

General Aviation Manufacturers Association

2012

GENERAL AVIATION

Statistical Databook & Industry Outlook



GENERAL AVIATION IS ONE OF THE WORLD'S MOST IMPORTANT AND DYNAMIC INDUSTRIES

As an integral and vital part of the aviation system, general aviation provides transportation services and fulfills needs that are increasingly important to the world's economy. General aviation involves millions of people working to bring the advantages of aircraft to communities around the globe.

General aviation touches every aspect of our lives and our economy. The industry supports over one million jobs, tens-of-billions of dollar in revenue, and access to thousands of cities, businesses, services, and manufacturing facilities around the world.

General aviation is defined as all aviation other than military and scheduled commercial airlines.

General Aviation:

- › Includes over **360,000** general aviation aircraft worldwide, ranging from two-seat training aircraft to intercontinental business jets flying today; of which **223,000** aircraft are based in the United States.
- › Contributes more than **\$150 billion** to the U.S. economy annually and employs more than **1.2 million** people.
- › In the U.S., flies almost **25 million** flight hours of which two-thirds are flown for business purposes.
- › Flies to more than **5,000** U.S. public airports while scheduled airlines serve less than 500 airports. The European general aviation fleet can fly to over **3,900** airports.
- › Is the primary training ground for most commercial airline pilots.



The General Aviation Manufacturers Association (GAMA) represents over 80 of the world's leading manufacturers general aviation airplanes and rotocraft, engines, avionics, components and related services. GAMA's members also operate repair stations, fixed-based operations, pilot and maintenance training facilities and manage fleets of aircraft worldwide.

Headquartered in Washington, DC, with an additional office in Brussels, Belgium, GAMA represents the interests of its members to government agencies throughout the world. These interests include legislation, safety regulations and standards, market access, development of aviation infrastructure, and aviation security.

GAMA also works with national and international industry groups and regulatory authorities to promote the interests of general aviation globally through a variety of means including the development of worldwide standards at the International Civil Aviation Organization (ICAO).

Through its public information and education programs, GAMA promotes better understanding of general aviation and the important role it plays in economic growth and in serving the transportation needs of communities, companies and individuals around the globe.

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The total number of general aviation airplane shipments increased in 2012, but the performance across the different segments was mixed. Turboprop shipments moved in a positive direction for the first time since the start of the recent economic difficulties. Piston airplane shipments and the jet segment were in negative territory.

SHIPMENTS AND BILLINGS

Shipments of general aviation airplanes totaled 2,133 airplanes as compared to 2,120 in 2011 for companies that reported data for both years. However, the value of general aviation airplane shipments declined in 2012 from \$19.0 billion to \$18.9 billion.

The industry continued to shift away from the North American market. This trend began with the business jet segment and in 2012 each segment saw close to an even split between customers in North America and the rest of the world. North America accounted for 49.7 percent of the total airplanes shipments. Customer deliveries in the rest of the world included 18.1 percent to European operators, 15.2 percent to the Asia-Pacific region, 11.5 percent to Latin America, and 5.4 percent to Middle-East and Africa.

As part of the association's engagement in the rotorcraft industry, shipment numbers for helicopters are available on the GAMA website in a separate report for 2012. GAMA will combine the helicopter data with the airplane data for 2013 and publish quarterly information for the worldwide general aviation industry, including helicopters.

BUSINESS JETS

Business jet deliveries declined for a fourth consecutive year to 672 deliveries compared to 696 in 2011, a 3.6 percent decrease. North America accounted for 49.7 percent of the business jet deliveries in 2012. Europe's share of deliveries was 20.8 percent. The third largest share of deliveries was to customers in Asia-Pacific at 11.8 percent which was closely followed by the Latin-America region at 11.6 percent of the total. Middle-East and Africa accounted for 6.1 percent which is that region's lowest share of the market since 2007.

TURBOPROPS

Turboprop deliveries increased in 2012 to 580 unit deliveries compared to 526 deliveries in 2011. GAMA expanded the coverage of turbo-propeller airplanes to include the agricultural segment this year and data for both 2011 and 2012 are available in this data book. Deliveries of turboprop airplanes counted without agricultural airplanes were flat at 361 in 2012.

Approximately 48.6 percent of turboprop deliveries were to customers in North America. The Asia-Pacific region was second in market share in 2012 accounting

for 17.4 percent of the deliveries. Latin America came in third at 14.5 percent and Europe in fourth place at 12.6 percent. Middle-East and Africa accounted for 6.9 percent of the market.

TURBINE OPERATORS

The fractional fleet declined in 2012 to 905 aircraft and the number of fractional share owners declined 7 percent from 4,677 to 4,350. The fractional industry, however, began placing new orders and taking deliveries of new aircraft in the past year which is a positive sign for the turbine segment.

The worldwide number of operators of business airplanes and helicopters continued to grow over the past year from 31,986 to 33,119. Similar growth was seen in the worldwide turbine airplane fleet, which reached 33,020, a 2.6 percent increase, and in the piston and helicopter fleet, which increased to 27,758 aircraft in 2012, according to JETNET, LLC.

PISTON AIRPLANE SHIPMENTS

The piston engine airplane models historically tracked by GAMA declined slightly to 881 shipments compared to



898 in 2011 for companies that reported data for both years. GAMA has begun identifying other type certified piston aircraft, such as those type certified under CS-Very Light Aircraft and CS-Light Sport Aircraft, as well as Special Light Sport Aircraft in the shipment report. These aircraft will be further integrated into the report over the coming years.

The North American market for piston engine airplanes was 50.4 percent of the worldwide market in 2012. The European and Asia-Pacific market shares both grew compared to 2011 and accounted for 19.6 and 16.3 percent respectively.

U.S. EXPORTS

As previously discussed, the general aviation industry has shifted away from the North American market. In 2012, export share of deliveries by general aviation airplane manufacturers based in the United States was 720 airplanes, or 47.6 percent, and \$4.8 billion of their revenue were accounted for by exports.

