.0	0.0	43.5	12.6	9.1
	ROW %	10.9	5.2	8.2	22.3	0.0	0.0	5.1	48.2	
	COLUMN %	1.9	2.5	1.5	2.1	0.0	0.0	2.1	5.2	2.8
350-399	ESTIMATE	375	242	179	1150	0	23	363	2255	4586
	% STD ERR	43.2	48.7	*	25.0	0.0	*	35.6	15.6	11.4
	ROW %	8.2	5.3	3.9	25.1	0.0	0.5	7.9	49.2	
	COLUMN %	0.9	1.6	0.4	1.5	0.0	2.2	2.1	3.4	1.8

TABLE 2-25

HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
400-449	ESTIMATE	367	382	583	1281	44	152	609	2319	5736
	% STD ERR	44.6	36.8	35.5	23.2	*	*	34.9	15.2	10.4
	ROW %	6.4	6.7	10.2	22.3	0.8	2.6	10.6	40.4	
	COLUMN %	0.9	2.5	1.5	1.6	8.6	14.6	3.5	3.5	2.2
450 UP	ESTIMATE	631	1401	1499	4896	22	180	2158	7095	17882
	% STD ERR	28.9	19.5	20.9	11.8	*	*	16.8	7.9	5.4
	ROW %	3.5	7.8	8.4	27.4	0.1	1.0	12.1	39.7	
	COLUMN %	1.5	9.2	3.8	6.3	4.3	17.3	12.5	10.6	6.9
INACTIVE	ESTIMATE	19290	2840	7886	4921	5	20	519	2034	37515
	% STD ERR	4.8	13.2	8.2	11.0	*	*	30.7	15.7	3.4
	ROW %	51.4	7.6	21.0	13.1	0.0	0.1	1.4	5.4	
	COLUMN %	46.7	18.6	19.7	6.3	1.0	1.9	3.0	3.0	14.4
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS
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   4096 CODE TRANSPONDER
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NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-26

HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1983

		1	2	3	4	5	6	7	8	TOTALS
0-4 YRS	ESTIMATE	3877	1912	3411	7051	74	415	3939	16486	37165
	% STD ERR	12.6	16.0	14.6	10.0	*	40.0	12.7	5.6	3.7
	ROW %	10.4	5.1	9.2	19.0	0.2	1.1	10.6	44.4	
	COLUMN %	9.4	12.5	8.5	9.0	14.5	39.9	22.8	24.5	14.3
5-9 YRS	ESTIMATE	5272	2691	5340	18348	188	263	5408	22984	60495
	% STD ERR	11.1	14.1	11.4	6.1	49.9	*	11.4	4.9	2.9
	ROW %	8.7	4.4	8.8	30.3	0.3	0.4	8.9	38.0	
	COLUMN %	12.8	17.6	13.4	23.5	36.9	25.3	31.3	34.2	23.2
10-14 YRS	ESTIMATE	3464	2396	5044	13235	102	104	1809	9644	35798
	% STD ERR	13.6	15.3	11.2	7.1	*	*	19.5	7.8	4.0
	ROW %	9.7	6.7	14.1	37.0	0.3	0.3	5.1	26.9	
	COLUMN %	8.4	15.7	12.6	17.0	20.0	10.0	10.5	14.4	13.7
15-19 YRS	ESTIMATE	3985	2306	7865	18802	166	195	2533	10275	46126
	% STD ERR	12.9	15.5	9.2	5.7	*	*	15.9	7.4	3.4
	ROW %	8.6	5.0	17.1	40.8	0.4	0.4	5.5	22.3	
	COLUMN %	9.6	15.1	19.7	24.1	32.5	18.7	14.6	15.3	17.7
20-24 YRS	ESTIMATE	1752	1088	4425	10556	5	50	1803	3771	23451
	% STD ERR	17.9	21.7	11.4	7.4	*	*	17.6	11.5	4.7
	ROW %	7.5	4.6	18.9	45.0	0.0	0.2	7.7	16.1	
	COLUMN %	4.2	7.1	11.1	13.5	1.0	4.8	10.4	5.6	9.0
25-29 YRS	ESTIMATE	1816	976	3776	5394	0	21	601	2063	14646
	% STD ERR	18.3	24.5	13.1	10.7	0.0	35.8	28.7	16.4	6.2
	ROW %	12.4	6.7	25.8	36.8	0.0	0.1	4.1	14.1	
	COLUMN %	4.4	6.4	9.5	6.9	0.0	2.0	3.5	3.1	5.6
30-34 YRS	ESTIMATE	1760	931	2755	2584	0	59	466	599	9153
	% STD ERR	16.3	24.1	12.1	14.8	0.0	*	26.5	28.8	6.8
	ROW %	19.2	10.2	30.1	28.2	0.0	0.6	5.1	6.5	
	COLUMN %	4.3	6.1	6.9	3.3	0.0	5.7	2.7	0.9	3.5
35+ YRS	ESTIMATE	17575	3287	8384	3027	0	19	802	573	33668
	% STD ERR	4.7	13.1	7.6	11.6	0.0	47.5	27.7	20.9	3.2
	ROW %	52.2	9.8	24.9	9.0	0.0	0.1	2.4	1.7	
	COLUMN %	42.5	21.6	21.0	3.9	0.0	1.8	4.6	0.9	12.9

TABLE 2-26

HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS

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TABLE 2-27

HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

1983

		1	2	3	4	5	6	7	8	TOTALS
FIXED WING	ESTIMATE	29652	7026	26275	17578	12	97	2274	1308	84221
PISTON	% STD ERR	3.6	9.1	4.0	5.5	*	*	16.9	23.2	0.0
ENG=1	ROW %	35.2	8.3	31.2	20.9	0.0	0.1	2.7	1.6	
1-3 SEATS	COLUMN %	71.8	46.1	65.8	22.6	2.4	9.3	13.1	1.9	32.3
FIXED WING	ESTIMATE	3725	1852	12332	53898	390	486	12613	34254	119549
PISTON	% STD ERR	11.8	16.1	6.2	2.6	41.5	38.5	6.8	3.7	0.0
ENG=1	ROW %	3.1	1.5	10.3	45.1	0.3	0.4	10.6	28.7	
4+ SEATS	COLUMN %	9.0	12.1	30.9	69.2	76.5	46.7	72.9	51.0	45.9
FIXED WING	ESTIMATE	297	51	301	3403	52	72	980	13536	18691
PISTON	% STD ERR	38.8	*	36.1	11.1	*	*	22.7	3.2	0.0
ENG=2	ROW %	1.6	0.3	1.6	18.2	0.3	0.4	5.2	72.4	
1-6 SEATS	COLUMN %	0.7	0.3	0.8	4.4	10.2	6.9	5.7	20.1	7.2
FIXED WING	ESTIMATE	390	144	191	883	6	243	480	7792	10130
PISTON	% STD ERR	20.2	*	16.1	18.9	*	40.2	22.3	3.0	0.0
ENG=2	ROW %	3.8	1.4	1.9	8.7	0.1	2.4	4.7	76.9	
7+ SEATS	COLUMN %	0.9	0.9	0.5	1.1	1.2	23.3	2.8	11.6	3.9
FIXED WING	ESTIMATE	42	2	28	125	0	0	23	106	327
PISTON	% STD ERR	30.7	*	39.7	14.8	0.0	0.0	41.2	16.4	0.0
OTHER	ROW %	12.8	0.6	8.6	38.2	0.0	0.0	7.0	32.4	
	COLUMN %	0.1	0.0	0.1	0.2	0.0	0.0	0.1	0.2	0.1
FIXED WING	ESTIMATE	0	0	1	89	9	31	70	4668	4868
TURBOPROP	% STD ERR	0.0	0.0	*	*	*	*	*	1.9	0.0
ENG=2	ROW %	0.0	0.0	0.0	1.8	0.2	0.6	1.4	95.9	
1-12 SEATS	COLUMN %	0.0	0.0	0.0	0.1	1.8	3.0	0.4	6.9	1.9
FIXED WING	ESTIMATE	8	0	0	97	0	20	25	518	668
TURBOPROP	% STD ERR	*	0.0	0.0	49.6	0.0	*	*	11.0	0.0
ENG=2	ROW %	1.2	0.0	0.0	14.5	0.0	3.0	3.7	77.5	
13+ SEATS	COLUMN %	0.0	0.0	0.0	0.1	0.0	1.9	0.1	0.8	0.3
FIXED WING	ESTIMATE	99	7	11	22	0	0	3	61	204
TURBOPROP	% STD ERR	41.1	*	*	*	0.0	0.0	*	*	0.0
OTHER	ROW %	48.5	3.4	5.4	10.8	0.0	0.0	1.5	29.9	
	COLUMN %	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1

TABLE 2-27

HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
FIXED WING TURBOJET ENG=2	ESTIMATE	47	0	0	92	43	0	0	3473	3655
	% STD ERR	*	0.0	0.0	*	*	0.0	0.0	2.5	0.0
	ROW %	1.3	0.0	0.0	2.5	1.2	0.0	0.0	95.0	
	COLUMN %	0.1	0.0	0.0	0.1	8.4	0.0	0.0	5.2	1.4
FIXED WING TURBOJET OTHER	ESTIMATE	32	5	6	9	0	0	0	668	720
	% STD ERR	*	46.5	44.3	*	0.0	0.0	0.0	4.5	0.0
	ROW %	4.4	0.7	0.8	1.3	0.0	0.0	0.0	92.8	
	COLUMN %	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3
ROTORCRAFT PISTON	ESTIMATE	2861	1929	198	349	0	39	37	0	5413
	% STD ERR	7.3	9.9	19.4	34.7	0.0	33.2	*	0.0	0.0
	ROW %	52.9	35.6	3.7	6.4	0.0	0.7	0.7	0.0	
	COLUMN %	6.9	12.6	0.5	0.4	0.0	3.7	0.2	0.0	2.1
ROTORCRAFT TURBINE	ESTIMATE	267	891	480	1362	0	10	790	780	4580
	% STD ERR	39.7	23.1	31.9	16.9	0.0	*	25.2	23.7	0.0
	ROW %	5.8	19.5	10.5	29.7	0.0	0.2	17.2	17.0	
	COLUMN %	0.6	5.8	1.2	1.7	0.0	1.0	4.6	1.2	1.8
OTHER	ESTIMATE	3906	3343	131	35	0	44	0	17	7476
	% STD ERR	6.8	7.9	*	*	0.0	*	0.0	*	0.0
	ROW %	52.2	44.7	1.8	0.5	0.0	0.6	0.0	0.2	
	COLUMN %	9.5	21.9	0.3	0.0	0.0	4.2	0.0	0.0	2.9
ALL CRAFT	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS

2. TWO-WAY COMMUNICATIONS

3. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
VOR OR ADF OR RNAV

GROUP
4. TWO-WAY COMMUNICATIONS
TWO SYSTEMS - AIR TAXIS
4096 CODE TRANSPONDER
VOR OR RNAV

5. 4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

6. TWO-WAY COMMUNICATIONS
4096 CODE TRANSPONDER
ALTITUDE ENCODING EQUIPMENT

GROUP
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TWO SYSTEMS - AIR TAXIS
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ALTITUDE ENCODING EQUIPMENT

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TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT
4096 CODE TRANSPONDER
VOR OR RNAV
DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-28

HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

1983

		1	2	3	4	5	6	7	8	TOTALS
ALASKAN	ESTIMATE	827	966	2912	2283	97	4	36	443	7570
	% STD ERR	25.9	23.3	14.1	16.8	*	*	*	36.7	8.7
	ROW %	10.9	12.8	38.5	30.2	1.3	0.1	0.5	5.9	
	COLUMN %	2.0	6.3	7.3	2.9	19.0	0.4	0.2	0.7	2.9
CENTRAL	ESTIMATE	2646	473	2957	4941	0	37	498	3216	14768
	% STD ERR	14.3	28.7	15.5	11.8	0.0	*	37.3	13.9	6.5
	ROW %	17.9	3.2	20.0	33.5	0.0	0.3	3.4	21.8	
	COLUMN %	6.4	3.1	7.4	6.3	0.0	3.6	2.9	4.8	5.7
EASTERN	ESTIMATE	4026	1890	4185	7901	85	20	2592	8119	28817
	% STD ERR	11.3	17.9	12.2	9.4	*	*	16.4	8.6	4.5
	ROW %	14.0	6.6	14.5	27.4	0.3	0.1	9.0	28.2	
	COLUMN %	9.7	12.4	10.5	10.1	16.7	1.9	15.0	12.1	11.1
EUROPEAN	ESTIMATE	3	13	20	177	2	0	15	433	663
	% STD ERR	*	*	*	*	*	0.0	*	33.8	27.4
	ROW %	0.5	2.0	3.0	26.7	0.3	0.0	2.3	65.3	
	COLUMN %	0.0	0.1	0.1	0.2	0.4	0.0	0.1	0.6	0.3
GREAT LAKE	ESTIMATE	8526	2566	8008	14193	51	214	2197	10620	46375
	% STD ERR	7.9	14.4	8.6	6.8	*	*	17.1	7.4	3.4
	ROW %	18.4	5.5	17.3	30.6	0.1	0.5	4.7	22.9	
	COLUMN %	20.6	16.8	20.0	18.2	10.0	20.6	12.7	15.8	17.8
NEW ENGLND	ESTIMATE	1749	384	1652	2529	2	49	891	2226	9482
	% STD ERR	18.2	31.7	19.8	16.8	*	*	28.2	17.1	8.2
	ROW %	18.4	4.0	17.4	26.7	0.0	0.5	9.4	23.5	
	COLUMN %	4.2	2.5	4.1	3.2	0.4	4.7	5.2	3.3	3.6
NRTHWST MT	ESTIMATE	3759	2470	4792	9071	77	208	1921	5143	27439
	% STD ERR	12.0	15.3	11.4	8.6	*	*	18.4	10.7	4.6
	ROW %	13.7	9.0	17.5	33.1	0.3	0.8	7.0	18.7	
	COLUMN %	9.1	16.2	12.0	11.6	15.1	20.0	11.1	7.7	10.5
SOUTHERN	ESTIMATE	6219	1247	5011	12786	5	189	2144	12474	40075
	% STD ERR	9.6	19.2	11.1	7.3	*	*	17.7	6.6	3.7
	ROW %	15.5	3.1	12.5	31.9	0.0	0.5	5.3	31.1	
	COLUMN %	15.0	8.2	12.5	16.4	1.0	18.2	12.4	18.6	15.4

TABLE 2-28

HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)

1983

		1	2	3	4	5	6	7	8	TOTALS
SOUTHWEST	ESTIMATE	6636	1961	5223	11461	91	125	2232	12603	40332
	% STD ERR	9.6	16.9	11.0	7.6	*	*	17.2	6.7	3.7
	ROW %	16.5	4.9	13.0	28.4	0.2	0.3	5.5	31.2	
	COLUMN %	16.1	12.9	13.1	14.7	17.8	12.0	12.9	18.8	15.5
WST-PACIFI	ESTIMATE	6309	2701	5503	13334	132	134	4846	12022	44982
	% STD ERR	9.2	12.6	10.2	7.0	*	*	11.6	7.0	3.4
	ROW %	14.0	6.0	12.2	29.6	0.3	0.3	10.8	26.7	
	COLUMN %	15.3	17.7	13.8	17.1	25.9	12.9	28.0	17.9	17.3
TOTALS	ESTIMATE	41326	15250	39955	77943	510	1041	17295	67181	260505
	% STD ERR	2.9	5.3	3.3	2.3	34.5	23.4	5.7	2.1	
	ROW %	15.9	5.9	15.3	29.9	0.2	0.4	6.6	25.8	

KEY

GROUP
1. NO REGULATORY AVIONICS
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3. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   VOR OR ADF OR RNAV

GROUP
4. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   4096 CODE TRANSPONDER
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GROUP
7. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   4096 CODE TRANSPONDER
   ALTITUDE ENCODING EQUIPMENT
8. TWO-WAY COMMUNICATIONS
   TWO SYSTEMS - AIR TAXIS
   ALTITUDE ENCODING EQUIPMENT
   4096 CODE TRANSPONDER
   VOR OR RNAV
   DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-29

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
EXECUTIVE	ESTIMATE	469	483	6294	8877	4240	9156	151	123	137	1119	17587
	% STD ERR	34.8	35.7	9.1	5.1	8.7	5.1	*	*	*	23.3	4.3
	ROW %	2.7	2.7	35.8	50.5	24.1	52.1	0.9	0.7	0.8	6.4	
	COLUMN %	3.0	4.1	6.7	46.2	45.1	45.8	14.5	14.3	28.9	0.9	6.8
BUSINESS	ESTIMATE	1743	1988	30168	4825	1748	4852	372	372	62	7792	46705
	% STD ERR	19.1	17.7	4.0	10.1	18.0	10.1	43.0	43.0	*	8.9	3.1
	ROW %	3.7	4.3	64.6	10.3	3.7	10.4	0.8	0.8	0.1	16.7	
	COLUMN %	11.1	16.8	32.3	25.1	18.6	24.3	35.7	43.3	13.1	6.6	17.9
PERSONAL	ESTIMATE	7154	6083	34419	2105	1323	2221	414	274	202	56610	106861
	% STD ERR	9.3	10.1	3.8	17.6	21.6	17.1	42.0	*	*	2.6	1.6
	ROW %	6.7	5.7	32.2	2.0	1.2	2.1	0.4	0.3	0.2	53.0	
	COLUMN %	45.6	51.3	36.9	11.0	14.1	11.1	39.8	31.9	42.6	47.6	41.0
INSTRUCT.	ESTIMATE	3167	832	4761	126	290	183	3	0	0	7540	16429
	% STD ERR	14.9	29.5	11.7	*	*	*	*	0.0	0.0	9.1	6.1
	ROW %	19.3	5.1	29.0	0.8	1.8	1.1	0.0	0.0	0.0	45.9	
	COLUMN %	20.2	7.0	5.1	0.7	3.1	0.9	0.3	0.0	0.0	6.3	6.3
AERIAL AP.	ESTIMATE	124	2	312	3	2	6	2	0	0	6527	6972
	% STD ERR	*	*	38.6	*	*	*	*	0.0	0.0	9.5	9.1
	ROW %	1.8	0.0	4.5	0.0	0.0	0.1	0.0	0.0	0.0	93.6	
	COLUMN %	0.8	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	5.5	2.7
AERIAL OBS	ESTIMATE	524	74	1548	86	245	125	3	0	0	1919	4307
	% STD ERR	32.7	*	20.7	*	48.8	*	*	0.0	0.0	15.9	11.4
	ROW %	12.2	1.7	35.9	2.0	5.7	2.9	0.1	0.0	0.0	44.6	
	COLUMN %	3.3	0.6	1.7	0.4	2.6	0.6	0.3	0.0	0.0	1.6	1.7
OTHER WORK	ESTIMATE	123	4	158	53	71	54	4	4	0	2151	2514
	% STD ERR	*	*	*	*	*	*	*	*	0.0	15.9	14.7
	ROW %	4.9	0.2	6.3	2.1	2.8	2.1	0.2	0.2	0.0	85.6	
	COLUMN %	0.8	0.0	0.2	0.3	0.8	0.3	0.4	0.5	0.0	1.8	1.0
COMMUTER	ESTIMATE	10	200	1055	291	0	296	0	0	0	29	1585
	% STD ERR	*	*	21.8	37.6	0.0	37.0	0.0	0.0	0.0	*	17.2
	ROW %	0.6	12.6	66.6	18.4	0.0	18.7	0.0	0.0	0.0	1.8	
	COLUMN %	0.1	1.7	1.1	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.6