GA SAFETY

The Federal Aviation Administration's preliminary statistics for general aviation safety point to a flat year in 2012. The agency identified 270 fatal general aviation accidents for calendar year 2012 compared to 263 in 2011, a 2.7 percent increase. However, commercial operations with general aviation aircraft under Part 135 saw a decline in the number of fatal aircraft accidents from 16 in 2011 to 9 in 2012.

GAMA has added general aviation safety data developed by the European Aviation Safety Agency to the data book for 2006 through 2011 (its most recent available data). The European data identified 181 fatal general aviation accidents for 2011.

PILOT POPULATION

There is growing concern about the number of active pilots in the United States and a number of other countries. 2012 was another year that experienced decline in the total population of pilots to 610,576 active pilots certified by the FAA. The decline included the private pilot population which shrank to 188,001 from last year's 194,441. There are today one-hundred thousand fewer private pilots than in 1992 when the population was at 288,078.

The positive in the 2012 year-end airman data was for student pilots and sport pilots. The number of holders of student pilot certificates increased 1.1 percent to 119,946. The number of sport pilots increased 10.5 percent to 4,493.

GAMA DATABOOK

This databook covers a number of topics including a detailed overview of general aviation airplane shipments. Additionally, the following chapters contain select data about the active fleet of general aviation aircraft in a number of key markets, detailed review of active U.S. pilots, an overview of airports in the United States and Europe, as well as detailed statistics about general aviation safety.

Additional data can be accessed online at www.GAMA.aero. If you have questions about GAMA's databook, you can contact the staff at +1-202-393-1500.

GAMA's focus is on safeguarding the growth and vitality of general aviation around the world. The specific strategies for 2013 are designed to support a dynamic and sustainable global general aviation manufacturing industry whose purpose is to link nations and their communities, facilitate business and create jobs.



The foundation of GAMA's organizational strength is its members. We actively coordinate with our board of industry executives as well as other industry leaders on key aviation policy initiatives worldwide. GAMA serves its membership by providing timely information and analysis about general aviation issues and by effectively representing the industry before regulators and policymakers globally. GAMA also communicates the economic contributions and societal benefits of general aviation to the media, government officials and the communities served.

RAISING GENERAL AVIATION (GA) SAFETY LEVELS WORLDWIDE

- › Expedite the adoption of new safety technologies through initiatives with U.S. and international authorities to restructure part 23 and other regulatory parts for rotorcraft and transport category airplanes and establish consensus standards for airplanes and rotorcraft as well as other regulatory enhancements
- › Advance work with the Federal Aviation Administration (FAA) on public-private partnerships, like the General Aviation Joint Steering Committee for airplanes and similar efforts for helicopters, to raise safety levels and reduce the number of fatal GA accidents
- › Facilitate the use and retrieval of electronic flight data to inform aviation safety activities
- › Engage Chinese authorities on GA safety risk analysis and education
- › Advocate and highlight best practices in safety management for the airworthiness and operation of GA aircraft

IMPROVING GOVERNMENTAL EFFECTIVENESS AND EFFICIENCY AND REMOVING UNNECESSARY REGULATORY BURDENS

- › Promote certification and validation process reform initiatives with authorities to strengthen oversight of safety areas and ensure adequate resources to support industry activity around the world
- › Establish consistent and appropriate airworthiness standards for business aircraft cabin interiors with the European Aviation Safety Agency and the FAA
- › Gain audit efficiencies and remove redundant audits for repair stations
- › Strive to ensure that security programs are risk-based and enhance security without adversely impacting the utility of GA
- › Streamline the alien flight student program to efficiently achieve vetting of pilots seeking training in the U.S.

BUILDING GLOBAL AWARENESS ABOUT THE ECONOMIC IMPACT AND SOCIETAL BENEFITS OF GA

- › Highlight GA's economic contribution through GA rallies and GAMA's Annual "Hill Day" in the U.S., engagement with members of the European Parliament, and other GAMA sponsored forums
- › Launch social media efforts to bring awareness and promote GA activities
- › Spotlight GA efforts to enhance workforce education, support military veterans, and promote economic development and job creation
- › Support the Congressional GA Caucuses and the "No plane, No gain" advocacy campaign

STRENGTHENING ACCESS AND MARKETS FOR GA GLOBALLY

- › Continue work with the Asia Pacific Economic Cooperation (APEC) forum on a framework to facilitate business operations in the Asia Pacific region and expand to the Middle East
- › Advocate for improvements to European aviation regulations that conform to the European Union's (EU) 2012 Safety Strategy document
- › Ensure effective safety cooperation by strengthening the US-EU safety agreement and eliminating redundant activities
- › Work with the Transportation Security Administration (TSA) to facilitate GA access to Temporary Flight Restricted zones (TFRs) and Reagan National Airport

ADVOCATING FOR GOVERNMENT POLICIES THAT STRENGTHEN GA

- › Promote infrastructure investment in air traffic system modernization (NextGen, Single European Sky, and airport infrastructure) while ensuring GA access
- › Work with International Civil Aviation Organization (ICAO), and other government and industry stakeholders to adopt a CO2 standard for engines, improve fleet efficiency, promote biofuel development, and implement air traffic improvements
- › Advocate for a regulatory environment in markets worldwide that provides sound tax and trade policy for growth in GA
- › Strive for appropriate oversight, accountability and funding for aviation safety regulators









01

General Aviation Shipments and Billings

1.1 General Aviation Airplane Shipments by Type of Airplane Manufactured Worldwide (1994–2012)

Year	Grand Total	Single-Engine	Multi-Engine	Total Piston	Turboprop	Business Jet	Total Turbine
1994	1,132	544	77	621	233	278	511
1995	1,251	605	61	666	285	300	585
1996	1,437	731	70	801	320	316	636
1997	1,840	1,043	80	1,123	279	438	717
1998	2,457	1,508	98	1,606	336	515	851
1999	2,808	1,689	112	1,801	340	667	1,007
2000	3,147	1,877	103	1,980	415	752	1,167
2001	2,998	1,645	147	1,792	422	784	1,206
2002	2,677	1,591	130	1,721	280	676	956
2003	2,686	1,825	71	1,896	272	518	790
2004	2,961	1,999	52	2,051	319	591	910
2005	3,590	2,326	139	2,465	375	750	1,125
2006	4,054	2,513	242	2,755	412	887	1,299
2007	4,277	2,417	258	2,675	465	1,137	1,602
2008	3,972	1,943	176	2,119	538	1,315	1,853
2009	2,283	893	70	963	446	874	1,320
2010	2,023	781	108	889	368	767	1,134
2011	2,120	761	137	898	526	696	1,222
2012	2,133	790	91	881	580	672	1,252