TABLE 2-29

NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP
(CONTINUED)

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
AIR TAXI	ESTIMATE	355	109	4145	1272	603	1489	39	39	39	1121	7257
	% STD ERR	37.5	*	11.2	20.4	29.5	18.7	*	*	*	22.2	8.3
	ROW %	4.9	1.5	57.1	17.5	8.3	20.5	0.5	0.5	0.5	15.4	
	COLUMN %	2.3	0.9	4.4	6.6	6.4	7.5	3.7	4.5	8.2	0.9	2.8
OTHER	ESTIMATE	290	248	1268	806	419	814	16	16	10	2498	5180
	% STD ERR	38.5	49.1	20.6	24.2	37.0	24.0	*	*	*	14.9	10.1
	ROW %	5.6	4.8	24.5	15.6	8.1	15.7	0.3	0.3	0.2	48.2	
	COLUMN %	1.8	2.1	1.4	4.2	4.5	4.1	1.5	1.9	2.1	2.1	2.0
RENTAL	ESTIMATE	559	458	5041	389	138	392	0	0	0	1586	8035
	% STD ERR	36.9	40.7	11.4	40.1	*	39.9	0.0	0.0	0.0	20.0	9.0
	ROW %	7.0	5.7	62.7	4.8	1.7	4.9	0.0	0.0	0.0	19.7	
	COLUMN %	3.6	3.9	5.4	2.0	1.5	2.0	0.0	0.0	0.0	1.3	3.1
INACTIVE	ESTIMATE	1314	1415	4126	498	335	502	54	45	34	30140	37515
	% STD ERR	19.5	21.2	11.5	29.2	41.8	29.0	*	*	*	3.8	3.4
	ROW %	3.5	3.8	11.0	1.3	0.9	1.3	0.1	0.1	0.1	80.3	
	COLUMN %	8.4	11.9	4.4	2.6	3.6	2.5	5.2	5.2	7.2	25.4	14.4
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP		GROUP	
L:	LOCALIZER	RA:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-30

NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
1-49	ESTIMATE	4230	2835	12723	1246	504	1371	310	175	84	35697	57090
	% STD ERR	12.0	14.8	6.7	20.4	31.7	19.7	48.6	*	*	3.6	2.8
	ROW %	7.4	5.0	22.3	2.2	0.9	2.4	0.5	0.3	0.1	62.5	
	COLUMN %	27.0	23.9	13.6	6.5	5.4	6.9	29.8	20.3	17.7	30.0	21.9
50-99	ESTIMATE	3046	3548	21620	2141	1432	2159	233	225	121	23410	54153
	% STD ERR	14.2	13.1	5.1	16.0	21.1	15.9	*	*	*	4.9	3.0
	ROW %	5.6	6.6	39.9	4.0	2.6	4.0	0.4	0.4	0.2	43.2	
	COLUMN %	19.4	29.9	23.2	11.1	15.2	10.8	22.4	26.2	25.5	19.7	20.8
100-149	ESTIMATE	2060	1803	19069	2340	1038	2494	73	72	2	10215	35629
	% STD ERR	18.0	19.7	5.5	15.3	23.5	14.9	*	*	*	7.6	3.9
	ROW %	5.8	5.1	53.5	6.6	2.9	7.0	0.2	0.2	0.0	28.7	
	COLUMN %	13.1	15.2	20.4	12.2	11.1	12.5	7.0	8.4	0.4	8.6	13.7
150-199	ESTIMATE	1095	582	9766	1725	1164	1834	148	148	16	3843	17164
	% STD ERR	24.9	33.8	7.9	17.7	22.4	17.1	*	*	*	12.5	5.8
	ROW %	6.4	3.4	56.9	10.1	6.8	10.7	0.9	0.9	0.1	22.4	
	COLUMN %	7.0	4.9	10.5	9.0	12.4	9.2	14.2	17.2	3.4	3.2	6.6
200-249	ESTIMATE	673	512	7418	1857	943	1897	59	59	54	3350	13928
	% STD ERR	31.8	36.5	9.0	16.3	24.6	16.1	*	*	*	14.0	6.5
	ROW %	4.8	3.7	53.3	13.3	6.8	13.6	0.4	0.4	0.4	24.1	
	COLUMN %	4.3	4.3	7.9	9.7	10.0	9.5	5.7	6.9	11.4	2.8	5.3
250-299	ESTIMATE	528	186	3978	2036	810	2046	1	1	0	2874	9612
	% STD ERR	36.9	*	12.6	15.4	25.3	15.3	*	*	0.0	14.8	7.8
	ROW %	5.5	1.9	41.4	21.2	8.4	21.3	0.0	0.0	0.0	29.9	
	COLUMN %	3.4	1.6	4.3	10.6	8.6	10.2	0.1	0.1	0.0	2.4	3.7
300-349	ESTIMATE	669	186	2856	1589	535	1685	34	28	28	1889	7206
	% STD ERR	32.3	*	14.9	17.6	28.8	17.1	*	*	*	18.0	9.1
	ROW %	9.3	2.6	39.6	22.1	7.4	23.4	0.5	0.4	0.4	26.2	
	COLUMN %	4.3	1.6	3.1	8.3	5.7	8.4	3.3	3.3	5.9	1.6	2.8
350-399	ESTIMATE	212	124	1829	1154	295	1175	0	0	0	1247	4586
	% STD ERR	*	*	18.5	20.3	38.6	20.0	0.0	0.0	0.0	23.3	11.4
	ROW %	4.6	2.7	39.9	25.2	6.4	25.6	0.0	0.0	0.0	27.2	
	COLUMN %	1.4	1.0	2.0	6.0	3.1	5.9	0.0	0.0	0.0	1.0	1.8

TABLE 2-30

NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP
(CONTINUED)

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
400-449	ESTIMATE	399	80	2443	1358	417	1360	0	0	0	1453	5736
	% STD ERR	42.6	*	16.5	18.8	31.2	18.8	0.0	0.0	0.0	21.3	10.4
	ROW %	7.0	1.4	42.6	23.7	7.3	23.7	0.0	0.0	0.0	25.3	
	COLUMN %	2.5	0.7	2.6	7.1	4.4	6.8	0.0	0.0	0.0	1.2	2.2
450 UP	ESTIMATE	1571	611	7374	3364	1917	3543	144	119	144	4636	17882
	% STD ERR	20.7	32.0	8.7	10.7	14.6	10.5	*	*	*	11.5	5.4
	ROW %	8.8	3.4	41.2	18.8	10.7	19.8	0.8	0.7	0.8	25.9	
	COLUMN %	10.0	5.1	7.9	17.5	20.4	17.7	13.8	13.8	30.4	3.9	6.9
INACTIVE	ESTIMATE	1314	1415	4126	498	335	502	54	45	34	30140	37515
	% STD ERR	19.5	21.2	11.5	29.2	41.8	29.0	*	*	*	3.8	3.4
	ROW %	3.5	3.8	11.0	1.3	0.9	1.3	0.1	0.1	0.1	80.3	
	COLUMN %	8.4	11.9	4.4	2.6	3.6	2.5	5.2	5.2	7.2	25.4	14.4
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP		GROUP	
L:	LOCALIZER	RA:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-31

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP

1983

		L	L,MB	L,MB GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
0-4 YRS	ESTIMATE	2380	518	15194	6279	3121	6380	269	269	192	12452	37165
	% STD ERR	17.4	35.3	5.9	8.9	13.2	8.8	48.0	48.0	*	7.0	3.7
	ROW %	6.4	1.4	40.9	16.9	8.4	17.2	0.7	0.7	0.5	33.5	
	COLUMN %	15.2	4.4	16.3	32.7	33.2	31.9	25.8	31.3	40.5	10.5	14.3
5-9 YRS	ESTIMATE	4109	1424	29630	6640	2099	7046	170	131	93	18465	60495
	% STD ERR	13.6	22.5	4.4	9.1	17.2	8.8	*	*	*	5.8	2.9
	ROW %	6.8	2.4	49.0	11.0	3.5	11.6	0.3	0.2	0.2	30.5	
	COLUMN %	26.2	12.0	31.7	34.6	22.3	35.3	16.3	15.2	19.6	15.5	23.2
10-14 YRS	ESTIMATE	1877	2357	13995	2890	1381	2907	161	161	69	14659	35798
	% STD ERR	19.1	17.4	6.7	14.0	20.9	14.0	*	*	*	6.4	4.0
	ROW %	5.2	6.6	39.1	8.1	3.9	8.1	0.4	0.4	0.2	40.9	
	COLUMN %	12.0	19.9	15.0	15.0	14.7	14.6	15.5	18.7	14.6	12.3	13.7
15-19 YRS	ESTIMATE	2700	3016	17446	2286	1220	2317	102	26	0	20461	46126
	% STD ERR	15.9	15.0	5.7	15.5	23.0	15.3	*	*	0.0	5.5	3.4
	ROW %	5.9	6.5	37.8	5.0	2.6	5.0	0.2	0.1	0.0	44.4	
	COLUMN %	17.2	25.4	18.7	11.9	13.0	11.6	9.8	3.0	0.0	17.2	17.7
20-24 YRS	ESTIMATE	1970	2025	9009	567	549	639	107	97	13	9676	23451
	% STD ERR	17.2	17.0	7.7	24.7	31.3	23.4	*	*	*	7.8	4.7
	ROW %	8.4	8.6	38.4	2.4	2.3	2.7	0.5	0.4	0.1	41.3	
	COLUMN %	12.6	17.1	9.7	3.0	5.8	3.2	10.3	11.3	2.7	8.1	9.0
25-29 YRS	ESTIMATE	752	1343	4670	43	380	58	17	7	4	7692	14646
	% STD ERR	29.1	21.8	10.7	28.9	42.2	38.0	*	*	*	9.0	6.2
	ROW %	5.1	9.2	31.9	0.3	2.6	0.4	0.1	0.0	0.0	52.5	
	COLUMN %	4.8	11.3	5.0	0.2	4.0	0.3	1.6	0.8	0.8	6.5	5.6
30-34 YRS	ESTIMATE	686	633	1640	37	28	38	4	0	0	6153	9153
	% STD ERR	26.2	28.4	16.4	43.4	*	42.7	*	0.0	0.0	8.7	6.8
	ROW %	7.5	6.9	17.9	0.4	0.3	0.4	0.0	0.0	0.0	67.2	
	COLUMN %	4.4	5.3	1.8	0.2	0.3	0.2	0.4	0.0	0.0	5.2	3.5
35+ YRS	ESTIMATE	1493	710	1691	87	324	92	62	2	0	29431	33668
	% STD ERR	17.9	29.7	14.4	23.1	43.0	26.7	*	*	0.0	3.5	3.2
	ROW %	4.4	2.1	5.0	0.3	1.0	0.3	0.2	0.0	0.0	87.4	
	COLUMN %	9.5	6.0	1.8	0.5	3.4	0.5	6.0	0.2	0.0	24.8	12.9

TABLE 2-31

NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP
(CONTINUED)

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP		GROUP	
L:	LOCALIZER	RA:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-32

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
FIXED WING	ESTIMATE	7226	2396	4192	84	450	92	230	161	84	70118	84221
PISTON	% STD ERR	9.2	16.9	12.6	*	38.2	*	*	*	*	1.3	0.0
ENG=1	ROW %	8.6	2.8	5.0	0.1	0.5	0.1	0.3	0.2	0.1	83.3	
1-3 SEATS	COLUMN %	46.1	20.2	4.5	0.4	4.8	0.5	22.1	18.7	17.7	59.0	32.3
FIXED WING	ESTIMATE	7132	8346	67625	3393	2876	3608	440	361	59	32412	119549
PISTON	% STD ERR	9.0	8.4	2.0	14.1	14.9	13.7	41.0	45.2	*	3.7	0.0
ENG=1	ROW %	6.0	7.0	56.6	2.8	2.4	3.0	0.4	0.3	0.0	27.1	
4+ SEATS	COLUMN %	45.5	70.3	72.5	17.7	30.6	18.1	42.3	42.0	12.4	27.3	45.9
FIXED WING	ESTIMATE	215	771	13295	3672	872	3815	77	77	72	704	18691
PISTON	% STD ERR	40.9	25.6	3.3	10.6	24.2	10.4	*	*	*	25.5	0.0
ENG=2	ROW %	1.2	4.1	71.1	19.6	4.7	20.4	0.4	0.4	0.4	3.8	
1-6 SEATS	COLUMN %	1.4	6.5	14.2	19.1	9.3	19.1	7.4	9.0	15.2	0.6	7.2
FIXED WING	ESTIMATE	169	29	6251	3020	428	3023	23	14	7	649	10130
PISTON	% STD ERR	45.1	*	5.2	10.6	30.5	10.6	32.4	45.7	*	16.0	0.0
ENG=2	ROW %	1.7	0.3	61.7	29.8	4.2	29.8	0.2	0.1	0.1	6.4	
7+ SEATS	COLUMN %	1.1	0.2	6.7	15.7	4.6	15.1	2.2	1.6	1.5	0.5	3.9
FIXED WING	ESTIMATE	4	5	180	37	18	40	0	0	0	98	327
PISTON	% STD ERR	*	*	10.5	32.6	49.2	31.3	0.0	0.0	0.0	17.7	0.0
OTHER	ROW %	1.2	1.5	55.0	11.3	5.5	12.2	0.0	0.0	0.0	30.0	
	COLUMN %	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1
FIXED WING	ESTIMATE	0	66	660	4104	610	4208	44	44	38	0	4868
TURBOPROP	% STD ERR	0.0	*	23.9	4.1	24.8	3.8	*	*	*	0.0	0.0
ENG=2	ROW %	0.0	1.4	13.6	84.3	12.5	86.4	0.9	0.9	0.8	0.0	
1-12 SEATS	COLUMN %	0.0	0.6	0.7	21.4	6.5	21.1	4.2	5.1	8.0	0.0	1.9
FIXED WING	ESTIMATE	0	0	239	401	141	421	0	0	0	8	668
TURBOPROP	% STD ERR	0.0	0.0	27.4	16.7	39.5	15.7	0.0	0.0	0.0	*	0.0
ENG=2	ROW %	0.0	0.0	35.8	60.0	21.1	63.0	0.0	0.0	0.0	1.2	
13+ SEATS	COLUMN %	0.0	0.0	0.3	2.1	1.5	2.1	0.0	0.0	0.0	0.0	0.3
FIXED WING	ESTIMATE	13	0	69	11	10	17	19	19	7	111	204
TURBOPROP	% STD ERR	*	0.0	*	*	*	*	*	*	*	36.2	0.0
OTHER	ROW %	6.4	0.0	33.8	5.4	4.9	8.3	9.3	9.3	3.4	54.4	
	COLUMN %	0.1	0.0	0.1	0.1	0.1	0.1	1.8	2.2	1.5	0.1	0.1

TABLE 2-32

NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
(CONTINUED)

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
FIXED WING TURBOJET ENG=2	ESTIMATE	0	72	62	3521	2343	3546	207	181	207	0	3655
	% STD ERR	0.0	*	*	2.1	8.3	1.9	45.0	48.4	45.0	0.0	0.0
	ROW %	0.0	2.0	1.7	96.3	64.1	97.0	5.7	5.0	5.7	0.0	
	COLUMN %	0.0	0.6	0.1	18.3	24.9	17.8	19.9	21.0	43.7	0.0	1.4
FIXED WING TURBOJET OTHER	ESTIMATE	2	5	72	602	567	602	0	0	0	39	720
	% STD ERR	*	46.5	*	10.8	13.7	10.8	0.0	0.0	0.0	*	0.0
	ROW %	0.3	0.7	10.0	83.6	78.8	83.6	0.0	0.0	0.0	5.4	
	COLUMN %	0.0	0.0	0.1	3.1	6.0	3.0	0.0	0.0	0.0	0.0	0.3
ROTORCRAFT PISTON	ESTIMATE	176	2	9	2	52	4	0	0	0	5174	5413
	% STD ERR	*	*	*	*	*	*	0.0	0.0	0.0	2.0	0.0
	ROW %	3.3	0.0	0.2	0.0	1.0	0.1	0.0	0.0	0.0	95.6	
	COLUMN %	1.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	4.4	2.1
ROTORCRAFT TURBINE	ESTIMATE	712	176	679	370	1026	590	2	2	0	2106	4580
	% STD ERR	26.2	*	26.6	34.4	21.4	27.5	*	*	0.0	11.9	0.0
	ROW %	15.5	3.8	14.8	8.1	22.4	12.9	0.0	0.0	0.0	46.0	
	COLUMN %	4.5	1.5	0.7	1.9	10.9	3.0	0.2	0.2	0.0	1.8	1.8
OTHER	ESTIMATE	33	0	0	0	0	5	0	0	0	7439	7476
	% STD ERR	*	0.0	0.0	0.0	0.0	*	0.0	0.0	0.0	0.6	0.0
	ROW %	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	99.5	
	COLUMN %	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	2.9
ALL CRAFT	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP		GROUP	
L:	LOCALIZER	RA:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-33

NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
ALASKAN	ESTIMATE	586	32	1800	74	117	195	0	0	0	5049	7570
	% STD ERR	31.5	39.2	18.8	*	*	44.7	0.0	0.0	0.0	10.8	8.7
	ROW %	7.7	0.4	23.8	1.0	1.5	2.6	0.0	0.0	0.0	66.7	
	COLUMN %	3.7	0.3	1.9	0.4	1.2	1.0	0.0	0.0	0.0	4.2	2.9
CENTRAL	ESTIMATE	1360	442	5011	904	347	931	96	13	25	6991	14768
	% STD ERR	23.3	37.3	11.5	25.1	38.8	24.6	*	*	*	9.3	6.5
	ROW %	9.2	3.0	33.9	6.1	2.3	6.3	0.7	0.1	0.2	47.3	
	COLUMN %	8.7	3.7	5.4	4.7	3.7	4.7	9.2	1.5	5.3	5.9	5.7
EASTERN	ESTIMATE	1638	1482	10982	2304	1156	2409	191	187	95	12358	28817
	% STD ERR	19.3	21.8	7.6	15.5	20.5	15.1	*	*	*	6.9	4.5
	ROW %	5.7	5.1	38.1	8.0	4.0	8.4	0.7	0.6	0.3	42.9	
	COLUMN %	10.4	12.5	11.8	12.0	12.3	12.1	18.3	21.7	20.0	10.4	11.1
EUROPEAN	ESTIMATE	0	0	409	222	179	222	3	3	0	31	663
	% STD ERR	0.0	0.0	36.7	43.2	*	43.2	*	*	0.0	*	27.4
	ROW %	0.0	0.0	61.7	33.5	27.0	33.5	0.5	0.5	0.0	4.7	
	COLUMN %	0.0	0.0	0.4	1.2	1.9	1.1	0.3	0.3	0.0	0.0	0.3
GREAT LAKE	ESTIMATE	2736	2493	14492	3646	1225	3703	315	315	167	22808	46375
	% STD ERR	15.7	16.9	6.5	11.9	21.2	11.8	47.8	47.8	*	4.9	3.4
	ROW %	5.9	5.4	31.2	7.9	2.6	8.0	0.7	0.7	0.4	49.2	
	COLUMN %	17.4	21.0	15.5	19.0	13.0	18.5	30.3	36.6	35.2	19.2	17.8
NEW ENGLND	ESTIMATE	647	594	3193	659	193	664	3	0	0	4337	9482
	% STD ERR	32.5	34.4	14.7	31.1	*	30.9	*	0.0	0.0	11.8	8.2
	ROW %	6.8	6.3	33.7	7.0	2.0	7.0	0.0	0.0	0.0	45.7	
	COLUMN %	4.1	5.0	3.4	3.4	2.1	3.3	0.3	0.0	0.0	3.6	3.6
NRTHWST MT	ESTIMATE	1467	854	8634	1150	640	1295	155	74	71	15046	27439
	% STD ERR	20.9	27.3	8.5	20.4	28.4	19.7	*	*	*	6.3	4.6
	ROW %	5.3	3.1	31.5	4.2	2.3	4.7	0.6	0.3	0.3	54.8	
	COLUMN %	9.4	7.2	9.3	6.0	6.8	6.5	14.9	8.6	15.0	12.7	10.5
SOUTHERN	ESTIMATE	2171	2362	15372	3849	1693	3969	114	109	38	16069	40075
	% STD ERR	17.7	16.9	6.2	11.1	18.9	10.9	*	*	*	6.0	3.7
	ROW %	5.4	5.9	38.4	9.6	4.2	9.9	0.3	0.3	0.1	40.1	
	COLUMN %	13.8	19.9	16.5	20.0	18.0	19.9	11.0	12.7	8.0	13.5	15.4

TABLE 2-33

NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
(CONTINUED)

1983

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LRN,ML	NO GROUP	ALL CRAFT
SOUTHWEST	ESTIMATE	2557	1201	14945	4091	2240	4285	68	60	54	16999	40332
	% STD ERR	16.4	23.5	6.4	10.9	15.8	10.7	*	*	*	5.9	3.7
	ROW %	6.3	3.0	37.1	10.1	5.6	10.6	0.2	0.1	0.1	42.1	
	COLUMN %	16.3	10.1	16.0	21.3	23.8	21.5	6.5	7.0	11.4	14.3	15.5
WST-PACIFI	ESTIMATE	2793	2529	17992	2559	1525	2584	88	87	4	18957	44982
	% STD ERR	15.6	16.1	5.8	13.8	19.2	13.7	*	*	*	5.3	3.4
	ROW %	6.2	5.6	40.0	5.7	3.4	5.7	0.2	0.2	0.0	42.1	
	COLUMN %	17.8	21.3	19.3	13.3	16.2	12.9	8.5	10.1	0.8	15.9	17.3
TOTALS	ESTIMATE	15681	11868	93332	19217	9393	19973	1041	860	474	118857	260505
	% STD ERR	6.1	7.1	1.7	3.9	6.7	3.8	24.3	26.6	33.2	1.3	
	ROW %	6.0	4.6	35.8	7.4	3.6	7.7	0.4	0.3	0.2	45.6	

KEY

GROUP		GROUP	
L:	LOCALIZER	RA:	RADAR ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

APPENDIX A.1 FIRST MAILING COVER LETTER

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

February 1984

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1983. Data collected in the survey will be used for performing safety analyses, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey is being mailed to owners of a random sample of around 10 percent of all general aviation aircraft. Because the sample is random it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1983, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations on your aircraft. We appreciate your cooperation.

Sincerely,

Lawrence R. Kelly Jr.

Lawrence Kelly
Acting Manager, Management Standards
and Statistics Division, AMS-400

Enclosure

APPENDIX A.2 SECOND MAILING COVER LETTER

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

March 1984

Dear Aircraft Owner:

In February the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

Lawrence Kelly

Lawrence Kelly
Acting Manager, Management Standards
and Statistics Division, AMS-400

Enclosure

1. CONTROL NUMBER

U.S. Department of Transportation
Federal Aviation Administration

GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY (As of December 31, 1983)

Form Approved OMB No 2120-0060

This report is authorized by Section 311 of the Federal Aviation Act of 1958, as amended. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely. Information collected in this survey will be used for statistical purposes only and not to disclose individual aircraft activity.

2. a. ☐ "X" here if this aircraft is an ultralight and GO TO QUESTION 4.

b. ☐ "X" here if you operate your aircraft principally as an air carrier (under FAR 121 or 127). If so, DO NOT complete remainder of form. However please return to address shown below.

3. AIRCRAFT CHARACTERISTICS

N-

INSTRUCTIONS: Please answer questions for the aircraft identified at right. Mail the completed questionnaire in the enclosed postage paid envelope to

Transportation Systems Center—GAF
Kendall Square
Cambridge, Massachusetts 02142

4. **What were the total lifetime airframe hours as of December 31, 1983?** ..... HOURS

5. **Was aircraft flown in Calendar Year 1983?** *(Check one)*
1 ☐ Yes 2 ☐ No *(Skip to question 11)*

6. **Did you own this aircraft for the entire year of 1983?**
1 ☐ Yes 2 ☐ No
If "No," include previous owner's hours for 1983 in your estimates below.

7. **How many hours did this aircraft fly in each of the categories below during Calendar Year 1983?**

	HOURS
EXECUTIVE/CORPORATE TRANSPORTATION- Company flying with a professional crew transporting company personnel, guests, and cargo ..... a	
BUSINESS TRANSPORTATION-Individual use of an aircraft for business transportation ..... b	
PERSONAL-Individual flying for personal reasons c	
INSTRUCTIONAL-Flying with or under the supervision of a flight instructor *(excludes proficiency flying)* ..... d	
AERIAL APPLICATION-Agriculture, health, forestry, cloud seeding, firefighting, insect control, etc. ..... e	
AERIAL OBSERVATION-Aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, sightseeing *(not Part 135)*, etc. ..... f	
OTHER WORK USE-Construction work *(not Part 135)*, helicopter hoist, aerial advertising, towing gliders, parachuting, etc. ..... g	
COMMUTER AIR CARRIER-Performs at least five scheduled round trips per week between two or more points or carries mail ..... h	
DEMAND AIR TAXI-All Part 135 passenger and cargo operations, including charter and excluding commuter air carrier i	
OTHER-Experimentation, R & D, testing, demonstrations, government, air shows, air racing, etc. ..... j	
AIRCRAFT RENTAL BUSINESS-Commercial flying club, leased and rental aircraft activity *(If you know the purpose of flight, assign hours to categories above. If not, enter hours here.)* ..... k	

8. **In Calendar Year 1983, what percentage of the flying time for this aircraft was flown in each of the following conditions?** *(a, b, c, and d should add to 100%).*

		%
Instrument Meteorological Condition (IMC) Day	a	
Instrument Meteorological Condition (IMC) Night	b	
Visual Meteorological Condition (VMC) Day	c	
Visual Meteorological Condition (VMC) Night	d	
TOTAL		100%

9. **Was this aircraft flown on an Instrument Flight Plan in 1983?**
1 ☐ Yes 2 ☐ No
If "Yes," how many hours were flown on an Instrument Flight Plan? ..... IFR HOURS

10. **What was this aircraft's average rate of fuel consumption (gal./hr.) during 1983?** *(Report whole gals. only)* ..... GAL./HR

11. **In what state** *(Abbreviation)* **or foreign country was this aircraft based as of December 31, 1983?** ..... STATE

12. **AVIONICS EQUIPMENT CAPABILITY**
("X" ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group.)

		X
VHF COMMUNICATIONS EQUIPMENT		
VHF Communications System:		
360 Channels or less	a	
720 Channels or more	b	
More than one comm. system	c	
No VHF Communications Equipment	d	
TRANSPONDER EQUIPMENT		
4096 Code	e	
Altitude Encoding Equipment	f	
No Transponder Equipment	g	
NAVIGATION EQUIPMENT		
VOR Receiver:		
100 Channels	h	
200 Channels	i	
More than one VOR Receiver	j	
Automatic Direction Finder (ADF)	k	
Distance Measuring Equipment (DME)	l	
Area Navigation Equipment (RNAV)	m	
Long Range Nav. (Doppler, INS, Other)	n	
Flight Director	o	
Radar Altimeter	p	
Flight Management Computer	q	
No Navigation Equipment	r	
ILS RECEIVING EQUIPMENT		
Localizer	s	
Marker Beacon	t	
Glide Slope	u	
Microwave Landing System	v	
No ILS Receiving Equipment	w	

FAA Form 1800-54 (12-83)

THANK YOU FOR YOUR COOPERATION

APPENDIX B

SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for three years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

1) The accuracy of owners' addresses deteriorated, causing the percentage of questionnaires returned by the post office to almost triple from 1977 to 1982. This partially accounted for the lower survey response rates experienced since 1977.

2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and

2) aircraft owned by non-U.S corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

1) Aircraft registered to dealers.

2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.

3) Aircraft with a known inaccurate owner's address.

4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1983, the sample frame consisted of 260,505 general aviation aircraft records from which 27,828 records were sampled, yielding a 10.7 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

1) State or territory of aircraft registration.

2) A variable called the make-model index constructed from a combination of the computed aircraft type, the Service Difficulty Reporting (SDR) aircraft manufacturer/model group, and the FAA make-model-series of the aircraft.

The 54 levels of the state criterion and the 268 levels of the make-model index yielded a matrix of 54 by 268 or 14,472 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells, yielding a final sample size of 27,828 general aviation aircraft.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in the sample frame represented by that aircraft. When all responses to the survey

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
Piston			
1 engine, 1-3 seats	84,221	9,783	11.6
1 engine, 4+ seats	119,549	9,377	7.8
2 engines, 1-6 seats	18,691	1,784	9.5
2 engines, 7+ seats	10,130	2,303	22.7
Other Piston	327	289	88.4
Turboprop			
2 engines, 1-12 seats	4,868	310	6.4
2 engines, 13+ seats	669	57	8.5
Other Turboprop	204	53	26.0
Turbojet			
2 engines	3,655	157	4.3
Other Turbojet	720	84	11.7
Rotorcraft			
Piston	5,413	1,657	30.6
Turbine	4,582	625	13.6
Other	7,476	1,349	18.1
TOTAL	260,505	27,828	10.7

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	7,588	1,463	19.3
Central	14,981	1,760	11.7
Eastern	29,193	3,245	11.1
European (Foreign)	543	93	17.1
Great Lakes	46,249	4,179	9.0
New England	9,578	2,145	22.4
Northwest Mountain	27,432	2,711	9.9
Southern	39,431	4,745	12.0
Southwestern	40,703	2,360	5.8
Western-Pacific	44,695	5,126	11.5
TOTAL	260,505	27,828	10.7

Note: Column summations may differ from printed totals due to estimation procedures.

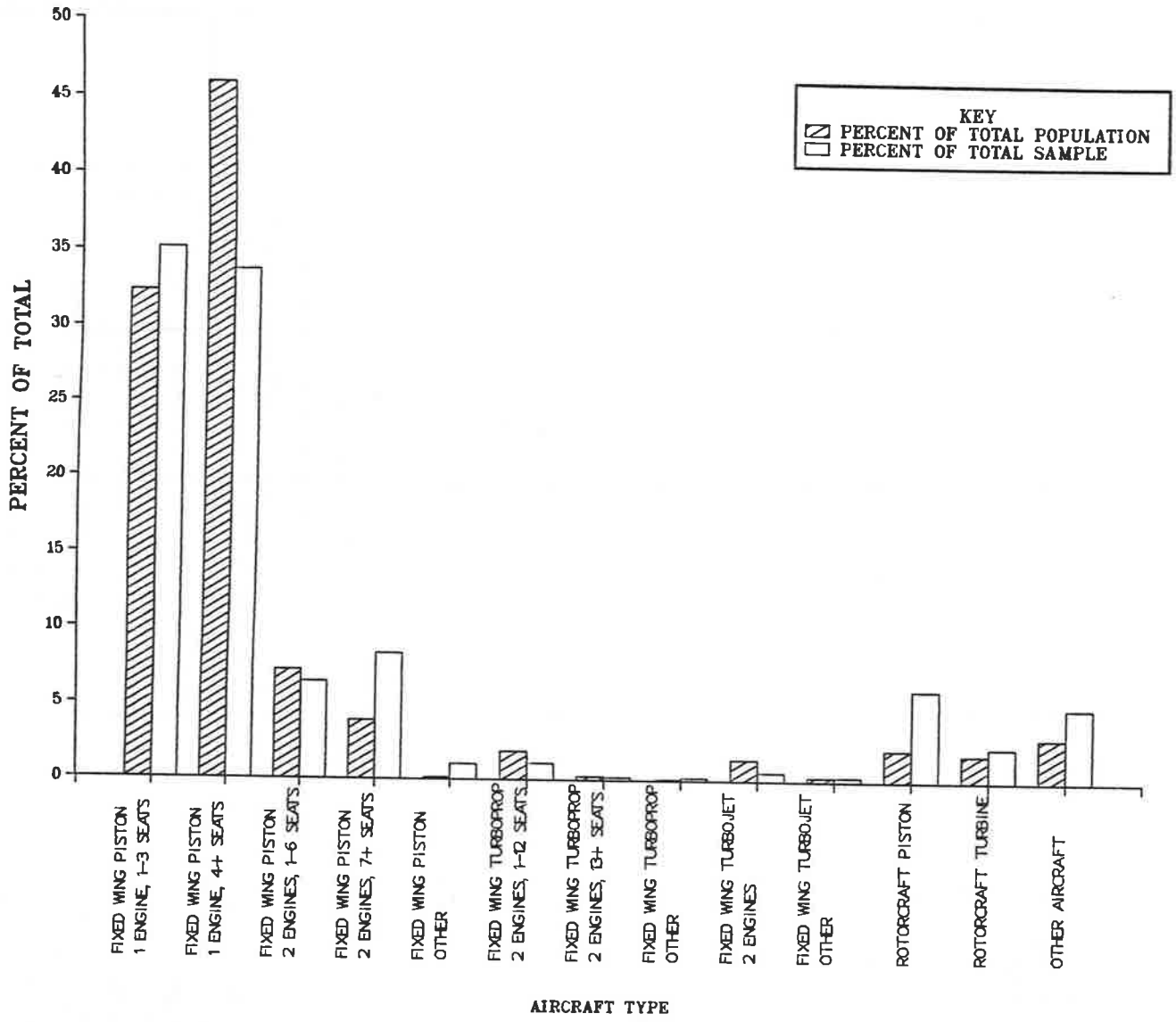

FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

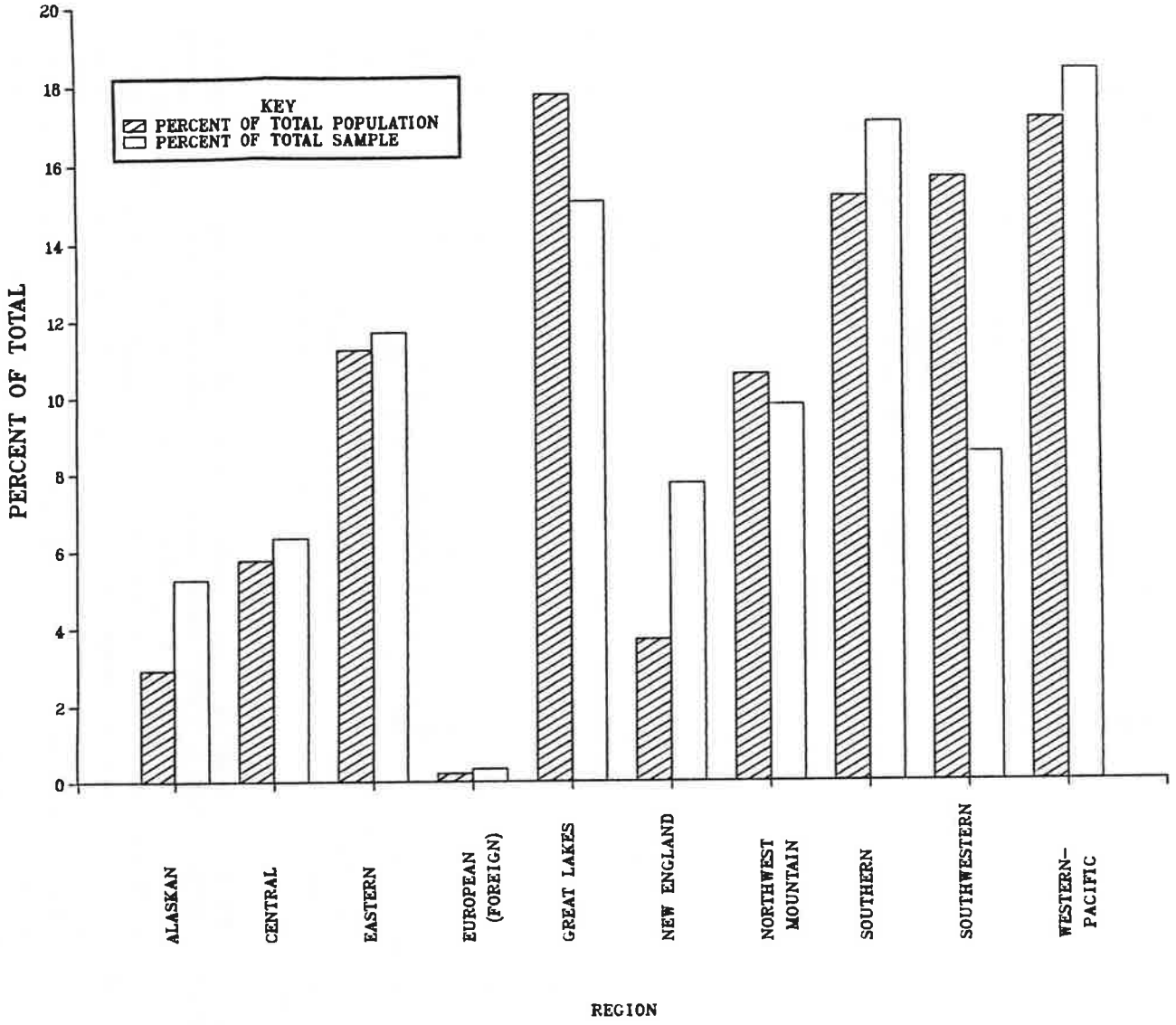

FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

were tallied, each weight was adjusted according to the response rate for the cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

1) Non-respondents' weights were changed to zero.