Source: GAMA

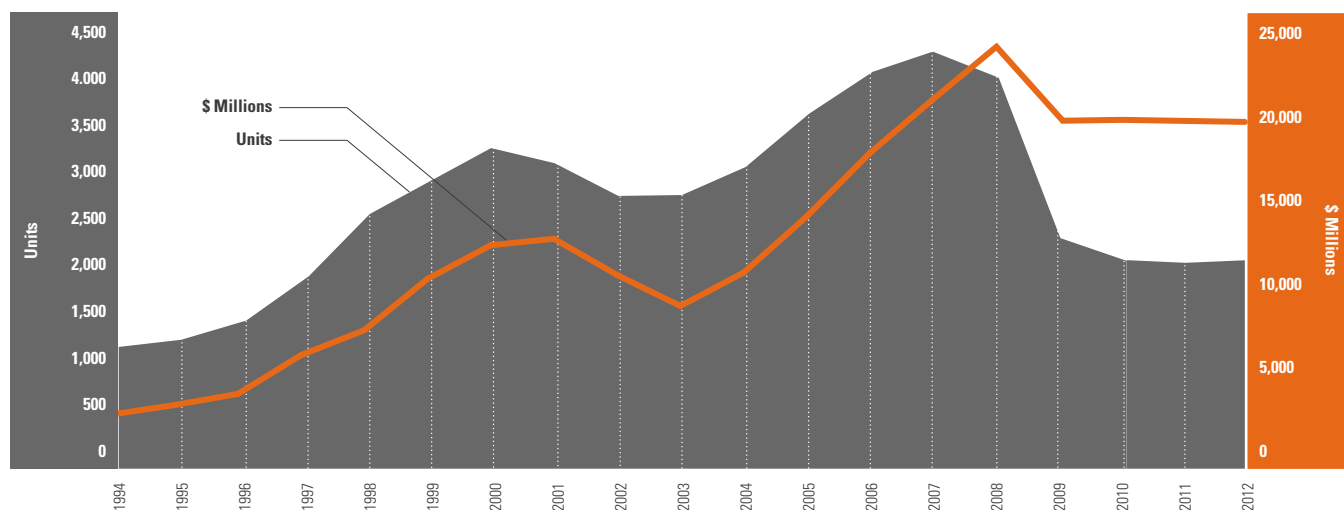
1.2 Estimated Billings (in Millions) for General Aviation Airplane Shipments by Type of Airplane Manufactured Worldwide (1994–2012)

Year	Grand Total	Single Engine	Multi-Engine	Total Piston	Turboprop	Business Jet	Total Turbine
1994	3,749	*	*	111	714	2,924	3,638
1995	4,294	*	*	169	774	3,351	4,125
1996	4,936	*	*	191	864	3,881	4,745
1997	7,170	*	*	238	913	6,019	6,932
1998	8,604	*	*	377	1,011	7,216	8,227
1999	11,560	*	*	440	930	10,190	11,120
2000	13,496	*	*	512	1,323	11,661	12,984
2001	13,868	*	*	541	1,210	12,117	13,327
2002	11,778	*	*	483	868	10,427	11,295
2003	9,998	*	*	545	837	8,616	9,453
2004	11,918	*	*	692	997	10,229	11,226
2005	15,156	*	*	805	1,189	13,161	14,350
2006	18,815	*	*	857	1,389	16,569	17,958
2007	21,837	*	*	897	1,593	19,347	20,940
2008	24,772	*	*	945	1,953	21,874	23,827
2009	19,474	*	*	442	1,589	17,443	19,032
2010	19,715	*	*	415	1,300	18,000	19,300
2011	19,042	*	*	441	1,365	17,235	18,600
2012	18,873	*	*	428	1,340	17,105	18,445

The 2011 and 2012 data includes the additional of agricultural airplanes manufacturers for piston and turboprop deliveries and also new piston airplane manufacturers. The data cannot be directly compared to 2010 and earlier entries. Refer to Table 1.4b and 1.4c for make and model detail.

Source: GAMA

FIGURE 1.1 General Aviation Airplane Shipments and Billings Worldwide (1994–2012)



1.3 Customer Delivery Region (in Percent of Total) for General Aviation Airplane Shipments by Type of Airplane Manufactured Worldwide (2007–2012)

Year	Piston					Turboprop					Business Jet				
	North America	Europe	Asia Pacific	Latin America	Middle-East & Africa	North America	Europe	Asia Pacific	Latin America	Middle-East & Africa	North America	Europe	Asia Pacific	Latin America	Middle-East & Africa
2007	66.5	16.3	9.2	5.4	2.7	57.2	16.3	8.6	14.4	3.4	58.3	24.9	4.2	7.5	5.2
2008	68.1	15.2	7.5	7.3	2.0	57.3	21.9	6.0	7.4	7.4	53.8	25.9	4.7	9.4	6.3
2009	59.4	21.2	9.5	6.8	2.8	57.8	17.5	8.7	8.1	7.8	49.4	26.3	8.6	9.2	6.4
2010	53.4	18.6	13.7	8.8	5.5	43.2	15.2	16.8	14.7	10.1	42.1	22.8	11.8	14.3	9.0
2011	57.7	12.0	15.6	10.0	4.6	52.6	14.1	14.4	13.6	5.3	50.0	20.2	12.9	10.1	6.8
2012	50.4	19.6	16.3	9.7	4.1	48.6	12.6	17.4	14.5	6.9	49.7	20.8	11.8	11.6	6.1

Source: GAMA



1.4a Worldwide Business Jet Shipments by Manufacturer (1999–2012) (CONTINUED ON NEXT PAGE)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Airbus	0	0	5	2	0	0	9	11	13	11	13	15	10	9
Airbus Corporate Jet (all models)	-	-	5	2	0	0	9	10	12	9	11	-	-	-
ACJ318	-	-	-	-	-	-	-	-	-	-	-	2	2	2
ACJ319	-	-	-	-	-	-	-	-	-	-	-	8	6	6
ACJ320	-	-	-	-	-	-	-	-	-	-	-	3	1	0
ACJ330	-	-	-	-	-	-	-	-	1	1	1	1	1	1
ACJ340	-	-	-	-	-	-	-	1	0	1	1	1	0	0
Avcraft (form. Fairchild)	0	0	4	4	9	9	1	0	0	0	0	0	0	0
Envoy 3	-	-	4	4	9	9	1	-	-	-	-	-	-	-
Boeing Business Jet	29	14	16	11	7	3	4	13	7	6	6	12	8	12
Boeing Business Jet	29	14	11	9	4	2	3	12	7	3	3	4	8	2
Boeing Business Jet 2	-	-	5	2	3	1	1	1	0	1	0	2	0	2
Boeing Business Jet 3	-	-	-	-	-	-	-	-	-	2	1	4	0	0
Boeing Business Jet 767	-	-	-	-	-	-	-	-	-	-	1	0	0	0
Boeing Business Jet 777	-	-	-	-	-	-	-	-	-	-	1	2	0	0
Boeing Business Jet 747	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Bombardier Business Aircraft	173	207	179	101	70	129	188	213	224	245	173	150	182	179
Learjet 31A	24	27	17	9	2	-	-	-	-	-	-	-	-	-
Learjet 40/XR	-	-	-	-	-	17	21	26	-	48	33	16	24	24
Learjet 45/XR	43	71	63	27	17	22	28	30	57	48	33	16	24	24
Learjet 60	32	35	29	17	12	9	18	15	23	26	13	12	19	15
Challenger 300	-	-	-	-	1	28	50	55	51	59	33	29	37	48
Challenger 604 / 605	42	39	41	31	24	29	36	29	35	44	36	38	43	34
Global 5000	-	-	-	-	-	4	17	18	-	51	51	49	53	54
Global 6000 / Express	32	35	29	17	14	20	13	22	46	51	51	49	53	54
CL 850/870/890	-	-	-	-	-	-	5	18	12	17	7	6	6	4
Cessna Aircraft Company	216	252	306	305	196	181	247	307	388	466	289	178	183	181
C510 Citation Mustang	-	-	-	-	-	-	-	1	45	101	125	73	43	38
C525 Citation CJ1	59	56	61	30	22	20	14	-	-	-	-	-	-	-
C525 Citation CJ1+	-	-	-	-	-	-	4	25	34	20	14	3	2	-
C525A Citation CJ2	-	8	41	86	56	27	23	1	-	-	-	-	-	-
C525A Citation CJ2+	-	-	-	-	-	-	-	36	44	56	21	17	15	19
C525B Citation CJ3	-	-	-	-	-	6	48	72	78	88	40	20	22	21
C525C Citation CJ4	-	-	-	-	-	-	-	-	-	-	-	19	48	44
C550 Citation Bravo	36	54	48	41	31	25	21	18	-	-	-	-	-	-
C560 Citation Ultra	32	-	-	-	-	-	-	-	-	-	-	-	-	-
C560 Citation Encore	-	6	37	36	21	24	13	12	-	-	-	-	-	-
C560 Citation Encore+	-	-	-	-	-	-	-	-	23	28	5	5	4	-
C560 Citation Excel	39	79	85	81	48	23	-	-	-	-	-	-	-	-
C560 Citation XLS	-	-	-	-	-	32	64	73	82	72	7	-	-	-
C560 Citation XLS+	-	-	-	-	-	-	-	-	-	8	37	22	27	31
C650 Citation VII	14	12	-	-	-	-	-	-	-	-	-	-	-	-
C680 Citation Sovereign	-	-	-	-	-	9	46	57	65	77	33	16	19	22
C750 Citation X	36	37	34	31	18	15	14	12	17	16	7	3	3	6
Dassault Falcon Jet	69	73	75	66	49	63	51	61	70	72	77	95	63	66
Falcon 50EX	11	18	13	10	8	5	5	5	2	1	-	-	-	-
Falcon 900B	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Falcon 900C	-	6	6	4	3	3	1	-	-	-	-	-	-	-
Falcon 900EX	16	23	21	17	6	1	-	-	-	-	-	-	-	-
Falcon 900DX	-	-	-	-	-	-	2	4	10	4	1	3	-	-
Falcon 900EX EASy	-	-	-	-	4	14	16	16	18	19	17	17	1	-
Falcon 900LX	-	-	-	-	-	-	-	-	-	-	-	4	11	7
Falcon 2000	34	26	35	35	12	11	6	6	1	-	-	-	-	-
Falcon 2000DX	-	-	-	-	-	-	-	-	-	3	1	-	-	-
Falcon 2000EX	-	-	-	-	16	10	-	-	-	-	-	-	-	-
Falcon 2000EX EASy	-	-	-	-	-	19	21	30	33	24	3	-	-	-
Falcon 2000LX	-	-	-	-	-	-	-	-	-	-	23	30	20	22
Falcon 7X	-	-	-	-	-	-	-	-	6	21	32	41	31	37
Eclipse Aviation Corporation	0	0	0	0	0	0	0	1	98	161	0	0	0	0
Eclipse 500	-	-	-	-	-	-	-	1	98	161	-	-	-	-
Embraer	0	0	0	8	13	13	20	27	36	38	122	145	99	99
Phenom 100	-	-	-	-	-	-	-	-	-	2	97	100	41	29
Phenom 300	-	-	-	-	-	-	-	-	-	-	1	26	42	48
Legacy 600 / 650	-	-	-	8	13	13	20	27	36	36	18	11	13	17
Lineage 1000 / E190 Head of State	-	-	-	-	-	-	-	-	-	-	5	5	3	2
Shuttles (ERJs and E-Jets)	-	-	-	-	-	-	-	-	-	-	1	3	0	3
Emivest (prev. Sino Swearingen)	0	0	0	0	0	0	0	1	1	0	2	0	0	0
SJ30-2	-	-	-	-	-	-	-	1	1	0	2	0	0	0
Gulfstream Aerospace Corporation	80	88	101	85	74	78	89	113	138	156	94	99	99	94
G100/150 (prev. IAI Astra)	9	11	5	9	24	22	26	42	59	68	19	24	21	11
G200 (prev. IAI Galaxy)	1	6	25	15	-	-	-	-	-	-	-	-	-	-
G300/350/400/450 (prev. GIV / GIVSP)	39	37	36	29	50	56	63	71	79	88	75	75	78	83
G500/G550 (prev. GV / GVSP)	31	34	35	32	-	-	-	-	-	-	-	-	-	-