2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weight by the response rate for the cell.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.[1] Sampling errors occur because the estimates are based on a sample — not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean characteristics, annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model characteristics , and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for all estimated quantities. In some cases, the tables contain the percent standard error, which is the standard error multiplied by one hundred divided by the corresponding estimate.

[1] Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be 2541 + 2(191) or (2159, 2923). One would say that the number of active rotorcraft with piston engines lies somewhere between 2159 and 2923 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- o A second mailing to non-respondents was conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. Sixty-two percent of those aircraft sampled responded to a least one question of the survey. The 1983 rate marks a decline over the 80 percent response achieved in 1977, the first year of the survey. Possible causes of the decrease include:

  1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This caused a gradual increase in the percentage of questionnaires returned undelivered by the postmaster from around 1.6% in 1977 to 6.8% in 1981, hence decreasing the response rate. The percentage of postmaster returns for 1983 (5.7%) shows a slight decline from the 1981 level, but is still significantly higher than in 1977.

2) Repeated sampling of aircraft in two and possibly three or four successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1983 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 36% for the European (Foreign) region due to mail delivery difficulties. The Alaskan Region rate was low at 51% for similar reasons. These two regions together, however, represented only about 3% of the U.S. general aviation fleet. Two aircraft types had response rates of less than 50%, fixed wing twin engine piston aircraft with 7 or more seats, and the other fixed wing piston group. These two groups represent, however, only 4% of the fleet.

- The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.

- To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."[1]

- Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.

- The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

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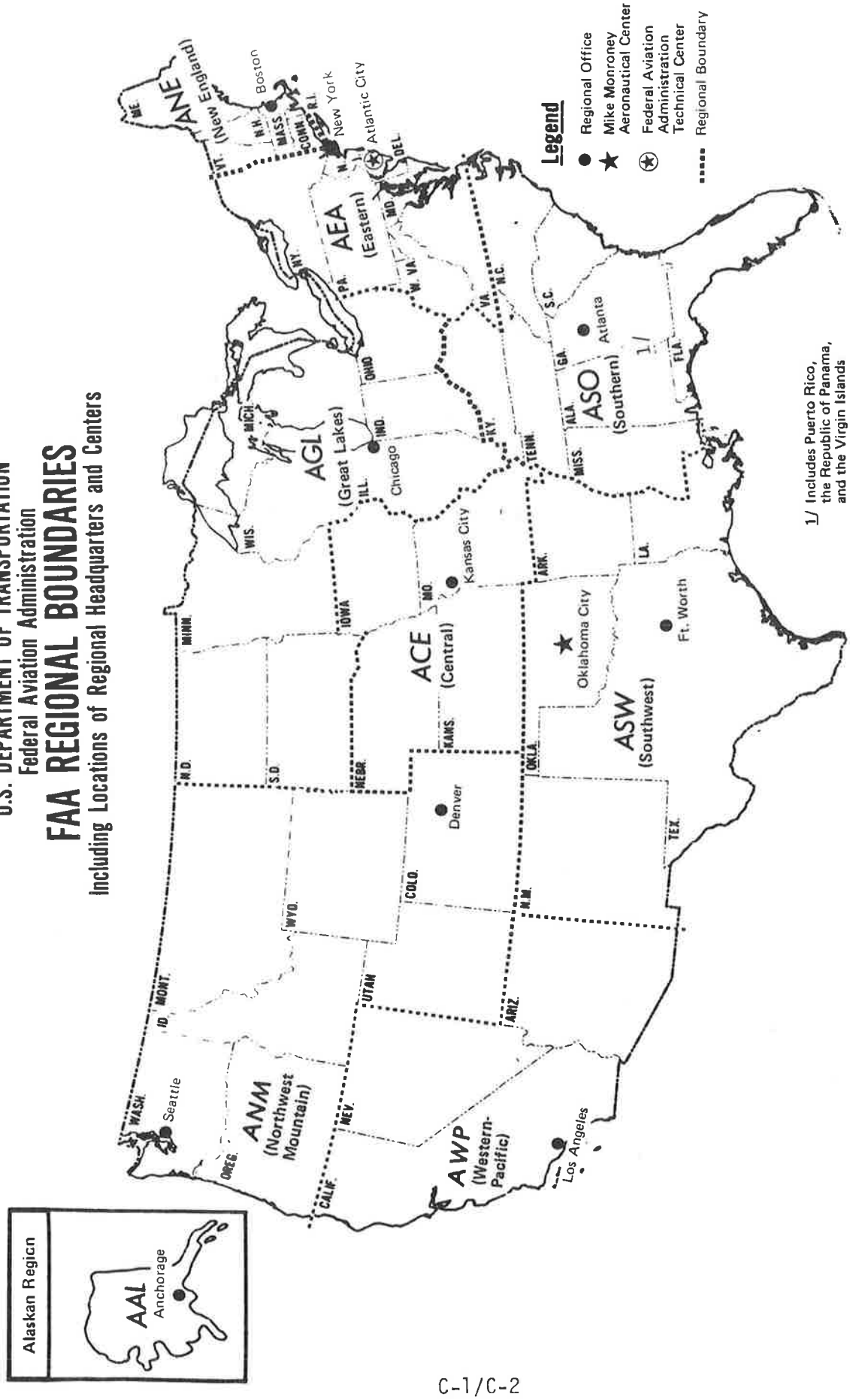
[1]See Appendix A.1.

TABLE B-4. RESPONSE RATES BY REGION

REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	51	New England	67
Central	68	Northwest Mountain	61
Eastern	65	Southern	57
European (Foreign)	36	Southwestern	60
Great Lakes	70	Western-Pacific	62
		TOTAL	62

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	67	2 engines	65
1 engine, 4+ seats	63	Other	63
2 engines, 1-6 seats	61		
2 engines, 7+ seats	48	Rotorcraft	
Other	43	Piston	60
		Turbine	57
Turboprop			
2 engines, 1-12 seats	62	Other	62
2 engines, 13+ seats	68		
Other	55	TOTAL	62


U.S. DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
FAA REGIONAL BOUNDARIES
Including Locations of Regional Headquarters and Centers
Legend
Regional Office
Mike Monroney Aeronautical Center
Federal Aviation Administration Technical Center
Regional Boundary
ANE (New England)
Boston
New York
Atlantic City
AEA (Eastern)
AGL (Great Lakes)
Chicago
ACE (Central)
Kansas City
ASO (Southern)
Atlanta
1/
ASW (Southwest)
Oklahoma City
Ft. Worth
Denver
ANM (Northwest Mountain)
Seattle
AWP (Western-Pacific)
Los Angeles
1/ Includes Puerto Rico, the Republic of Panama, and the Virgin Islands
Alaskan Region
AAL
Anchorage

APPENDIX D

SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA
ADAMS A50S	0050101
ADAMS A50S	0050105
ADAMS A50S	0050103
AERORSJ2	5500604
AEROSPAS355	8680805
AEROSPAS355	8680806
AEROSPSA316	8680207
AEROSPSA316	8680512
AEROSPSA316	8680513
AEROSPSA316	8680515
AEROSPSA316	8680605
AEROSPSA316	8680615
AGUSTAA109	0260109
AIRPTSA	0144202
AIRPTSA	0144204
AIRPTSA	0144206
AIRPTSA	1850102
AIRPTSA	1850104
AIRPTSA	1850106
AIRPTSA	1850108
AIRPTSA	1850110
AIRPTSA	1850112
AIRPTSA	1850114
AIRPTSA	1850116
AIRPTSA	1850118
AIRPTSA	1850120
AIRPTSA	1850122
AIRPTSA	4570424
AIRPTSA	4570602
AIRPTSA	4570604
AIRPTSA	4570606
AIRPTSA	4570608
AIRPTSA	4570610
AIRPTSA	4570612
AIRPTSA	4570614
AIRPTSA	4570616
AIRPTSA	4570618
AIRPTSA	4570620
AIRPTSA	4570622
AIRPTSA	4570624
AIRSPC18	0440102
AIRSPC18	0440104
AIRSPC18	9200202
AIRTRCAT300	0390101
AIRTRCAT300	0390103
AIRTRCAT300	0390104
AIRTRCAT400	0390202
AIRTRCAT400	0390203
AMD FALC10	*FALC10
AMD FALC10	2730101
AMD FALC20	*FALC20
AMD FALC20	2720302
AMD FALC20	2720303
AMD FALC20	2720304
AMD FALC20	2720305
AMD FALC20	2720306
AMD FALC20	2730103
AMD FALC50	2730106
AMTR TMK	4220120
ARCRNEH37	8141617
ARCRNEH37	8142801
ARCTICS1A	1850202
ARCTICS1A	1850204
ARCTICS1A	1850206
ARCTICS1A	1850208
ARCTICS1A	1850210
ARCTICS1A	1850212
ARCTICS1A	1850214
ARCTICS1A	1850216

SDR	FAA
ARCTICS1B1	1850302
ARCTICS1B1	1850304
ARCTICS1B1	1850306
ARCTICS1B1	1850308
ARCTICS1B1	1850310
ARCTICS1B1	1850312
ARONCA15	0191202
ARONCA15	0191204
ARONCA58	0191002
ARONCA58	0191004
ARONCA58	0191006
ARONCA58	0191008
ARONCA58	0191010
ARONCA58	0191012
ARONCA65	0190802
ARONCA65	0190902
ARONCA65	0190904
ARONCA65	0190906
ARONCA65	0190908
ARONCA65	0190910
ARONCA65	0190912
ARONCA65	0190914
ARONCA65	0190916
ARONCA65	0190918
ARONCA65	0191014
ARONCA65	0191016
ARONCAC3	0190302
ARONCAC3	0190304
AVIANWFALCON	0900102
AVIANWSKYHWK	0900104
AYRES S2	0143002
AYRES S2	0143004
AYRES S2	0143006
AYRES S2	0143008
AYRES S2	0143010
AYRES S2	0143012
AYRES S2	0143022
AYRES S2	0970100
AYRES S2	0970101
AYRES S2	0970104
AYRES S2	0970105
AYRES S2	0970107
AYRES S2	0970202
AYRES S2	0970210
AYRES S2	0970215
AYRES S2	7630202
AYRES S2	7630203
AYRES S2	8380202
AYRES S2	8380204
AYRES S2	8380206
AYRES S2	8380302
AYRES S2	8380306
AYRES S2T	0970106
BAC 111	*111
BAC 111	1480202
BAC 111	1480204
BAC 111	1480208
BAC 111	1480210
BAC 111	1480218
BAC 111	1480221
BAC 111	1480264
BAC 111	1480268
BAC 111	1480270
BAC 111	1480273
BAC 111	1480277
BAC 111	1480283
BAG B206	1121223
BAG B206	1121224
BALWKSFIREFY	1050100

SDR	FAA
BALWKSFIREFY	1050101
BALWKSFIREFY	1050103
BALWKSFIREFY	1050104
BALWKSFIREFY	1050107
BALWKSFIREFY	1050109
BALWKSFIREFY	10501A9
BEECH 100	*100
BEECH 100	1152915
BEECH 100	1152916
BEECH 100	1152917
BEECH 100	1152919
BEECH 17	1150502
BEECH 17	1150504
BEECH 17	1150506
BEECH 17	1150508
BEECH 17	1150510
BEECH 17	1150512
BEECH 17	1150514
BEECH 17	1150516
BEECH 17	1150518
BEECH 17	1150520
BEECH 17	1150522
BEECH 17	1150524
BEECH 17	1150526
BEECH 17	1150528
BEECH 17	1150530
BEECH 17	1150532
BEECH 17	1150534
BEECH 17	1150536
BEECH 17	1150538
BEECH 17	1150540
BEECH 17	1150542
BEECH 17	1150544
BEECH 17	1150546
BEECH 17	1150548
BEECH 17	1150550
BEECH 17	1150552
BEECH 17	1150554
BEECH 17	1150556
BEECH 17	1150558
BEECH 17	1150560
BEECH 17	1150562
BEECH 17	1150564
BEECH 18	*18
BEECH 18	1150202
BEECH 18	1150204
BEECH 18	1150602
BEECH 18	1150604
BEECH 18	1150702
BEECH 18	1150704
BEECH 18	1150706
BEECH 18	1150708
BEECH 18	1150710
BEECH 18	1150712
BEECH 18	1150802
BEECH 18	1150804
BEECH 18	1150806
BEECH 18	1150808
BEECH 18	1150902
BEECH 18	1150904
BEECH 18	1150906
BEECH 18	1150908
BEECH 18	1150909
BEECH 18	1150910
BEECH 18	1150911
BEECH 18	1150912
BEECH 18	1150913
BEECH 18	1150914
BEECH 18	1150916

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
BEECH 18	1150918
BEECH 18	1150920
BEECH 18	1150922
BEECH 18	1150924
BEECH 18	1150926
BEECH 18	1150928
BEECH 18	1150930
BEECH 18	1151001
BEECH 18	1151002
BEECH 18	1151004
BEECH 18	1151006
BEECH 18	1151007
BEECH 18	1151008
BEECH 18	1151009
BEECH 18	1151010
BEECH 18	1151011
BEECH 18	1151012
BEECH 18	1151013
BEECH 18	1151014
BEECH 18	1151015
BEECH 18	1151016
BEECH 18	1151018
BEECH 18	1151019
BEECH 18	1151020
BEECH 18	1151021
BEECH 18	1151022
BEECH 18	1151023
BEECH 18	1151024
BEECH 18	1151026
BEECH 18	1151040
BEECH 18	1151042
BEECH 18	1151044
BEECH 18	1151046
BEECH 18	*18
BEECH 18	1150202
BEECH 18	1150204
BEECH 18	1150602
BEECH 18	1150604
BEECH 18	1150702
BEECH 18	1150704
BEECH 18	1150706
BEECH 18	1150708
BEECH 18	1150710
BEECH 18	1150712
BEECH 18	1150802
BEECH 18	1150804
BEECH 18	1150806
BEECH 18	1150808
BEECH 18	1150902
BEECH 18	1150904
BEECH 18	1150906
BEECH 18	1150908
BEECH 18	1150909
BEECH 18	1150910
BEECH 18	1150911
BEECH 18	1150912
BEECH 18	1150913
BEECH 18	1150914
BEECH 18	1150916
BEECH 18	1150918
BEECH 18	1150920
BEECH 18	1150922
BEECH 18	1150924
BEECH 18	1150926
BEECH 18	1150928
BEECH 18	1150930
BEECH 18	1151001
BEECH 18	1151002
BEECH 18	1151004
BEECH 18	1151006
BEECH 18	1151007
BEECH 18	1151008
BEECH 18	1151009
BEECH 18	1151010
BEECH 18	1151011
BEECH 18	1151012
BEECH 18	1151013
BEECH 18	1151014
BEECH 18	1151015
BEECH 18	1151016
BEECH 18	1151018
BEECH 18	1151019
BEECH 18	1151020
BEECH 18	1151021
BEECH 18	1151022
BEECH 18	1151023
BEECH 18	1151024
BEECH 18	1151026
BEECH 18	1151040
BEECH 18	1151042
BEECH 18	1151044
BEECH 18	1151046
BEECH 200	*200
BEECH 200	1152920
BEECH 200	1152922
BEECH 200	1152924
BEECH 200	1152926
BEECH 200	1152928
BEECH 200	1152921
BEECH 200	1152929
BEECH 23	1151202
BEECH 23	1151204
BEECH 23	1151208
BEECH 23	1151212
BEECH 23	1151214
BEECH 23	1151215
BEECH 23	1151216
BEECH 23	1151226
BEECH 23	1151240
BEECH 23	1151242
BEECH 23	1151250
BEECH 23	1151252
BEECH 23	1151253
BEECH 23	1151254
BEECH 33	1151402
BEECH 33	1151404
BEECH 33	1151406
BEECH 33	1151408
BEECH 33	1151410
BEECH 33	1151422
BEECH 33	1151423
BEECH 33	1151424
BEECH 33	1151425
BEECH 33	1151432
BEECH 33	1151434
BEECH 33	1151435
BEECH 35	1151502
BEECH 35	1151504
BEECH 35	1151506
BEECH 35	1151508
BEECH 35	1151510
BEECH 35	1151512
BEECH 35	1151514
BEECH 35	1151516
BEECH 35	1151518
BEECH 35	1151520
BEECH 35	1151522
BEECH 35	1151524
BEECH 35	1151526
BEECH 35	1151528
BEECH 35	1151530
BEECH 35	1151532
BEECH 35	1151538
BEECH 35	1151540
BEECH 35	1151544