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1.4a Worldwide Business Jet Shipments by Manufacturer (1999–2012) (CONTINUED FROM PREVIOUS PAGE)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hawker Beechcraft Corporation	100	118	98	94	100	115	141	140	162	160	98	73	52	32
Premier I/A	-	-	18	29	29	37	30	23	54	31	16	11	11	3
Hawker 400XP	45	51	25	19	24	28	53	53	41	35	11	12	1	-
Hawker 750	-	-	-	-	-	-	-	-	-	23	13	5	7	-
Hawker 800XP	55	67	55	46	47	50	58	8	-	-	-	-	1	-
Hawker 850XP	-	-	-	-	-	-	-	56	35	15	3	1	0	-
Hawker 900XP	-	-	-	-	-	-	-	-	32	50	35	28	22	17
Hawker 4000	-	-	-	-	-	-	-	-	-	6	20	16	10	12
Total Number of Airplanes	667	752	784	676	518	591	750	887	1,137	1,315	874	767	696	672
% Change	29.5%	12.7%	4.3%	-13.8%	-23.4%	14.1%	26.9%	18.3%	28.2%	15.7%	-33.5%	-12.2%	-9.3%	-3.4%
Total Billings for Airplanes (\$M)	10,190	11,661	12,117	10,427	8,616	10,229	13,161	16,555	19,347	21,874	17,443	18,000	17,235	17,105
% Change	41.2%	14.4%	3.9%	-13.9%	-17.4%	18.7%	28.7%	25.8%	16.9%	13.1%	-20.3%	3.2%	-4.2%	-0.8%

1.4b Worldwide Turboprop Airplane Shipments by Manufacturer (1999–2011)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Air Tractor*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	130	168
AT-402A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	1
AT-402B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9	21
AT-502A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	1
AT-502B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	57	81
AT-504	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4	6
AT-602	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10	10
AT-802	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	26	18
AT-802A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21	30
Cessna Aircraft Company	87	92	75	80	57	64	86	67	79	101	97	95	93	107
C208 Caravan 675	20	16	19	14	8	13	11	8	11	12	12	8	10	11
C208B Grand Caravan	67	76	56	66	49	51	75	59	68	89	85	87	83	96
Extra Aircraft*	0	0	0	0	0	0	0	0	0	0	0	0	0	2
EA500	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Hawker Beechcraft Corporation	177	205	130	82	81	102	114	140	157	172	119	90	92	85
Beechcraft King Air C90	41	46	41	21	18	27	35	52	46	66	44	28	29	25
Beechcraft King Air B200 / B250	55	59	46	26	38	39	37	42	58	54	37	24	25	22
Beechcraft King Air 350	45	46	32	24	24	36	42	46	53	52	38	38	38	38
Beechcraft 1900D	36	54	11	11	1	-	-	-	-	-	-	-	-	-
Maule Air Incorporated	1	0	3	0	1	2	0	0	0	1	0	0	0	0
M-7-420AC	0	0	0	0	0	0	0	0	0	1	0	0	0	0
MT-7-420	1	0	3	0	1	2	0	0	0	0	0	0	0	0
Pacific Aerospace Corporation	0	0	1	0	2	8	10	5	10	15	12	11	10	10
PAC 750XL	-	-	1	0	2	8	10	5	10	15	12	11	10	10
Piaggio	0	6	12	14	12	16	14	19	21	30	24	11	14	5
P.180 Avanti	n/a	6	12	14	12	16	13	-	-	-	-	-	-	-
P.180 Avanti II	-	-	-	-	-	-	1	19	21	30	24	11	14	5
Pilatus	55	69	70	45	61	70	80	90	98	100	105	84	69	67
PC-6 Porter	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6	3	5	5	6	5
PC-12	55	69	70	45	61	70	80	90	92	97	100	79	63	62
Piper Aircraft, Inc.	0	18	98	25	24	26	40	49	53	52	29	25	32	32
PA-46-500 TP Meridian	-	18	98	25	24	26	40	49	53	52	29	25	32	32
Quest Aircraft Company	0	0	0	0	0	0	0	0	1	7	24	14	13	15
Kodiak 100	-	-	-	-	-	-	-	-	1	7	24	14	13	15
SOCATA	20	25	33	34	34	31	31	42	46	60	36	38	38	38
TBM 700	20	25	33	34	34	31	31	-	-	-	-	-	-	-
TBM 850	-	-	-	-	-	-	-	42	46	60	36	38	38	38
Thrush Aircraft, Inc.*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	35	51
S2R-T34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	30	39
S2RHG-T65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	0
S2R-T660	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	0
S2R-G10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	3
S2R-H80	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	9
Total Number of Airplanes	340	415	422	280	272	319	375	412	465	538	446	368	526	580
% Change	1.2%	22.1%	1.7%	-33.6%	-2.9%	17.3%	17.6%	9.9%	12.9%	15.7%	-17.1%	-17.5%	n/a	10.3%
Total Billings for Airplanes (\$M)	930	1,323	1,210	868	837	997	1,189	1,389	1,593	1,953	1,589	1,300	1,365	1,340
% Change	-8.0%	42.2%	-8.5%	-28.3%	-3.5%	19.1%	19.3%	16.9%	14.6%	22.7%	-18.7%	-18.2%	n/a	-1.9%

The table includes the addition of agricultural airplane deliveries from Air Tractor and Thrush Aircraft for 2011 and 2012. Extra Aircraft was added to the 2012 report and identifies a new production model.

1.4c Worldwide Piston Engine Airplane Shipments by Manufacturer (1999–2012) (CONTINUED ON NEXT PAGE)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Adam Aircraft	0	0	0	0	0	0	2	4	3	0	0	0	0	0
A500	-	-	-	-	-	-	2	4	3	-	-	-	-	-
Alpha Aviation	0	0	0	0	0	0	0	5	13	1	0	0	0	0
120T	-	-	-	-	-	-	-	-	2	-	-	-	-	-
160A	-	-	-	-	-	-	-	5	9	1	-	-	-	-
160Ai	-	-	-	-	-	-	-	-	2	0	-	-	-	-
American Champion	91	96	56	53	63	94	89	60	70	54	26	37	29	18
7EC Champ	-	-	-	-	-	-	-	1	21	7	1	0	3	0
7ECA Aurora	9	3	2	3	2	2	3	2	4	3	2	2	1	0
7GCAA Adventurer	19	23	8	12	9	12	12	6	6	2	1	2	0	0
7GCBC Citabria Explorer	31	22	21	13	12	24	26	16	8	8	4	4	6	3
8GCBC Scout	5	23	6	11	8	18	9	14	8	10	8	15	13	7
8KCAB Super Decathlon	27	25	19	14	32	38	39	21	23	24	10	14	6	8
Aviat Aircraft	83	91	57	38	47	42	47	0	0	0	0	0	0	0
A-1A Husky	23	4	-	-	-	-	-	-	-	-	-	-	-	-
A-1B Husky	44	76	50	34	37	30	41	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Husky P u p	-	-	-	-	3	3	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
S-2C Pitts	16	11	7	4	7	9	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bellanca	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Super Viking 17-30A	1	1	1	-	-	-	-	-	-	-	-	-	-	-
Britten-Norman	1	2	0	0	0	0	0	0	0	0	0	0	0	0
BN-2B Islander	1	2	-	-	-	-	-	-	-	-	-	-	-	-
Cessna Aircraft Company	899	912	821	559	588	654	822	865	807	733	355	261	413	283
Cessna 162 SkyCatcher	-	-	-	-	-	-	-	-	-	-	1	22	168	19
Cessna 172R Skyhawk	180	150	107	57	58	32	37	87	133	55	16	8	26	27
Cessna 172S Skyhawk	272	340	341	258	291	204	314	322	240	228	110	77	77	113
Cessna 182T Skylane	248	267	142	109	118	196	241	140	161	109	58	64	40	48
Cessna T182T Turbo Skylane	-	-	96	79	47	133	118	187	140	105	75	36	37	19
Cessna 206H Stationair	79	53	41	18	16	22	29	25	20	17	3	4	11	16
Cessna T206H Turbo Stationair	120	102	94	38	58	67	83	104	111	95	46	42	53	40
Cessna 350 Corvalis	-	-	-	-	-	-	-	-	1	14	5	1	0	1
Cessna 400 Corvalis TT	-	-	-	-	-	-	-	-	1	110	41	7	1	0
Columbia Aircraft (prev. Lancair)	0	5	27	24	51	78	114	185	152	0	0	0	0	0
Columbia 300	-	5	27	24	19	-	-	-	-	-	-	-	-	-
Columbia 350	-	-	-	-	32	28	25	39	34	-	-	-	-	-
Columbia 400	-	-	-	-	-	50	89	146	118	-	-	-	-	-
Cirrus Design Corporation	9	95	183	397	469	553	600	721	710	549	266	264	255	253
Cirrus SR-20	9	95	59	105	112	91	116	150	112	115	28	42	48	84
Cirrus SR-22	-	-	124	292	355	459	475	565	588	427	238	165	105	81
Cirrus SR-22T	-	-	-	-	-	-	-	-	-	-	-	57	102	88
Cirrus SR-V	-	-	-	-	2	3	9	6	10	7	-	-	-	-
Commander Aircraft	13	20	11	7	0	0	0	0	0	0	0	0	0	0
Commander 114B	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Commander 114TC	5	1	-	-	-	-	-	-	-	-	-	-	-	-
Commander 115	-	11	5	1	-	-	-	-	-	-	-	-	-	-
Commander 115TC	-	8	6	6	-	-	-	-	-	-	-	-	-	-
CubCrafters	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	47	58
CC11 Sport Cub S2	-	-	-	-	-	-	-	-	-	-	-	-	2	0
CC11 Carbon Cub SS	-	-	-	-	-	-	-	-	-	-	-	-	38	57
CC18 Top Cub	-	-	-	-	-	-	-	-	-	-	-	-	7	1
Diamond Aircraft	0	0	0	155	228	261	329	438	471	308	163	130	185	156
HK -36	-	-	-	-	-	-	-	-	-	-	13	10	3	3
DA-20	n/a	n/a	n/a	70	75	58	54	55	58	69	14	31	40	32
DA-40	-	-	n/a	85	153	203	207	220	232	154	98	57	72	93
DA-42	-	-	-	-	-	-	68	163	181	85	38	32	70	28
Embraer	17	17	1	0	0	0	0	0	0	0	0	0	0	0
EMB-201A Ipanema	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMB-202 Ipanema	12	15	1	-	-	-	-	-	-	-	-	-	-	-
EMB-720 Minuano	2	-	-	-	-	-	-	-	-	-	-	-	-	-
EMB-810 Seneca II	3	2	-	-	-	-	-	-	-	-	-	-	-	-
Extra Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19
E A 300	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19
Flight Design GmbH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	89	76
ASTM CT Series	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	89	76
GippsAero Pty Ltd.	0	0	0	0	19	20	22	20	17	19	11	14	10	14
GA-8 Airvan	-	-	-	-	19	20	22	20	17	19	11	14	10	14