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
BEECH 35	1151546
BEECH 35	1151548
BEECH 35	1151550
BEECH 36	1151602
BEECH 36	1151603
BEECH 36	1151604
BEECH 36	1151605
BEECH 36	1151606
BEECH 36	1151607
BEECH 36	1151609
BEECH 45	1152002
BEECH 45	1152004
BEECH 45	1152006
BEECH 45	1152008
BEECH 45	1152010
BEECH 45	1152012
BEECH 45	1152013
BEECH 45	1152014
BEECH 50	1152502
BEECH 50	1152504
BEECH 50	1152506
BEECH 50	1152508
BEECH 50	1152510
BEECH 50	1152512
BEECH 50	1152514
BEECH 50	1152516
BEECH 50	1152518
BEECH 50	1152520
BEECH 50	1152522
BEECH 50	1152524
BEECH 50	1152526
BEECH 50	1152528
BEECH 50	1152530
BEECH 50	1152532
BEECH 50	1152534
BEECH 50	1152536
BEECH 55	*55
BEECH 55	1152702
BEECH 55	1152704
BEECH 55	1152706
BEECH 55	1152708
BEECH 55	1152729
BEECH 55	1152730
BEECH 55	1152732
BEECH 56	1152736
BEECH 56	1152738
BEECH 58	*58
BEECH 58	1152740
BEECH 58	1152744
BEECH 58	1152746
BEECH 60	1153602
BEECH 60	1153604
BEECH 60	1153605
BEECH 65	*65
BEECH 65	1152802
BEECH 65	1152803
BEECH 65	1152804
BEECH 65	1152805
BEECH 76	*76
BEECH 76	1153005
BEECH 77	1153007
BEECH 80	*80
BEECH 80	1152806
BEECH 80	1152807
BEECH 80	1152808
BEECH 80	1152809
BEECH 80	1152812
BEECH 90	*90
BEECH 90	1152907
BEECH 90	1152908
BEECH 90	1152909
BEECH 90	1152912
BEECH 90	1152914
BEECH 90	1153409
BEECH 90	1152913
BEECH 95	1153402
BEECH 95	1153404
BEECH 95	1153406
BEECH 95	1153408
BEECH 95	1153410
BEECH 99	*99
BEECH 99	1153802
BEECH 99	1154002
BEECH 99	1154004
BEECH 99	1154006
BEECH 99	1154003
BELL 204	1181404
BELL 204	1181405
BELL 204	1181406
BELL 204	1181408
BELL 204	1181410
BELL 204	1181411
BELL 204	1181401
BELL 204	1181407
BELL 204	118141M
BELL 205	1181413
BELL 205	1181414
BELL 206	1181502
BELL 206	1181503
BELL 206	1181504
BELL 206	1181506
BELL 206	1181508
BELL 206	1181510
BELL 206	1181511
BELL 206	1181522
BELL 206	1181579
BELL 206	1182107
BELL 206	1182108
BELL 212	1181420
BELL 222	1182122
BELL 412	1182202
BELL 47	1180602
BELL 47	1180604
BELL 47	1180606
BELL 47	1180702
BELL 47	1180704
BELL 47	1180802
BELL 47	1180808
BELL 47	1180809
BELL 47	1180810
BELL 47	1180812
BELL 47	1180813
BELL 47	1180814
BELL 47	1180816
BELL 47	1180820
BELL 47	1180822
BELL 47	1180843
BELL 47	1180844
BELL 47	1180845
BELL 47	118084C
BELL 47	118084E
BELL 47	118084G
BELL 47	118084H
BELL 47	118084K
BELL 47	118084M
BELL 47	118084P
BELL 47	118084R
BELL 47	118084V
BELL 47	1180902
BELL 47	1180904
BELL 47	1181001
BELL 47	1181002
BELL 47	1181003
BELL 47	1181005
BELL 47	1181006
BELL 47	1181008
BELL 47	1181009
BELL 47	118100V
BELL 47	1181010
BELL 47	1181011
BELL 47	1181012
BELL 47	1181013
BELL 47	1181014
BELL 47	1181016
BELL 47	1181023
BELL 47	1181024
BELL 47	1181025
BELL 47	1181026
BELL 47	1181027
BELL 47	1181028
BELL 47	1181029
BELL 47	1181030
BELL 47	1181031
BELL 47	1181032
BELL 47	1181033
BELL 47	1181034
BELL 47	118103M
BELL 47	118103Z
BELL 47	1181060
BELL 47	1181061
BELL 47	1181062
BELL 47	1181063
BELL 47	1181064
BELL 47	1181065
BELL 47	1181066
BELL 47	1181068
BELL 47	1181069
BELL 47	1181070
BELL 47	1181071
BELL 47	1181073
BELL 47	1181102
BELL 47	1181103
BELL 47	1181104
BELL 47	1181106
BELL 47	1181202
BELL 47	1181310
BELL 47	1181403
BELL 47	2390101
BELL 47	2390301
BELL 47	8930102
BELL 47	8930103
BELL 47	8930105
BLANCA11	0191102
BLANCA11	0191104
BLANCA11	0191106
BLANCA11	0191108
BLANCA11	0191110
BLANCA11	0191112
BLANCA11	9140404
BLANCA11	9140408
BLANCA1413	1201002
BLANCA1413	1201004
BLANCA1413	1201006
BLANCA1413	1201008
BLANCA1419	1220402
BLANCA1419	1220404
BLANCA1419	1220406

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
BLANCA1419	1220408
BLANCA1419	3080102
BLANCA1419	3080104
BLANCA1419	3080106
BLANCA1419	3080108
BLANCA1419	3080112
BLANCA1419	3080114
BLANCA1419	3080116
BLANCA1419	3080118
BLANCA1419	3080122
BLANCA1419	3080124
BLANCA1419	3080126
BLANCA1419	3080128
BLANCA1419	4580802
BLANCA1419	4580804
BLANCA1419	4580806
BLANCA1419	4580808
BLANCA17	1220432
BLANCA17	1220433
BLANCA17	1220434
BLANCA17	1220435
BLANCA17	1220436
BLANCA17	1220437
BLANCA17	1220940
BLANCA7	0190107
BLANCA7	1220438
BLANCA7	1220460
BLANCA7	1220501
BLANCA7	1220601
BLANCA7	1220701
BLANCA7	2110102
BLANCA7	2110104
BLANCA7	2110106
BLANCA7	2110108
BLANCA7	2110110
BLANCA7	2110112
BLANCA7	2110114
BLANCA7	2110116
BLANCA7	2110118
BLANCA7	2110120
BLANCA7	2110122
BLANCA7	2110124
BLANCA7	2110126
BLANCA7	2110128
BLANCA7	2110130
BLANCA7	2110132
BLANCA7	2110133
BLANCA7	2110134
BLANCA7	2110136
BLANCA7	2110138
BLANCA7	2110140
BLANCA7	2110142
BLANCA7	2110144
BLANCA7	2110146
BLANCA7	2110148
BLANCA7	2110150
BLANCA7	2110152
BLANCA7	2110154
BLANCA7	2110156
BLANCA7	2110158
BLANCA7	2110160
BLANCA7	2110162
BLANCA7	2110164
BLANCA7	2110166
BLANCA7	2110168
BLANCA7	2110170
BLANCA7	2110172
BLANCA7	2110174
BLANCA7	2110176
BLANCA7	21101M2
BLANCA7	21101M6
BLANCA7	21101MA
BLANCA7	21101MF
BLANCA7	21101ML
BLANCA7	21101MR
BLANCA7	21101MW
BLANCA7	21101N2
BLANCA7	21101N7
BLANCA7	21101N8
BLANCA7	21101NB
BLANCA7	21101NG
BLANCA7	21101NM
BLANCA7	21101NN
BLANCA7	21101NS
BLANCA7	21101NX
BLANCA7	21101P3
BLANCA7	21101PC
BLANCA7	21101PH
BLANCA7	21101PK
BLANCA7	21101PN
BLANCA7	21101PT
BLANCA7	21101PY
BLANCA8	1220801
BLANCA8	1220803
BLANCA8	2110612
BNORM BN2	*BN2
BNORM BN2	1520202
BNORM BN2	1520204
BNORM BN2	1520206
BNORM BN2	1520207
BNORM BN2	1520209
BNORM BN2	1520210
BNORM BN2	1520215
BNORM BN2	1520220
BNORM BN2	1520221
BNORM BN2	1520226
BNORM BN2	1520227
BNORM BN2	1520302
BNORM BN2	1520350
BNORM BN2	7080221
BNORM BN2	7080227
BNORM BN2	1520205
BOEING707	*707
BOEING707	138360H
BOEING707	138360K
BOEING707	138360N
BOEING707	138360P
BOEING707	138360T
BOEING707	1383612
BOEING707	1383614
BOEING707	1383616
BOEING707	1383618
BOEING707	138361G
BOEING707	138365B
BOEING707	138365D
BOEING707	138365F
BOEING707	138365H
BOEING707	138365K
BOEING707	1383660
BOEING707	1383668
BOEING707	138366B
BOEING707	138366C
BOEING707	138366D
BOEING707	138366F
BOEING707	138366H
BOEING707	138366K
BOEING707	138366M
BOEING707	138366P
BOEING707	1383677

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
BOEING707	138367A
BOEING707	138367B
BOEING707	138367C
BOEING707	138367D
BOEING707	138367E
BOEING707	138367F
BOEING707	138367G
BOEING707	138367H
BOEING707	138367J
BOEING707	138367K
BOEING707	138367L
BOEING707	138367M
BOEING707	138367N
BOEING707	138367P
BOEING707	138367Q
BOEING707	138367R
BOEING707	138367S
BOEING707	138367T
BOEING707	138367W
BOEING707	138367X
BOEING707	138367Y
BOEING707	138368B
BOEING707	138368D
BOEING707	138368F
BOEING707	138368H
BOEING707	138368K
BOEING707	138368M
BOEING720	*720
BOEING720	1383802
BOEING720	1383804
BOEING720	1383810
BOEING720	1383818
BOEING720	1383822
BOEING720	1383826
BOEING720	1383830
BOEING720	1383841
BOEING720	1383845
BOEING720	1383849
BOEING720	1383853
BOEING720	1383857
BOEING720	1383861
BOEING720	1383865
BOEING720	1383869
BOEING720	1383873
BOEING720	1383877
BOEING727	*727
BOEING727	1384001
BOEING727	1384002
BOEING727	1384003
BOEING727	1384004
BOEING727	1384005
BOEING727	1384006
BOEING727	1384008
BOEING727	138400B
BOEING727	138400C
BOEING727	138400E
BOEING727	138400F
BOEING727	138400H
BOEING727	138400J
BOEING727	138400K
BOEING727	138400M
BOEING727	1384010
BOEING727	1384011
BOEING727	1384012
BOEING727	1384013
BOEING727	1384014
BOEING727	1384015
BOEING727	1384016
BOEING727	1384017
BOEING727	1384018
BOEING727	1384019
BOEING727	1384025
BOEING727	1384027
BOEING727	1384028
BOEING727	138402C
BOEING727	1384030
BOEING727	1384032
BOEING727	1384035
BOEING727	1384036
BOEING727	1384041
BOEING727	1384043
BOEING727	1384044
BOEING727	138404G
BOEING727	138404V
BOEING727	138404Z
BOEING727	1384056
BOEING727	1384057
BOEING727	1384058
BOEING727	1384059
BOEING727	1384063
BOEING727	1384067
BOEING727	138406G
BOEING727	138406N
BOEING727	1384071
BOEING727	1384072
BOEING727	1384073
BOEING727	1384074
BOEING727	1384075
BOEING727	1384076
BOEING727	1384077
BOEING727	1384078
BOEING727	1384079
BOEING727	138407E
BOEING727	138407F
BOEING727	138407G
BOEING727	138407K
BOEING727	138407L
BOEING727	138407M
BOEING727	138407N
BOEING727	138407P
BOEING727	138407Q
BOEING727	138407R
BOEING727	138407S
BOEING727	138407T
BOEING727	138407W
BOEING727	138407Z
BOEING727	1384080
BOEING727	1384082
BOEING727	1384084
BOEING727	138408B
BOEING727	138408F
BOEING727	138408H
BOEING727	138408J
BOEING727	138408L
BOEING727	138408M
BOEING727	138408N
BOEING727	138408W
BOEING727	138408X
BOEING727	13840X2
BOEING727	13840XY
BOEING737	*737
BOEING737	1384404
BOEING737	1384435
BOEING737	1384438
BOEING737	1384453
BOEING737	1384454
BOEING737	1384457
BOEING737	1384458
BOEING737	1384459
BOEING737	1384460
BOEING737	1384461
BOEING737	1384469
BOEING737	138446R
BOEING737	1384473
BOEING737	1384477
BOEING737	1384478
BOEING737	1384479
BOEING737	1384480
BOEING737	1384484
BOEING737	1384488
BOEING737	138448A
BOEING737	138448B
BOEING737	138448C
BOEING737	138448D
BOEING737	138448E
BOEING737	138448F
BOEING737	138448G
BOEING737	138448J
BOEING737	138448M
BOEING737	138448P
BOEING737	138448R
BOEING737	138448S
BOEING737	138448T
BOEING737	138448V
BOEING737	138448W
BOEING737	138448X
BOEING737	138448Y
BOEING737	1384492
BOEING737	1384494
BOEING737	1384550
BOEING737	1384560
BOEING747	*747
BOEING747	1384802
BOEING747	1384804
BOEING747	1384810
BOEING747	1384813
BOEING747	1384815
BOEING747	1384820
BOEING747	1384849
BOEING747	1384866
BOEING747	1384868
BOEING747	1384869
BOEING747	1384871
BOEING747	1384872
BOEING747	1384873
BOEING747	1384874
BOEING747	1384881
BOEING747	1384882
BOEING747	1384885
BOEING747	1384886
BOEING747	1384888
BOEING747	1384890
BOEING747	1384891
BOEING747	1384892
BOEING747	1384893
BOEING747	1384894
BOEING747	1384895
BOEING747	1384896
BOEING747	1384897
BOEING747	1384898
BOEING747	1384899
BOEING747	1384902
BOEING747	1384903
BOEING747	1384807

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
BOEING747	1384823
BOEING747	1384856
BOEING75	1380102
BOEING75	1380104
BOEING75	1380106
BOEING75	1380108
BOEING75	1380110
BOEING75	1380112
BOEING75	1380114
BOEING75	1380116
BOEING75	1380118
BOEING75	1380120
BOEING75	1380121
BOEING75	1380122
BOEING75	1380124
BOEING75	1380126
BOEING75	1380130
BOEING75	1380131
BOEING75	1380132
BOEING75	1380134
BOEING75	1380136
BOEING75	1380137
BOEING75	1380138
BOEING75	1380140
BOEING75	1380142
BOEING75	1380144
BOEING75	1380146
BOEING75	1380148
BOEING75	1380150
BOEING75	1380152
BOEING75	1380154
BOEING767	1385102
BOEING767	1385120
BOEING767	1385122
BOEING767	1385123
BOEING767	1385131
BOEING767	1385132
BOLKMS105	1406006
BOLKMS105	5626005
BOLKMS105	5626006
BRAERODH125	1500205
BRAERODH125	4230170
BRASOVIS28	4490102
BRWSTRFLEET2	1461202
BRWSTRFLEET2	1461204
BRWSTRFLEET7	1461502
BRWSTRFLEET7	1461504
BRWSTRFLEET7	1461506
BRWSTRFLEET7	1461512
BRWSTRFLEET7	1461514
BRWSTRFLEET7	1461516
BUKER 131	1590104
BUKER 131	1590114
CAMRONMODELO	1880104
CAMRONMODELO	1880106
CAMRONMODELO	1880108
CAMRONMODELO	1880110
CAMRONMODELO	1880112
CAMRONMODELO	1880113
CAMRONMODELO	1880120
CAMRONMODELO	1880122
CAMRONMODELO	1880201
CAMRONMODELO	1880202
CAMRONMODELO	1880203
CAMRONMODELO	1880204
CASA C212	2410200
CASA C212	2410204
CASA C212	2410302
CASA C212	2410304
CASA C212	2410202
CESSNA120	2071402
CESSNA140	2071602
CESSNA140	2071604
CESSNA150	*150
CESSNA150	2071802
CESSNA150	2071804
CESSNA150	2071806
CESSNA150	2071808
CESSNA150	2071810
CESSNA150	2071812
CESSNA150	2071814
CESSNA150	2071816
CESSNA150	2071818
CESSNA150	2071820
CESSNA150	2071822
CESSNA150	2071824
CESSNA150	2071826
CESSNA150	2071828
CESSNA150	2071830
CESSNA150	2071831
CESSNA150	2071835
CESSNA150	2071836
CESSNA170	2072302
CESSNA170	2072304
CESSNA170	2072306
CESSNA172	2072202
CESSNA172	2072402
CESSNA172	2072404
CESSNA172	2072406
CESSNA172	2072408
CESSNA172	2072410
CESSNA172	2072412
CESSNA172	2072413
CESSNA172	2072414
CESSNA172	2072416
CESSNA172	2072418
CESSNA172	2072420
CESSNA172	2072421
CESSNA172	2072424
CESSNA172	2072425
CESSNA172	2072426
CESSNA172	2072428
CESSNA172	2072429
CESSNA172	2072430
CESSNA172	2072431
CESSNA172	2072432
CESSNA172	2072434
CESSNA172	2072436
CESSNA172	2072437
CESSNA172	2072438
CESSNA172	2072443
CESSNA175	2072502
CESSNA175	2072504
CESSNA175	2072506
CESSNA175	2072508
CESSNA177	2073704
CESSNA177	2073706
CESSNA177	2073708
CESSNA177	2073709
CESSNA180	2072602
CESSNA180	2072604
CESSNA180	2072606
CESSNA180	2072608
CESSNA180	2072610
CESSNA180	2072612
CESSNA180	2072614
CESSNA180	2072616
CESSNA180	2072618
CESSNA180	2072622
CESSNA180	2072624
CESSNA182	2072702
CESSNA182	2072704
CESSNA182	2072706
CESSNA182	2072708
CESSNA182	2072710
CESSNA182	2072712
CESSNA182	2072714
CESSNA182	2072716
CESSNA182	2072718
CESSNA182	2072722
CESSNA182	2072724
CESSNA182	2072726
CESSNA182	2072728
CESSNA182	2072730
CESSNA182	2072731
CESSNA182	2072732
CESSNA182	2072734
CESSNA182	2072735
CESSNA182	2072736
CESSNA182	2075802
CESSNA182	2075806
CESSNA182	2075814
CESSNA182	2075816
CESSNA185	*185
CESSNA185	2072802
CESSNA185	2072804
CESSNA185	2072806
CESSNA185	2072808
CESSNA185	2072812
CESSNA185	2072816
CESSNA185	2072818
CESSNA185	2072820
CESSNA185	2072821
CESSNA188	2073002
CESSNA188	2073004
CESSNA188	2073005
CESSNA188	2073006
CESSNA188	2073007
CESSNA188	2073008
CESSNA188	2073010
CESSNA188	2073011
CESSNA188	2073012
CESSNA190	2072902
CESSNA195	2073102
CESSNA195	2073104
CESSNA195	2073106
CESSNA195	2073108
CESSNA195	2073110
CESSNA195	2073112
CESSNA205	2073202
CESSNA205	2073204
CESSNA206	*206
CESSNA206	2073302
CESSNA206	2073304
CESSNA206	2073306
CESSNA206	2073308
CESSNA206	2073309
CESSNA206	2073310
CESSNA206	2073311
CESSNA206	2073312
CESSNA206	2073313
CESSNA206	2073316
CESSNA206	2073318
CESSNA206	2073322