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1.4c Worldwide Piston Engine Airplane Shipments by Manufacturer (1999–2012) (CONTINUED FROM PREVIOUS PAGE)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hawker Beechcraft Corporation	144	153	136	83	82	93	99	118	111	103	56	51	54	36
Beechcraft Bonanza A/G36	77	85	63	51	55	62	71	80	73	63	36	22	24	12
Beechcraft Bonanza B36TC	20	18	26	5	-	-	-	-	-	-	-	-	-	-
Beechcraft Baron B/G58	47	50	47	27	27	31	28	38	38	40	20	29	30	24
Liberty Aerospace	0	0	0	0	0	0	2	29	38	33	13	14	3	0
XL2	-	-	-	-	-	-	2	29	38	33	13	14	3	0
Maule Air Incorporated	68	57	54	46	31	25	27	38	36	27	7	4	4	9
M-4-180A, V	-	-	-	-	-	-	1	7	5	-	-	-	-	-
M-6-235	-	1	-	-	-	-	-	-	-	-	-	-	-	-
M-7-235, A, B, C	24	24	19	21	12	8	11	8	6	7	1	3	-	1
M-7-260, C	16	10	11	3	4	3	4	2	4	4	4	-	1	3
MT-7-235	4	5	16	12	7	1	2	9	2	6	2	-	-	1
MT-7-260	2	1	4	1	-	-	2	4	-	-	-	-	-	-
MX-7-160, C	1	-	-	-	-	-	-	-	-	-	-	-	-	-
MX-7-180, A, B, C, AC	3	3	1	4	6	5	3	4	6	4	-	1	1	1
MXT-7-160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MXT-7-180, A, AC	18	13	3	5	2	8	4	4	12	6	-	-	2	3
M-8-235	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Micco	0	6	10	0	0	0	0	0	0	0	0	0	0	0
SP-20	-	5	-	-	-	-	-	-	-	-	-	-	-	-
SP-26	-	1	10	-	-	-	-	-	-	-	-	-	-	-
Mooney	97	100	29	10	36	37	85	75	79	65	19	2	0	0
M20M Bravo	25	26	8	-	5	9	20	5	1	-	-	-	-	-
M20R Ovation	24	-	-	-	-	-	-	-	-	-	-	-	-	-
M20R Ovation 2	10	55	16	8	30	28	65	63	20	21	4	0	0	0
M20S Eagle	38	-	-	-	-	-	-	-	-	-	-	-	-	-
M20S Eagle 2	-	19	5	2	1	-	-	-	-	-	-	-	-	-
M20TN Acclaim	-	-	-	-	-	-	-	7	58	44	15	2	0	0
Piper Aircraft, Inc.	341	377	343	265	205	163	193	189	168	216	61	135	104	126
PA-28-161 Warrior III	20	43	32	29	31	18	37	19	27	23	8	23	15	20
PA-28-181 Archer III	107	102	88	38	49	19	16	29	16	7	1	21	2	4
PA-28R-201 Arrow IV	6	18	23	26	16	12	9	5	8	1	0	4	0	2
PA-32-301FT Piper 6X	-	-	-	-	10	24	18	10	12	0	-	-	-	-
PA-32-301XTC Piper 6XT	-	-	-	-	11	14	16	11	-	-	-	-	-	-
PA-32R-301 Saratoga II HP	28	28	22	5	9	9	8	10	-	-	-	-	-	-
PA-32-301T Saratoga II TC	52	70	68	45	28	31	37	37	39	12	-	-	-	-
PA-34-220T Seneca V	57	42	38	43	28	10	12	26	22	27	7	22	21	17
PA-44-180 Seminole	8	11	62	60	16	11	29	11	14	24	5	16	16	22
PA-46-350P Malibu Mirage	63	63	10	19	7	15	11	31	30	21	7	26	33	49
PA-46R-350T Matrix	-	-	-	-	-	-	-	-	-	101	33	23	17	12
Quartz Mountain Aerospace	0	0	0	0	0	0	0	0	0	11	0	0	0	0
QMA 11E	-	-	-	-	-	-	-	-	-	11	-	-	-	-
Symphony Aircraft (prev. OMF)	0	0	0	0	19	1	10	5	0	0	0	0	0	0
Symphony 160	-	-	-	-	19	1	10	5	-	-	-	-	-	-
Pacific Aerospace Corporation	0	0	0	0	0	6	0	0	0	0	0	0	0	0
CT/4E Airtrainer	-	-	-	-	-	6	-	-	-	-	-	-	-	-
SOCATA	37	48	63	70	40	5	9	0	0	0	0	0	0	0
TB-9 Tampico	0	2	2	3	2	0	1	-	-	-	-	-	-	-
TB-10	2	5	8	7	7	3	4	-	-	-	-	-	-	-
TB-20	31	26	33	44	19	0	1	-	-	-	-	-	-	-
TB-21	4	8	12	14	9	2	3	-	-	-	-	-	-	-
TB-200	0	7	8	2	3	0	0	-	-	-	-	-	-	-
Tiger Aircraft	0	0	0	14	18	19	15	3	0	0	0	0	0	0
AG-5B Tiger	-	-	-	14	18	19	15	3	-	-	-	-	-	-
WACO Classic Aircraft	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	6
YMF-5D	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5	6
Total Number of Airplanes	1,801	1,980	1,792	1,721	1,896	2,051	2,465	2,755	2,675	2,119	977	912	1,198	1,054
% Change	12.1%	9.9%	-9.5%	-4.0%	10.2%	8.2%	20.2%	11.8%	-2.9%	-20.8%	-53.9%	-6.7%	n/a	-12.0%
Total Billings for Airplanes	440	512	541	483	545	692	805	857	897	945	442	415	441	428
% Change	16.6%	16.5%	5.5%	-10.7%	12.9%	27.0%	16.3%	6.5%	4.7%	5.3%	-53.1%	-7.7%	n/a	-3.0%

Table 1.4c lists all airplane models manufactured by the companies listed including those historically identified by GAMA (and type certified to Part/CS-23 airworthiness standards) as well as those type certified under CS-Very Light Aircraft and CS-Light Sport Aircraft and those subject to the Special Light Sport Aircraft standard.