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
CESSNA206	2073324
CESSNA206	2073332
CESSNA206	2073333
CESSNA206	2073334
CESSNA206	2073338
CESSNA206	2073340
CESSNA206	2073342
CESSNA206	2073344
CESSNA206	2073346
CESSNA206	2073348
CESSNA206	2073350
CESSNA206	2073352
CESSNA206	2073353
CESSNA206	2073356
CESSNA206	2073357
CESSNA207	*207
CESSNA207	2073602
CESSNA207	2073604
CESSNA207	2073612
CESSNA207	2073614
CESSNA210	2073402
CESSNA210	2073404
CESSNA210	2073406
CESSNA210	2073408
CESSNA210	2073410
CESSNA210	2073412
CESSNA210	2073414
CESSNA210	2073416
CESSNA210	2073418
CESSNA210	2073422
CESSNA210	2073430
CESSNA210	2073432
CESSNA210	2073436
CESSNA210	2073438
CESSNA210	2073439
CESSNA210	2073440
CESSNA210	2073446
CESSNA210	2073447
CESSNA210	2073448
CESSNA210	2073449
CESSNA210	2073450
CESSNA210	2073451
CESSNA210	2073453
CESSNA210	2073454
CESSNA210	2073456
CESSNA303	2073820
CESSNA305	2073902
CESSNA305	2074001
CESSNA305	2074002
CESSNA305	2074003
CESSNA305	2074004
CESSNA305	2074005
CESSNA305	2074006
CESSNA305	2074008
CESSNA305	2074010
CESSNA305	2074012
CESSNA305	2074014
CESSNA305	2074016
CESSNA305	2074018
CESSNA305	2074028
CESSNA305	2074030
CESSNA310	*310
CESSNA310	2074202
CESSNA310	2074204
CESSNA310	2074206
CESSNA310	2074208
CESSNA310	2074210
CESSNA310	2074212
CESSNA310	2074214
CESSNA310	2074216
CESSNA310	2074218
CESSNA310	2074220
CESSNA310	2074222
CESSNA310	2074224
CESSNA310	2074226
CESSNA310	2074228
CESSNA310	2074230
CESSNA310	2074234
CESSNA310	2074236
CESSNA310	2074238
CESSNA310	2074240
CESSNA310	2074242
CESSNA310	2074244
CESSNA310	2074245
CESSNA310	2074246
CESSNA320	2074502
CESSNA320	2074504
CESSNA320	2074506
CESSNA320	2074508
CESSNA320	2074510
CESSNA320	2074512
CESSNA320	2074514
CESSNA320	2074516
CESSNA335	2075601
CESSNA336	2075602
CESSNA337	*337
CESSNA337	2075702
CESSNA337	2075703
CESSNA337	2075704
CESSNA337	2075706
CESSNA337	2075707
CESSNA337	2075712
CESSNA337	2075714
CESSNA337	2075717
CESSNA337	2075719
CESSNA337	2075721
CESSNA337	2075723
CESSNA337	2075724
CESSNA337	2075725
CESSNA337	2075726
CESSNA337	2075727
CESSNA337	2075730
CESSNA337	2075731
CESSNA337	2075732
CESSNA337	2075733
CESSNA340	2076404
CESSNA340	2076405
CESSNA401	*401
CESSNA401	207590C
CESSNA401	207590D
CESSNA401	207590E
CESSNA402	*402
CESSNA402	207590K
CESSNA402	207590L
CESSNA402	207590M
CESSNA402	207590P
CESSNA402	207590R
CESSNA404	2075901
CESSNA411	2075902
CESSNA411	2075904
CESSNA414	*414
CESSNA414	2075907
CESSNA414	2075908
CESSNA421	*421
CESSNA421	2076010
CESSNA421	2076012
CESSNA421	2076014
CESSNA421	2076016
CESSNA425	2076018
CESSNA441	2076020
CESSNA500	2076602
CESSNA500	2076604
CESSNA501	2066603
CESSNA501	2076605
CESSNAT50	2071302
CESSNAT50	2071304
CESSNAT50	2071306
CESSNAT50	2071308
CESSNAUC94	2070902
CESSNAUC94	2071002
CESSNAUC94	2071102
CESSNAUC94	2071104
CHILD S1	0110100
CHILD S1	0110301
CHILD S1	0110303
CHILD S2	0110201
CHILD S2	0110202
CHILD S2	0110304
CHILD S2	011101A
CNDAIRCL600	1900302
COMWTH185	2370602
COMWTH185	2370604
COMWTH185	2370608
CONAERLA4	2400102
CONAERLA4	2400108
CONAERLA4	2400110
CONAERLA4	5110302
CONAERLA4	5110304
CONAERLA4	5110306
CONAERLA4	5110310
CONAERLA4	5110312
CONAERLA4	5110314
CONAERLA4	5110316
CONAERLA4	5110320
CURTISC46	*C46
CURTISC46	2622601
CURTISC46	2622602
CURTISC46	2622604
CURTISC46	2622606
CURTISC46	2622608
CURTISC46	2622610
CURTISC46	2622624
CURTISC46	2622701
CURTISC46	2622702
CURTISC46	2622704
CURTISC46	2622706
CURTISC46	2622708
CURTISC46	2622710
CURTISC46	2622750
CURTISJR	2620502
CURTISROBIN	2620802
CURTISROBIN	2620804
CURTISROBIN	2620806
CURTISROBIN	2620808
CURTISROBIN	2620810
CURTISROBIN	2620812
CURTISROBIN	2620814
CURTISTRVAIR	2621004
CURTISTRVAIR	2621006
CURTISTRVAIR	2621010
CURTISTRVAIR	2621012
CURTISTRVAIR	2621104
CURTISTRVAIR	2621108
CURTISTRVAIR	2621202

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
CURTISTRVAIR	2621204
CURTISTRVAIR	2621302
CURTISTRVAIR	2621304
CURTISTRVAIR	2621306
CURTISTRVAIR	2621308
CURTISTRVAIR	2621402
CURTISTRVAIR	2621404
CURTISTRVAIR	2621406
CURTISTRVAIR	2621408
CURTISTRVAIR	2621502
CURTISTRVAIR	2621504
CURTISTRVAIR	2621506
CURTISTRVAIR	2621508
CURTISTRVAIR	2621602
CURTISTRVAIR	2621604
CURTISTRVAIR	2621606
CURTISTRVAIR	2621608
CURTISTRVAIR	2621702
CURTISTRVAIR	2621704
CURTISTRVAIR	2621802
CURTISTRVAIR	2621804
CURTISTRVAIR	2621806
CURTISTRVAIR	2621808
CURTISTRVAIR	2621810
CURTISTRVAIR	2621812
CURTISTRVAIR	2621814
CURTISTRVAIR	2621816
CURTISTRVAIR	2621818
CURTISTRVAIR	2621820
CURTISTRVAIR	2621822
CURTISTRVAIR	2621824
CURTISTRVAIR	2621826
CURTISTRVAIR	2621828
CURTISTRVAIR	2621830
CURTISTRVAIR	2621832
CURTISTRVAIR	2621902
CURTISTRVAIR	2621904
CURTISTRVAIR	2621906
CURTISTRVAIR	2621908
CVAC 22	*22
CVAC 22	2423302
CVAC 22	2423304
CVAC 22	3790104
CVAC 240	*240
CVAC 240	2422601
CVAC 240	2422602
CVAC 240	2422604
CVAC 240	2422606
CVAC 240	2422608
CVAC 240	2422610
CVAC 240	2422612
CVAC 240	2422614
CVAC 240	2422616
CVAC 240	2422618
CVAC 240	2422620
CVAC 240	2422622
CVAC 240	2422624
CVAC 240	2422626
CVAC 240	2422628
CVAC 240	2422630
CVAC 240	2422632
CVAC 240	2422633
CVAC 240	2422634
CVAC 240	2422636
CVAC 240	2422638
CVAC 240	2422640
CVAC 240	2422642
CVAC 240	2422643
CVAC 240	2422644
CVAC 240	2422647
CVAC 240	242264A
CVAC 340	*340
CVAC 340	2422702
CVAC 340	2422704
CVAC 340	2422706
CVAC 340	2422708
CVAC 340	242270A
CVAC 340	242270H
CVAC 340	2422712
CVAC 340	2422714
CVAC 340	2422716
CVAC 340	2422718
CVAC 340	2422742
CVAC BT13	2420202
CVAC BT13	2420204
CVAC BT13	2420206
CVAC BT13	2420208
CVAC BT13	2420210
CVAC BT13	2420222
CVAC BT13	2420224
CVAC BT13	2420226
CVAC BT13	2420228
CVAC BT13	2420230
CVAC L13	2420702
CVAC L13	2420704
CVAC L13	2420706
CVAC STC580	*STC580
CVAC STC580	2422801
CVAC STC580	2422802
CVAC STC580	2422804
CVAC STC580	2422806
CVAC STC580	2423001
CVAC STC580	2423002
DART G	2700102
DART G	2700104
DART G	2700106
DART G	2700108
DHAV DHC1	2801702
DHAV DHC1	2801704
DHAV DHC1	2801712
DHAV DHC1	2801714
DHAV DHC1	2801716
DHAV DHC1	2801736
DHAV DHC1	2801738
DHAV DHC1	2801739
DHAV DHC2	*DHC2
DHAV DHC2	2800102
DHAV DHC2	2800103
DHAV DHC2	2800104
DHAV DHC2	2800105
DHAV DHC2	2800106
DHAV DHC2	2800107
DHAV DHC2	2800108
DHAV DHC2	2800109
DHAV DHC2	2801830
DHAV DHC2	2801832
DHAV DHC3	*DHC3
DHAV DHC3	2800202
DHAV DHC6	*DHC6
DHAV DHC6	2802606
DHAVXXDH82	2801002
DOUG A26	3020504
DOUG A26	3020506
DOUG DC10	*DC10
DOUG DC10	3022110
DOUG DC10	3022111
DOUG DC10	3022114
DOUG DC10	3022118
DOUG DC10	3023001
DOUG DC10	3023501
DOUG DC10	3023503
DOUG DC10	3023508
DOUG DC3	*DC3
DOUG DC3	3021401
DOUG DC3	3021402
DOUG DC3	3021404
DOUG DC3	3021406
DOUG DC3	3021410
DOUG DC3	3021412
DOUG DC3	3021414
DOUG DC3	3021416
DOUG DC3	3021418
DOUG DC3	3021420
DOUG DC3	3021422
DOUG DC3	3021424
DOUG DC3	3021425
DOUG DC3	3021426
DOUG DC3	3021427
DOUG DC3	3021428
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DOUG DC3	3021436
DOUG DC3	3021438
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DOUG DC3	3021462
DOUG DC3	3021463
DOUG DC3	3021464
DOUG DC3	3021466
DOUG DC3	3021467
DOUG DC3	3021468
DOUG DC3	3021470
DOUG DC3	3021471
DOUG DC3	3021472
DOUG DC3	3021474
DOUG DC3	3021476
DOUG DC3	3021478
DOUG DC3	3021481
DOUG DC4	*DC4
DOUG DC4	3021502
DOUG DC4	3021504
DOUG DC4	3021506
DOUG DC4	3021508
DOUG DC4	3021510

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
DOUG DC4	3021512
DOUG DC4	3021514
DOUG DC4	3021516
DOUG DC4	3021518
DOUG DC4	3021520
DOUG DC4	3021522
DOUG DC4	3021524
DOUG DC4	3021526
DOUG DC4	3021528
DOUG DC4	3021530
DOUG DC4	3021532
DOUG DC4	3021534
DOUG DC4	3021536
DOUG DC4	3021537
DOUG DC4	3021538
DOUG DC6	*DC6
DOUG DC6	3021702
DOUG DC6	3021706
DOUG DC6	3021708
DOUG DC6	3021710
DOUG DC6	3021712
DOUG DC6	3021714
DOUG DC7	*DC7
DOUG DC7	3021802
DOUG DC7	3021804
DOUG DC7	3021806
DOUG DC8	*DC8
DOUG DC8	3021902
DOUG DC8	3021904
DOUG DC8	3021906
DOUG DC8	3021908
DOUG DC8	302190B
DOUG DC8	302190D
DOUG DC8	302190F
DOUG DC8	302190H
DOUG DC8	3021910
DOUG DC8	3021912
DOUG DC8	3021914
DOUG DC8	3021916
DOUG DC8	3021918
DOUG DC8	302191B
DOUG DC8	302191D
DOUG DC8	302191F
DOUG DC8	302191H
DOUG DC8	302191K
DOUG DC8	3021920
DOUG DC8	3021922
DOUG DC8	3021924
DOUG DC8	3021926
DOUG DC8	3021927
DOUG DC8	3021928
DOUG DC8	302192B
DOUG DC8	302192D
DOUG DC8	302192F
DOUG DC8	302192H
DOUG DC8	302192K
DOUG DC8	302192M
DOUG DC8	3021952
DOUG DC8	3021953
DOUG DC8	302195B
DOUG DC8	302195D
DOUG DC8	3021970
DOUG DC8	3021972
DOUG DC8	302197B
DOUG DC8	302197D
DOUG DC8	302198A
DOUG DC8	302198B
DOUG DC8	302198F
DOUG DC8	302198H

SDR	FAA
DOUG DC9	*DC9
DOUG DC9	3022002
DOUG DC9	3022026
DOUG DC9	3022028
DOUG DC9	302202B
DOUG DC9	3022030
DOUG DC9	3022034
DOUG DC9	3022036
DOUG DC9	3022037
DOUG DC9	302203D
DOUG DC9	302203F
DOUG DC9	302203H
DOUG DC9	302203K
DOUG DC9	3022051
DOUG DC9	302205A
DOUG DC9	302205C
DOUG DC9	3022065
DOUG DC9	3022066
DOUG DC9	3022067
DOUG DC9	302206A
DOUG DC9	302206C
DOUG DC9	302206E
DOUG DC9	302207A
DOUG DC9	302207C
DOUG DC9	302207D
DOUG DC9	302207N
DOUG DC9	302207P
DOUG DC9	3022080
DOUG DC9	3022081
DOUG DC9	3022082
EAGLE DW	3230203
EAGLEBC7	3240207
EIRVON20	5760102
EIRVON20	5760104
EIRVON20	5760202
EIRVON20	5760204
EIRVON20	5760206
EIRVON20	5760207
EMAIR MA1	3280103
EMAIR MA1	6070102
EMB 110	*110
EMB 110	3260122
EMB 110	3260124
ENSTRMF28	3300404
ENSTRMF28	3300405
ENSTRMF28	3300406
ENSTRMF28	3300407
ENSTRMF28	3300412
ENSTRMF28	3300424
ENSTRMF28	3300502
ENSTRMF28	3300505
ENSTRMF28	3300550
ENSTRMF28	3300404
ENSTRMF28	3300405
ENSTRMF28	3300406
ENSTRMF28	3300407
ENSTRMF28	3300412
ENSTRMF28	3300424
ENSTRMF28	3300502
ENSTRMF28	3300505
ENSTRMF28	3300550
FLEET 16B	3480502
FLEET 16B	3480504
FRCHLD24	3370202
FRCHLD24	3370204
FRCHLD24	3370206
FRCHLD24	3370208
FRCHLD24	3370210
FRCHLD24	3370212

SDR	FAA
FRCHLD24	3370214
FRCHLD24	3370216
FRCHLD24	3370218
FRCHLD24	3370220
FRCHLD24	3370222
FRCHLD24	3370224
FRCHLD24	3370302
FRCHLD24	3370304
FRCHLD24	3370402
FRCHLD24	3370404
FRCHLD24	3370406
FRCHLD24	3370408
FRCHLD24	3370410
FRCHLD24	3370412
FRCHLD24	3370414
FRCHLD24	3370416
FRCHLD24	3370418
FRCHLD24	3370502
FRCHLD24	3370504
FRCHLD24	3370506
FRCHLD24	3370508
FRCHLD24	3370510
FRCHLD24	3370512
FRCHLD24	3370514
FRCHLD24	3370516
FRCHLD24	3370518
FRCHLD24	3370520
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FRCHLD24	3370628
FRCHLD24	3370202
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FRCHLD24	3370216
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FRCHLD24	3370220
FRCHLD24	3370222
FRCHLD24	3370224
FRCHLD24	3370302
FRCHLD24	3370304
FRCHLD24	3370402
FRCHLD24	3370404
FRCHLD24	3370406
FRCHLD24	3370408
FRCHLD24	3370410
FRCHLD24	3370412
FRCHLD24	3370414
FRCHLD24	3370416
FRCHLD24	3370418
FRCHLD24	3370502
FRCHLD24	3370504
FRCHLD24	3370506
FRCHLD24	3370508
FRCHLD24	3370510

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
FRCHLD24	3370512
FRCHLD24	3370514
FRCHLD24	3370516
FRCHLD24	3370518
FRCHLD24	3370520
FRCHLD24	3370602
FRCHLD24	3370604
FRCHLD24	3370606
FRCHLD24	3370608
FRCHLD24	3370610
FRCHLD24	3370612
FRCHLD24	3370614
FRCHLD24	3370616
FRCHLD24	3370618
FRCHLD24	3370620
FRCHLD24	3370622
FRCHLD24	3370624
FRCHLD24	3370626
FRCHLD24	3370628
FRCHLDC119	3372102
FRCHLDC119	3372106
FRCHLDC119	3372108
FRCHLDF27	*F27
FRCHLDF27	3373002
FRCHLDF27	3373004
FRCHLDF27	3373006
FRCHLDF27	3373008
FRCHLDF27	3373010
FRCHLDF27	3373016
FRCHLDM62	3371604
FRCHLDM62	3371606
FRCHLDM62	3371608
FRCHLDM62	3371609
FRCHLDM62	3371610
FRCHLDM62	3371612
FRCHLDM62	3371614
FRCHLDM62	3371616
FRCHLDM62	3371618
FRCHLDM62	3371620
FRCHLDM62	3371622
FRCHLDM62	3371624
FRCHLDM62	3371626
FRCHLDM62	3371628
FRCHLDM62	3371630
FRCHLDM62	3371632
FRCHLDM62	3371634
FRCHLDM62	3371636
FRCHLDM62	3371638
FRCHLDM62	3371640
FRCHLDM62	3371642
FRCHLDM62	3374004
FRCHLDM62	3374006
GENBALAX6	3760102
GENBALAX6	3760202
GLASFL201	3800344
GLASFLH301	3800335
GLASFLH301	3800337
GLASFLH301	3800339
GLASFLH301	3800341
GROB 103CAT	1660202
GROB 109	1660204
GROB ASTIR	1660104
GRTLKS2T1	3910101
GRTLKS2T1	3910102
GRTLKS2T1	3910104
GRTLKS2T1	3910106
GRTLKS2T1	3910108
GRTLKS2T1	3910107
GRUMAVAA1	0630820
GRUMAVAA1	0631202
GRUMAVAA1	0632001
GRUMAVAA1	3960100
GRUMAVAA1	3960101
GRUMAVAA1	3960102
GRUMAVAA1	3960103
GRUMAVAA1	3960502
GRUMAVAA5	0632005
GRUMAVAA5	3960104
GRUMAVG1159	3960302
GRUMAVG164	3952801
GRUMAVG164	3960201
GRUMAVG164	3960202
GRUMAVG164	3960203
GRUMAVG164	3960204
GRUMAVG164	3979904
GRUMAVG164	8052214
GRUMAVG21	3951202
GRUMAVG21	3951204
GRUMAVG21	3951206
GRUMAVG21	3951208
GRUMAVG21	3951210
GRUMAVG21	3951212
GRUMAVG21	3951214
GRUMAVG21	3951216
GRUMAVG21	3951218
GRUMAVTBM	3950306
GRUMAVTBM	3950308
GRUMAVTBM	3950310
GULSTM112	0144701
GULSTM112	7630302
GULSTM112	7630303
GULSTM112	7630306
GULSTM112	7630307
GULSTM112	7630314
GULSTM112	7630315
GULSTM112	7630316
GULSTM500	0141102
GULSTM500	0141104
GULSTM500	0141106
GULSTM500	0141107
GULSTM500	0141108
GULSTM520	0141202
GULSTM560	0141402
GULSTM560	0141404
GULSTM560	0141406
GULSTM680	*680
GULSTM680	0141408
GULSTM680	0141602
GULSTM680	0141604
GULSTM680	0141606
GULSTM680	0141608
GULSTM680	0141610
GULSTM680	0141611
GULSTM680	0141612
GULSTM680	0141802
GULSTM680	7630513
GULSTM680TP	0141712
GULSTM680TP	0141714
GULSTM680TP	0141716
GULSTM680TP	0141718
GULSTM690TC	3970404
GULSTM690TP	0141720
GULSTM690TP	0141722
GULSTM690TP	3970410
GULSTM690TP	3970411
GULSTM690TP	7630515
GULSTM690TP	7630516
GULSTM690TP	7630517
GULSTM690TP	7630518
GULSTM690TP	7630519
GULSTM690TP	3970405
GULSTMAA1	0630610
GULSTMAA1	0630710
GULSTMAA1	0631206
GULSTMAA1	0631214
GULSTMAA5	0631410
GULSTMAA5	3960105
GULSTMAA5	3960106
GULSTMAA5	3960107
GULSTMAA5	3960124
GULSTMG1159	*G1159
GULSTMG1159	3953505
GULSTMG1159	3953535
GULSTMG1159	3970109
GULSTMG159	3952202
GULSTMG44	*G44
GULSTMG44	3951502
GULSTMG44	3951504
GULSTMG44	3951506
GULSTMG44	3951508
GULSTMG73	*G73
GULSTMG73	3951802
GULSTMGA7	3960401
HELIO H295	4300802
HELIO H295	4300803
HELIO H295	4301101
HELIO H295	4301102
HELIO H295	4301104
HELIO H391	4300102
HELIO H391	4300104
HELIO H391	4300106
HELIO H395	4300202
HELIO H395	4300204
HELIO H395	4300206
HILLERFH1100	3376502
HILLERFH1100	4361405
HILLERUH12	4360102
HILLERUH12	4360103
HILLERUH12	4360104
HILLERUH12	4360105
HILLERUH12	4360106
HILLERUH12	4360107
HILLERUH12	4360108
HILLERUH12	4360110
HILLERUH12	4360112
HILLERUH12	4360113
HILLERUH12	4360114
HILLERUH12	4360115
HILLERUH12	4360116
HILLERUH12	4360117
HILLERUH12	4360118
HILLERUH12	4360119
HILLERUH12	4360120
HILLERUH12	4360121
HILLERUH12	4360122
HILLERUH12	4360124
HILLERUH12	4360125
HILLERUH12	4360126
HILLERUH12	4360128
HILLERUH12	4360129
HILLERUH12	4360130
HILLERUH12	4360135
HILLERUH12	4360809
HUGHES269	4470402
HUGHES269	4470403
HUGHES269	4470404
HUGHES269	4470406

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
HUGHES269	4470502
HUGHES269	4470504
HUGHES269	4471004
HUGHES369	4470702
HUGHES369	4470704
HUGHES369	4470706
HUGHES369	4470718
HUGHES369	4470720
HUGHES369	4470722
HUGHES369	4470728
HUGHES369	4470730
HUGHES369	4470802
HUGHES369	4470806
HWKSLYDH104	*DH104
HWKSLYDH104	2800402
HWKSLYDH104	2800404
HWKSLYDH104	2800406
HWKSLYDH104	2800408
HWKSLYDH104	2800410
HWKSLYDH104	2800412
HWKSLYDH104	2800414
HWKSLYDH104	2800416
HWKSLYDH104	2800417
HWKSLYDH104	2800418
HWKSLYDH104	2800420
HWKSLYDH125	*DH125
HWKSLYDH125	1500204
HWKSLYDH125	4210101
HWKSLYDH125	4210112
HWKSLYDH125	4230106
HWKSLYDH125	4230110
HWKSLYDH125	4230126
HWKSLYDH125	4230138
HWKSLYDH125	423013M
HWKSLYDH125	423013P
HWKSLYDH125	4230140
HWKSLYDH125	4230158
HWKSLYDH125	4230160
HYNES B2	1440502
HYNES B2	1440504
HYNES B2	1440506
HYNES B2	1440508
INTRCP200	5650302
INTRCP200	5650304
INTRCP200	5650306
INTRCP200	5650308
INTRCP200	5650310
ISRAEL1121	0142002
ISRAEL1121	0142006
ISRAEL1121	0142010
ISRAEL1123	*1123
ISRAEL1123	4500101
ISRAEL1124	*1124
ISRAEL1124	4500102
ISRAEL1124	4500103
JBMSTRDGA15	4690502
JBMSTRDGA15	4690504
JBMSTRDGA15	4690506
JBMSTRDGA15	4690508
JBMSTRDGA15	4690510
JBMSTRDGA15	4690512
JBMSTRDGA15	4690514
JBMSTRDGA15	4690516
JBMSTRDGA15	4690518
LAIKFN10	5090204
LAIKFN10	5090208
LAIKFN10	5090208
LEAR 23	*23
LEAR 23	5170102
LEAR 24	*24
LEAR 24	5170302
LEAR 24	5170304
LEAR 24	5170306
LEAR 24	5170307
LEAR 24	5170309
LEAR 24	5170310
LEAR 24	5170311
LEAR 25	*25
LEAR 25	5170506
LEAR 25	5170509
LEAR 25	5170511
LEAR 25	5170513
LEAR 25	5170514
LEAR 35	*35
LEAR 35	5170600
LEAR 35	5170601
LEAR 35	5170602
LEAR 55	5170702
LET L13	1360306
LKHEED1011	*1011
LKHEED1011	5265010
LKHEED1011	5265015
LKHEED1011	5265020
LKHEED12A	5261402
LKHEED12A	5261404
LKHEED12A	5261406
LKHEED12A	5261408
LKHEED12A	5261410
LKHEED1329	*1329
LKHEED1329	5263102
LKHEED1329	5263108
LKHEED1329	5263116
LKHEED1329	5263125
LKHEED18	5261602
LKHEED18	5261603
LKHEED18	5261604
LKHEED18	5261606
LKHEED18	5261608
LKHEED18	5261610
LKHEED18	5261612
LKHEED18	5261614
LKHEED18	5261616
LKHEED18	5261618
LKHEED18	5261620
LKHEED18	5261622
LKHEED18	5261624
LKHEED18	5261632
LKHEED18	5261634
LKHEED18	5261636
LKHEED18	5261638
LKHEED18	5261640
LKHEED18	5261642
LKHEEDPV1	5260102
LKHEEDPV1	5260106
LKHEEDT33	5260401
LKHEEDT33	5260402
LKHEEDT33	5260404
LKHEEDT33	5260406
LUSCOM8	8190102
LUSCOM8	8190104
LUSCOM8	8190106
LUSCOM8	8190108
LUSCOM8	8190110
LUSCOM8	8190112
LUSCOM8	8190114
LUSCOM8	8190116
LUSCOM8	8190118
LUSCOM8	8190120
LUSCOM8	8190122
LUSCOM8	8190124
LUSCOM8	8190126
LUSCOM8	8190128
LUSCOM8	8190130
LUSCOM8	8190132
LUSCOM8	8190154
LUSCOM8	819019E
MARTIN404	*404
MARTIN404	5450702
MAULE M4	5460102
MAULE M4	5460104
MAULE M4	5460105
MAULE M4	5460106
MAULE M4	5460108
MAULE M4	5460112
MAULE M4	5460114
MAULE M4	5460116
MAULE M4	5460128
MAULE M4	5460130
MAULE M4	5460132
MAULE M5	5460133
MAULE M5	5460134
MAULE M5	5460135
MAULE M5	5460204
MAULE M6	5460160
MCLISHFUNKB	5480102
MCLISHFUNKB	5480104
MCLISHFUNKB	5480106
MCLISHFUNKB	5480108
MCLISHFUNKB	5480202
MCLISHFUNKB	5480204
MCLISHFUNKB	5480206
MCLISHFUNKB	5480208
MEYERSOTW	5650202
MEYERSOTW	5650204
MEYERSOTW	5650206
MEYERSOTW	5650208
MNCOUP90	5810102
MNCOUP90	5810104
MNCOUP90	5810107
MNCOUP90	5810108
MNCOUP90	5810110
MNMITEM18	5870102
MNMITEM18	5870104
MNMITEM18	5870106
MNMITEM18	5870108
MOONEYM20	5870202
MOONEYM20	5870204
MOONEYM20	5870206
MOONEYM20	5870208
MOONEYM20	5870210
MOONEYM20	5870212
MOONEYM20	5870214
MOONEYM20	5870219
MOONEYM20	5870220
MOONEYM20	5870302
MOONEYM20	5870304
MOONEYM20	5870306
MOONEYM20	5870308
MOONEYM20	5870310
MOONEYM20	5870312
MOONEYM20	5870314
MOONEYM20	5870316
MOONEYM20	5870601
MOONEYM20	5870605
MRCHTIS205	8120412
MTSBSIMU2	5780404
MTSBSIMU2	5780405

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
MTSBSIMU2	5780406
MTSBSIMU2	5780407
MTSBSIMU2	5780408
MTSBSIMU2	5780409
MTSBSIMU2	5780410
MTSBSIMU2	5780411
MTSBSIMU2	5780412
MTSBSIMU2	5780413
MTSBSIMU2	5780414
MTSBSIMU300	5780602
MULTECD16	9230602
MULTECD16	9230604
MULTECD16	9230606
MULTECD16	9230608
MULTECD16	9230610
MULTECD16	9230612
NAMER B25	6400702
NAMER B25	6400704
NAMER B25	6400705
NAMER B25	6400706
NAMER B25	6400708
NAMER B25	6400710
NAMER B25	6400712
NAMER B25	6400713
NAMER B25	6400714
NAMER B25	6400718
NAMER B25	6400719
NAMER F51	6402301
NAMER F51	6402302
NAMER F51	6402303
NAMER F51	6402304
NAMER F51	6402306
NAMER F51	6402307
NAMER F51	6402308
NAMER F51	6402309
NAMER F51	6402310
NAMER NA260	6402502
NAMER NA260	6402504
NAMER NA260	6402505
NAMER T6	1922828
NAMER T6	6400402
NAMER T6	6400404
NAMER T6	6400405
NAMER T6	6400406
NAMER T6	6400407
NAMER T6	6400408
NAMER T6	6400410
NAMER T6	6400412
NAMER T6	6400414
NAMER T6	6400415
NAMER T6	6400416
NAMER T6	6400417
NAMER T6	6400418
NAMER T6	6400419
NAMER T6	6400420
NAMER T6	6400422
NAMER T6	6400423
NAMER T6	6400424
NAMER T6	6400426
NAMER T6	6400430
NAMER T6	6400431
NAMER T6	6400432
NAMER T6	6400434
NAMER T6	6400436
NAMER T6	6400441
NAMER T6	6400442
NAVAL N3N	6120202
NAVIONNAVION	6150106
NAVIONNAVION	6150108
NAVIONNAVION	6150110
NAVIONNAVION	6150118
NAVIONNAVION	6150132
NAVIONNAVION	6150134
NAVIONNAVION	6150136
NAVIONNAVION	6150138
NAVIONNAVION	6150140
NAVIONNAVION	6150142
NAVIONNAVION	6150144
NAVIONNAVION	6150148
NAVIONNAVION	6150160
NAVIONNAVION	6150162
NAVIONNAVION	6150164
NAVIONNAVION	6150166
NAVIONNAVION	6150168
NAVIONNAVION	6150170
NAVIONNAVION	6150172
NAVIONNAVION	6150174
NAVIONNAVION	6150176
NAVIONNAVION	6150178
NORD SV4	6383006
NORD SV4	8470102
NORWST65	6480116
NORWST65	6480118
NORWST65	6480120
NORWST65	6480122
NORWST65	6480124
ORLHELH19	8141608
ORLHELH19	8141609
ORLHELH19	8141610
ORLHELH19	8141612
ORLHELH19	8141614
ORLHELH19	8141616
ORLHELH19	8141618
ORLHELH19	814161G
ORLHELH19	814161J
ORLHELS58	814181A
ORLHELS58	8141812
ORLHELS58	8141818
PARTENP68	6780105
PARTENP68	6780106
PICARDAX6	7001218
PILATSB4	7090103
PILATSB4	7090104
PIPER 600	*600
PIPER 600	7106001
PIPER 600	7106002
PIPER 600	7106010
PIPER 600	7106011
PIPER 600	7106012
PIPER 600	7106015
PIPER 600	8360607
PIPER 600	7106014
PIPER E2	7100302
PIPER J2	7100402
PIPER J3	7100501
PIPER J3	7100502
PIPER J3	7100504
PIPER J3	7100506
PIPER J3	7100508
PIPER J3	7100509
PIPER J3	7100510
PIPER J3	7100511
PIPER J3	7100512
PIPER J3	7100514
PIPER J3	7100516
PIPER J3	7100518
PIPER J3	7100519
PIPER J3	7100520
PIPER J3	7100522
PIPER J3	7100524
PIPER J3	7100526
PIPER J3	7100528
PIPER J3	710052T
PIPER J3	7100530
PIPER J3	7100532
PIPER J3	7100534
PIPER J3	7100536
PIPER J3	7100538
PIPER J3	7100540
PIPER J3	7100542
PIPER J3	7100544
PIPER J3	7100546
PIPER J3	7100548
PIPER J3	7100550
PIPER J3	7100552
PIPER J3	7101102
PIPER J3	7101104
PIPER J4	7100602
PIPER J4	7100604
PIPER J4	7100605
PIPER J4	7100606
PIPER J4	7100608
PIPER J4	7100610
PIPER J4	7100612
PIPER J4	7100614
PIPER J5	7100202
PIPER J5	7100204
PIPER J5	7100702
PIPER J5	7100704
PIPER J5	7100706
PIPER J5	7100708
PIPER J5	7100710
PIPER J5	7100712
PIPER PA12	7101202
PIPER PA12	7101204
PIPER PA14	7101402
PIPER PA15	7101502
PIPER PA16	7101602
PIPER PA16	7101604
PIPER PA17	7101702
PIPER PA18	7101802
PIPER PA18	7101804
PIPER PA18	7101806
PIPER PA18	7101808
PIPER PA18	7101809
PIPER PA18	7101810
PIPER PA18	7101811
PIPER PA18	7101812
PIPER PA18	7101813
PIPER PA18	7101814
PIPER PA18	7101815
PIPER PA18	7101816
PIPER PA18	7101818
PIPER PA18	7101820
PIPER PA18	7101822
PIPER PA18	7101824
PIPER PA18	7101826
PIPER PA18	7101828
PIPER PA18	7101830
PIPER PA18	7101832
PIPER PA18	7101834
PIPER PA18	7101836
PIPER PA18	7101837
PIPER PA18	7101838
PIPER PA18	7101880
PIPER PA18	7101902
PIPER PA18	7101904

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
PIPER PA18	7101906
PIPER PA20	7102002
PIPER PA20	7102004
PIPER PA20	7102006
PIPER PA20	7102008
PIPER PA20	7102010
PIPER PA20	7102012
PIPER PA22	7102202
PIPER PA22	7102204
PIPER PA22	7102206
PIPER PA22	7102208
PIPER PA22	7102210
PIPER PA22	7102212
PIPER PA22	7102214
PIPER PA22	7102216
PIPER PA22	7102202
PIPER PA22	7102204
PIPER PA22	7102206
PIPER PA22	7102208
PIPER PA22	7102210
PIPER PA22	7102212
PIPER PA22	7102214
PIPER PA22	7102216
PIPER PA23	*PA23
PIPER PA23	7102302
PIPER PA23	7102303
PIPER PA23	7102304
PIPER PA23	7102305
PIPER PA23	7102306
PIPER PA23	7102308
PIPER PA23	7102309
PIPER PA23	7102310
PIPER PA24	7102402
PIPER PA24	7102403
PIPER PA24	7102404
PIPER PA24	7102406
PIPER PA24	7102408
PIPER PA24	7102409
PIPER PA25	7102502
PIPER PA25	7102503
PIPER PA25	7102504
PIPER PA25	7102508
PIPER PA28	7102510
PIPER PA28	7102802
PIPER PA28	7102803
PIPER PA28	7102804
PIPER PA28	7102805
PIPER PA28	7102806
PIPER PA28	7102807
PIPER PA28	7102808
PIPER PA28	7102809
PIPER PA28	7102810
PIPER PA28	7102811
PIPER PA28	7102812
PIPER PA28	7102813
PIPER PA28	7102814
PIPER PA28	7102815
PIPER PA28	7102816
PIPER PA28	7102817
PIPER PA28	7102818
PIPER PA28	7102819
PIPER PA28	7102830
PIPER PA30	*PA30
PIPER PA30	7103002
PIPER PA30	7103902
PIPER PA30	7104002
PIPER PA31	*PA31
PIPER PA31	7103102
PIPER PA31	7103104
PIPER PA31	7103105
PIPER PA31	7103110
PIPER PA31	7103120
PIPER PA31	*PA31
PIPER PA31	7103102
PIPER PA31	7103104
PIPER PA31	7103105
PIPER PA31	7103110
PIPER PA31	7103120
PIPER PA31T	7103124
PIPER PA31T	7103126
PIPER PA31T	7103127
PIPER PA31T	7103128
PIPER PA32	7103116
PIPER PA32	7103206
PIPER PA32	7103207
PIPER PA32	7103209
PIPER PA32	7103210
PIPER PA32	7103211
PIPER PA32	7103212
PIPER PA32	7103213
PIPER PA32	7103214
PIPER PA32	7103215
PIPER PA32	7103218
PIPER PA32	7103220
PIPER PA32	7103222
PIPER PA34	*PA34
PIPER PA34	7103405
PIPER PA34	7103406
PIPER PA34	7103407
PIPER PA34	7103420
PIPER PA36	7103602
PIPER PA36	7103610
PIPER PA36	7103612
PIPER PA36	7103614
PIPER PA36	7103620
PIPER PA38	7103812
PIPER PA42	7104202
PIPER PA44	*PA44
PIPER PA44	7104402
PIPER PA44	7104404
PRATT PRG1	7300102
PRATT PRG1	7300104
PRATT PRG1	7300106
PROPJT200	0140302
PROPJT200	0140304
PROPJT200	0140306
PROPJT200	0140308
PROPJT200	0140312
PROPJT200	0140314
RAVEN RX6	7480502
RAVEN S50	05604XW
RAVEN S50	7480204
RAVEN S55	7480402
RAVEN S60	7480606
RAVEN S60	7480610
RAVEN S66	7480612
RAVEN S66	7480615
RKWELL500	*500
RKWELL500	7630410
RKWELL700	7630520
RKWELLNA265	*NA265
RKWELLNA265	6402602
RKWELLNA265	6402604
RKWELLNA265	6402606
RKWELLNA265	6402608
RKWELLNA265	6402612
RKWELLNA265	6402614
RKWELLNA265	6402618
RKWELLNA265	7630101
RKWELLNA265	7630104
RKWELLNA265	7630106
RKWELLNA265	7630107
RKWELLNA265	7630108
ROBSINR22	7640102
ROLSCHLS	3801206
ROLSCHLS	3801208
ROLSCHLS	3801211
ROLSCHLS	3801214
ROLSCHLS	3801250
RYAN ST3	7830502
RYAN ST3	7830504
RYAN ST3	7830506
RYAN STA	7830402
RYAN STA	7830404
SCHLERASW15	38015H2
SCHLERASW15	38015HZ
SCHLERASW19	3801508
SCHLERASW19	3801505
SCHLERASW20	3801503
SCHLERASW20	3801506
SCHLERK8	3801559
SCHLERK8	3801563
SCHLERK8	3801567
SCHLERK8	38019VK
SCHLERK8	38019VL
SCHLERKA8	3801525
SCHLERKA8	3801528
SCHLERKA8	3801530
SCHLERKA8	3801533
SCHLERKA8	3801535
SCHLERKA8	3801537
SCHLERKA8	3801540
SCHLERKA8	3801542
SCHLERKA8	3801545
SCHLERKA8	3801554
SCWZERG164	3952702
SCWZERG164	3952704
SCWZERG164	3952802
SCWZERG164	3952803
SCWZERSG1	8050102
SCWZERSG1	8050104
SCWZERSG1	8050106
SCWZERSG1	8050108
SCWZERSG1	8050110
SCWZERSG1	8050112
SCWZERSG1	8050114
SCWZERSG1	8050116

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
SCWZERSG1	8050118
SCWZERSG1	8050120
SCWZERSG1	8050122
SCWZERSG1	8050124
SCWZERSG1	8050146
SCWZERSG1	8050147
SCWZERSG1	8050148
SCWZERSG1	8050149
SCWZERSG1	8050151
SCWZERSG1	8050153
SCWZERSG1	8050502
SCWZERSG1	8050504
SCWZERSG2	8050202
SCWZERSG2	8050204
SCWZERSG2	8050206
SCWZERSG2	8050210
SCWZERSG2	8050602
SCWZERSG2	8050604
SCWZERSG2	8050606
SCWZERSG2	8050608
SCWZERSG2	8050610
SCWZERSG2	8050612
SCWZERSG2	8050614
SCWZERSG2	8051404
SCWZERSG2	8051604
SCWZERSG2	8051608
SEMCO CLNGER	8070802
SEMCO MODELT	8071701
SKRSKYS55	8141602
SKRSKYS55	8141604
SKRSKYS55	8141606
SKRSKYS58	8141801
SKRSKYS58	8141802
SKRSKYS58	8141804
SKRSKYS58	8141806
SKRSKYS58	8141808
SKRSKYS58	8141809
SKRSKYS58	8141814
SKRSKYS58	8141815
SKRSKYS58	8141816
SKRSKYS58	8141836
SKRSKYS76	8143006
SKRSKYS76	8143010
SLINDS100	0140202
SLINDS100	0140204
SLINDS100	0140208
SLINDS100	9550102
SLINDS100	9550104
SMITH 600	8360604
SMITH 600	8360605
SMITH 600	8360608
SMITH 600	1710602
SMITH 600	1710606
SMITH 600	8360602
SMITH 600	8360606
SNIAS 350	8680801
SNIAS 350	8680803
SNIAS 350	8680804
SNIAS 350	8680802
SNIAS SA318	8680506
SNIAS SA318	8680508
SNIAS SA318	8680511
SNIAS SA318	8680516
SNIAS SA341	8680610
SOCATAMS894	8402842
SOCATARALLYE	8400125
SOCATARALLYE	8400131
SPHRTHCIRRUS	38019VC
SPHRTHCIRRUS	38019VE
SPHRTHNIMBUS	3801923
SPHRTHNIMBUS	3801925
SPHRTHNIMBUS	3801950
SPHRTHNIMBUS	38019VD
SPHRTHNIMBUS	38019VF
SPHRTHNIMBUS	38019VG
SPHRTHNIMBUS	38019VJ
SPHRTHVENTUS	3802050
SPHRTHVENTUS	3802051
STBROSSD3	*SD3
STBROSSD3	8100602
STNSON10	8632002
STNSON10	8632004
STNSON10	8632102
STNSON10	8632104
STNSON10	8632106
STNSONLE	8630202
STNSONL5	8630204
STNSONL5	8630206
STNSONL5	8630208
STNSONL5	8630210
STNSONL5	8630212
STNSONL5	8630214
STNSONSR9	8631502
STNSONSR9	8631504
STNSONSR9	8631506
STNSONSR9	8631508
STNSONSR9	8631510
STNSONSR9	8631512
STNSONSR9	8631514
STNSONSR9	8631516
STNSONSR9	8631518
STNSONSR9	8631520
STNSONSR9	8631522
STNSONSR9	8631524
STNSONSR9	8631526
STNSONSR9	8631528
STNSONV77	8631802
STNSONV77	8631804
STOLAMRC3	3080202
STOLAMRC3	3080204
STOLAMRC3	3080206
STOLAMRC3	5410102
SUPAC LA	8730202
SUPAC LA	8730204
SUPAC LA	8730206
SUPAC LA	8730208
SUPAC V	8730302
SUPAC V	8730304
SUPAC V	8730306
SUPAC V	8730308
SWRNGNSA226	*SA226
SWRNGNSA226	8780122
SWRNGNSA226	8780402
SWRNGNSA226	8780404
SWRNGNSA226	8780405
SWRNGNSA226	8780406
SWRNGNSA226	*SA226
SWRNGNSA226	8780122
SWRNGNSA226	8780402
SWRNGNSA226	8780404
SWRNGNSA226	8780405
SWRNGNSA226	8780406
SWRNGNSA227	8780603
SWRNGNSA227	8780610
SWRNGNSA227	8780615
SWRNGNSA227	8780620
SWRNGNSA26	*SA26
SWRNGNSA26	8780102
SWRNGNSA26	8780112
TCRAFK21	8850906
TCRAFKD	8850402
TCRAFKD	8850404
TCRAFKD	8850406
TCRAFKD	8850408
TCRAFKD	8850410
TCRAFKD	8850412
TCRAFKD	8850414
TCRAFKD	8850415
TCRAFKD	8850416
TCRAFKD	8850418
TCRAFKD	8850420
TCRAFKD	8850422
TCRAFTA	8850202
TCRAFTBC	8850302
TCRAFTBC	8850304
TCRAFTBC	8850306
TCRAFTBC	8850308
TCRAFTBC	8850310
TCRAFTBC	8850314
TCRAFTBC	8850316
TCRAFTBC	8850318
TCRAFTBC	8850320
TCRAFTBC	8850321
TCRAFTBC	8850322
TCRAFTBC	8850323
TCRAFTBC	8850324
TCRAFTBC	9230902
TCRAFTBC	9230904
TCRAFTBC	9230906
TCRAFTBC	9230908
TCRAFTBC	9230910
TCRAFTBC	9230912
TCRAFTBC	9230914
TCRAFTBC	9230916
TCRAFTBC	9230918
TCRAFTBC	9230920
TCRAFTBC	9230922
TCRAFTBC	9230924
TCRAFTBC	9230926
TCRAFTBC	9230928
TCRAFTBF	8850326
TCRAFTBF	8850330
TCRAFTBF	8850332
TCRAFTBF	8850334
TCRAFTBF	8850336
TCRAFTBF	8850338
TCRAFTBF	8850340
TCRAFTBF	8850344
TCRAFTBL	8850346
TCRAFTBL	8850348
TCRAFTBL	8850350
TCRAFTBL	8850354
TCRAFTBL	8850356
TEMCO 11A	8890402
TEMCO 11A	8890404
THUNDRAX7	8970105
THUNDRAX7	8970106
THUNDRAX7	8970107
THUNDRAX7	8970108
THUNDRAX7	8970110
THUNDRAX7	8970120
TMPSONNAVION	6150104
TMPSONNAVION	6150112
TMPSONNAVION	6150114
TMPSONNAVION	6150116
TMPSONNAVION	6150120
TMPSONNAVION	6150122

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
TMPSONNAVION	6150130
TMPSONNAVION	6150146
TRYTEK65	0190406
TRYTEK65	0190712
TRYTEK65	0190714
TRYTEK65	0190716
TRYTEK65	0190718
TRYTEK65	0190920
TRYTEK65	0190922
TRYTEK65	0190924
TRYTEK65	0190926
TRYTEK65	0190928
TRYTEK65	0190930
TRYTEK65	0190932
TRYTEK65	0190934
TRYTEKK	0190402
TRYTEKK	0190404
UNIVACGC1	9230102
UNIVACGC1	9230104
UNIVACGC1	9230106
UNIVACGC1	9230108
UNIVACGC1	9230110
UNIVACGC1	9230112
UNIVAR108	9230402
UNIVAR108	9230404
UNIVAR108	9230406
UNIVAR108	9230408
UNIVAR108	9230412
UNIVAR108	9230414
UNIVAR108	9230416
UNIVAR108	9230418
UNIVAR415	0420102
UNIVAR415	0420104
UNIVAR415	0420202
UNIVAR415	0420204
UNIVAR415	0420302
UNIVAR415	0420304
UNIVAR415	0420306
UNIVAR415	0420308
UNIVAR415	0420310
UNIVAR415	0420312
UNIVAR415	0420314
UNIVAR415	0420316
UNIVAR415	0420318
UNIVAR415	0420320
UNIVAR415	0420322
UNIVAR415	0420324
UNIVAR415	0420326
UNIVAR415	0420328
UNIVAR415	0420330
UNIVAR415	0420332
UNIVAR415	0420334
UNIVAR415	0420336
UNIVAR415	0420338
UNIVAR415	0420340
UNIVAR415	0420402
UNIVAR415	0420404
UNIVAR415	0420406
UNIVAR415	0420408
UNIVAR415	0420410
UNIVAR415	0420502
UNIVAR415	0420504
UNIVAR415	0420702
UNIVAR415	0420722
UNIVAR415	0540102
UNIVAR415	0540104
UNIVAR415	5872014
UNIVAR415	5872018
VARGA 2150	5940202
VARGA 2150	5940204
VARGA 2150	9350102
VICKER745	9470204
VICKER745	9470402
VICKER745	9470404
VICKER745	9470602
WACO ASO	9601202
WACO GXE	9600702
WACO R	9600304
WACO R	9600422
WACO UPF7	9601302
WACO UPF7	9601304
WACO YK	9600816
WACO YK	9600818
WACO YK	9600832
WACO YK	9600834
WACO YK	9600835
WACO YK	9600836
WACO YK	9600838
WACO YK	9600840
WSK M18	9810102
WSK M18	9180102
WTHRLY201	9630404
WTHRLY201	9630406
WTHRLY201	9630408
WTHRLY201	9630410

APPENDIX E

SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL (MM) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MM CODES FOR ENGINES OF SIMILAR DESIGN INTO GROUPS FOR ANALYTICAL PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA
ALLSN 250C	03002
ALLSN 250C	03011
ALLSN 250C	03013
ALLSN 501D	*501D
ALLSN 501D	03004
ALLSN 501D	03005
ALLSN 501D	03006
AMTRMCMCCULH	42501
ARSRCHTFE731	*TFE7
ARSRCHTFE731	01518
ARSRCHTPE331	*TPE3
ARSRCHTPE331	01502
ARSRCHTPE331	01506
ARSRCHTPE331	01508
ARSRCHTPE331	01510
ARSRCHTPE331	01512
CONT 6285	17038
CONT 975	17037
CONT A40	17001
CONT A50	17002
CONT A65	17003
CONT A75	17005
CONT A80	17006
CONT C125	17011
CONT C145	17012
CONT C85	17008
CONT C90	17009
CONT E185	17014
CONT E225	17015
CONT O200	17020
CONT O300	17022
CONT O300	17024
CONT O360	17023
CONT O360	17025
CONT O360	17033
CONT O470	*0470
CONT O470	17026
CONT O470	17027
CONT O470	17028
CONT O470	17029
CONT O520	*0520
CONT O520	17032
CONT O520	17035
CONT O520	17040
CONT R670	17016
CONT R670	17018
DHAVXXGIPSY	20004
FCD 6440	26003
FRNKLN4AC150	27002
FRNKLN4AC150	27003
FRNKLN4AC150	27004
FRNKLN4AC176	27006
FRNKLN4AC176	27007
FRNKLN4AC199	27008
FRNKLN4AC199	27009
FRNKLN4AC199	27010
FRNKLN6A4150	27024
FRNKLN6A4165	27025
FRNKLN6A4200	27027
FRNKLN6A8215	27030
FRNKLN6AV335	27020
FRNKLN6AV350	27043
FRNKLN6VS335	27040
FRNKLNO3356	27033
GE CF700	*CF70
GE CF700	30010
GE CJ610	*CJ61
GE CJ610	30002
GE CJ610	30006
GE CJ805	*CJ80
GE CJ805	30004
GE CT58	*CT58
GE CT58	30001
GE CT58	30008
GLADENK5	37503
GLADENR5	37504
JACOBPR755	35006
JACOBPR755	35007
JACOBPR755	35008
JACOBSR755	35003
JACOBSR915	35005
LYC 0540	41532
LYC LTS101	41560
LYC O145	41501
LYC O145	41502
LYC O145	41503
LYC O235	41505
LYC O290	41506
LYC O320	41500
LYC O320	41508
LYC O320	41509
LYC O340	41510
LYC O360	41511
LYC O360	41513
LYC O360	41514
LYC O360	41515
LYC O360	41522
LYC O360	41524
LYC O435	*0435
LYC O435	41516
LYC O435	41517
LYC O435	41518
LYC O435	41519
LYC O435	41520
LYC O435	41521
LYC O435	41523
LYC O435	41525
LYC O435	41526
LYC O480	41527
LYC O480	41529
LYC O540	*0540
LYC O540	41355
LYC O540	41530
LYC O540	41531
LYC O540	41532
LYC O540	41533
LYC O540	41534
LYC O540	41535
LYC O540	41538
LYC O541	41536
LYC O541	41539
LYC O720	41546
LYC R680	41540
LYC R680	41541
LYC R680	41542
LYC R680	41543
LYC R680	41544
LYC R680	41545
LYC T53	41552
MNASCOC4	43504
ONAN B48	99999
OTHER	*AVON
OTHER	*BAST
OTHER	*CF6
OTHER	*CJ80
OTHER	*R182
OTHER	*R335
OTHER	*RB21
OTHER	*SPEY
OTHER	00585
OTHER	01505
OTHER	01510
OTHER	03003
OTHER	03010
OTHER	03012
OTHER	04501
OTHER	13802
OTHER	17013
OTHER	17030
OTHER	17033
OTHER	20003
OTHER	26002
OTHER	27005
OTHER	27011
OTHER	27026
OTHER	27033
OTHER	27033
OTHER	27036
OTHER	30005
OTHER	30020
OTHER	31701
OTHER	37002
OTHER	41549
OTHER	41555
OTHER	41581
OTHER	44554
OTHER	51001
OTHER	52001
OTHER	52045
OTHER	52047
OTHER	54501
OTHER	54510
OTHER	54517
OTHER	54519
OTHER	54521
OTHER	54523
OTHER	54554
OTHER	60002
OTHER	60003
OTHER	60004
OTHER	60005
OTHER	60006
OTHER	60007
OTHER	60008
OTHER	60009
OTHER	60012
OTHER	60014
OTHER	60014
OTHER	60020
OTHER	60030
OTHER	61502
OTHER	63501
OTHER	64503
OTHER	64504
OTHER	64505
OTHER	67007
OTHER	67009
OTHER	67010
OTHER	67011
OTHER	67012
OTHER	67015
OTHER	67018
OTHER	67019
OTHER	67021

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA
OTHER	67024
OTHER	67025
OTHER	67026
OTHER	67027
OTHER	67028
OTHER	67029
OTHER	67030
OTHER	67031
OTHER	67032
OTHER	67033
OTHER	67034
OTHER	67037
OTHER	67038
OTHER	67050
OTHER	60030
OTHER	99999
OTHER	BE US
PCKARDV1650	49001
PWA JT12	*JT12
PWA JT12	52042
PWA JT15	52060
PWA JT15	52112
PWA JT3C	*JT3C
PWA JT3C	52036
PWA JT3D	*JT3D
PWA JT3D	52039
PWA JT4	*JT4
PWA JT4	52037
PWA JT8	*JT8
PWA JT8	52044
PWA JT8	52046
PWA JT8	52048
PWA JT8	52049
PWA JT8	52051
PWA JT9	*JT9
PWA JT9	52050
PWA PT6	*PT6
PWA PT6	52043
PWA PT6	52053
PWA PT6	52403
PWA PT6	61501
PWA PT6	61503
PWA PT6	61504
PWA PT6	61506
PWA R1340	*R134
PWA R1340	52009
PWA R1340	52010
PWA R1340	52011
PWA R1340	52012
PWA R1340	52016
PWA R1830	*R183
PWA R1830	52017
PWA R1830	52018
PWA R1830	52019
PWA R1830	52020
PWA R2000	*R200
PWA R2000	52021
PWA R2000	52023
PWA R2800	*R280
PWA R2800	52024
PWA R2800	52025
PWA R2800	52026
PWA R985	*R985
PWA R985	52006
PWA R985	52007
PWA R985	52008
RROYCEDART	*DART
RROYCEDART	54503
RROYCEDART	54504
RROYCEDART	54505
RROYCEDART	54506
RROYCEDART	54507
RROYCEDART	54508
RROYCEDART	54509
RROYCEDART	54522
RROYCEDART	54553
RROYCEGIPSY	20005
RROYCEGIPSY	20006
RROYCEGIPSY	20007
RROYCEGIPSY	20008
RROYCEVIPER	*VIPE
RROYCEVIPER	10201
RROYCEVIPER	54550
RROYCEVIPER	54552

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