Source: GAMA





1.5 U.S. Manufactured General Aviation Airplanes by Units Shipped, Number of Companies Reporting and Billings (1946–2012)

Year	Units Shipped	Companies Reporting	Factory Net Billings (\$Millions)
1946	35,000	-	\$111
1947	15,594	15	\$58
1948	7,037	12	\$32
1949	3,405	11	\$18
1950	3,386	13	\$19
1951	2,302	12	\$17
1952	3,058	8	\$27
1953	3,788	7	\$34
1954	3,071	7	\$43
1955	4,434	7	\$68
1956	6,738	8	\$104
1957	6,118	9	\$100
1958	6,414	10	\$102
1959	7,689	9	\$130
1960	7,588	8	\$151
1961	6,778	8	\$124
1962	6,697	7	\$137
1963	7,569	7	\$153
1964	9,336	8	\$199
1965	11,852	8	\$318
1966	15,768	10	\$445
1967	13,577	14	\$360
1968	13,698	14	\$426
1969	12,457	14	\$585
1970	7,292	13	\$337
1971	7,466	11	\$322
1972	9,774	12	\$558
1973	13,646	12	\$828
1974	14,166	12	\$909
1975	14,056	12	\$1,033
1976	15,451	12	\$1,226
1977	16,904	12	\$1,488
1978	17,811	12	\$1,781
1979	17,048	12	\$2,165
1980	11,877	12	\$2,486
1981	9,457	12	\$2,920
1982	4,266	11	\$2,000
1983	2,691	10	\$1,470
1984	2,431	9	\$1,681
1985	2,029	9	\$1,431
1986	1,495	9	\$1,262
1987	1,085	9	\$1,364
1988	1,212	11	\$1,923
1989	1,535	11	\$1,804
1990	1,144	14	\$2,008
1991	1,021	14	\$1,968
1992	941	16	\$1,840
1993	964	16	\$2,144
1994	928	13	\$2,357
1995	1,077	13	\$2,842
1996	1,115	13	\$3,048
1997	1,549	12	\$4,593
1998	2,200	12	\$5,761
1999	2,504	13	\$7,843
2000	2,816	15	\$8,558
2001	2,634	14	\$8,641
2002	2,207	12	\$7,719
2003	2,137	13	\$6,434
2004	2,355	13	\$6,816
2005	2,857	13	\$8,667
2006	3,147	16	\$10,367
2007	3,279	16	\$11,941
2008	3,079	15	\$13,348
2009	1,585	13	\$9,082
2010	1,334	12	\$7,875
2011	1,465	16	\$8,266
2012	1,514	16	\$8,017

Source: GAMA

1.6 U.S. Manufactured General Aviation Airplane Shipments by Type (1959–2012)

Year	Grand Total	Single-Engine	Multi-Engine	Total Piston	Turboprop	Business Jet	Total Turbine
1959	7,689	6,849	840	7,689	-	-	-
1960	7,588	6,569	1,019	7,588	-	-	-
1961	6,756	5,995	761	6,756	-	-	-
1962	6,697	5,690	1,007	6,697	-	-	-
1963	7,569	6,248	1,321	7,569	-	-	-
1964	9,336	7,718	1,606	9,324	9	3	12
1965	11,852	9,873	1,780	11,653	87	112	199
1966	15,768	13,250	2,192	15,442	165	161	326
1967	13,577	11,557	1,773	13,330	149	98	247
1968	13,698	11,398	1,959	13,357	248	93	341
1969	12,457	10,054	2,078	12,132	214	111	325
1970	7,292	5,942	1,159	7,101	135	56	191
1971	7,466	6,287	1,043	7,330	89	47	136
1972	9,774	7,898	1,548	9,446	179	149	328
1973	13,646	10,780	2,413	13,193	247	206	453
1974	14,166	11,562	2,135	13,697	250	219	469
1975	14,056	11,439	2,116	13,555	305	196	501
1976	15,449	12,783	2,120	14,903	359	187	546
1977	16,907	14,057	2,195	16,252	428	227	655
1978	17,811	14,398	2,634	17,032	548	231	779
1979	17,050	13,286	2,843	16,129	639	282	921
1980	11,860	8,640	2,116	10,756	778	326	1,104
1981	9,457	6,608	1,542	8,150	918	389	1,307
1982	4,266	2,871	678	3,549	458	259	717
1983	2,691	1,811	417	2,228	321	142	463
1984	2,431	1,620	371	1,991	271	169	440
1985	2,029	1,370	193	1,563	321	145	466
1986	1,495	985	138	1,123	250	122	372
1987	1,085	613	87	700	263	122	385
1988	1,143	628	67	695	291	157	448
1989	1,535	1,023	87	1,110	268	157	425
1990	1,144	608	87	695	281	168	449
1991	1,021	564	49	613	222	186	408
1992	941	552	41	593	177	171	348
1993	964	516	39	555	211	198	409
1994	929	444	55	499	208	222	430
1995	1,077	515	61	576	255	246	501
1996	1,171	607	42	649	289	233	522
1997	1,562	898	86	984	236	342	578
1998	2,212	1,434	94	1,528	271	413	684
1999	2,530	1,634	114	1,748	265	517	782
2000	2,816	1,810	103	1,913	315	588	903
2001	2,631	1,581	147	1,728	303	600	903
2002	2,207	1,366	130	1,496	187	524	711
2003	2,137	1,519	71	1,590	163	384	547
2004	2,355	1,706	52	1,758	194	403	597
2005	2,857	2,024	71	2,095	240	522	762
2006	3,147	2,208	79	2,287	256	604	860
2007	3,279	2,097	77	2,174	290	815	1,105
2008	3,079	1,700	91	1,791	333	955	1,288
2009	1,585	770	32	802	269	514	783
2010	1,334	679	67	746	224	364	588
2011	1,465	639	67	706	395	364	759
2012	1,514	645	63	708	459	347	806

The 2011 and 2012 data includes the additional of agricultural airplanes manufacturers for piston and turboprop deliveries. The data cannot be directly compared to 2010 and earlier entries. Refer to Table 1.4b and 1.4c for make and model detail.

Source: GAMA

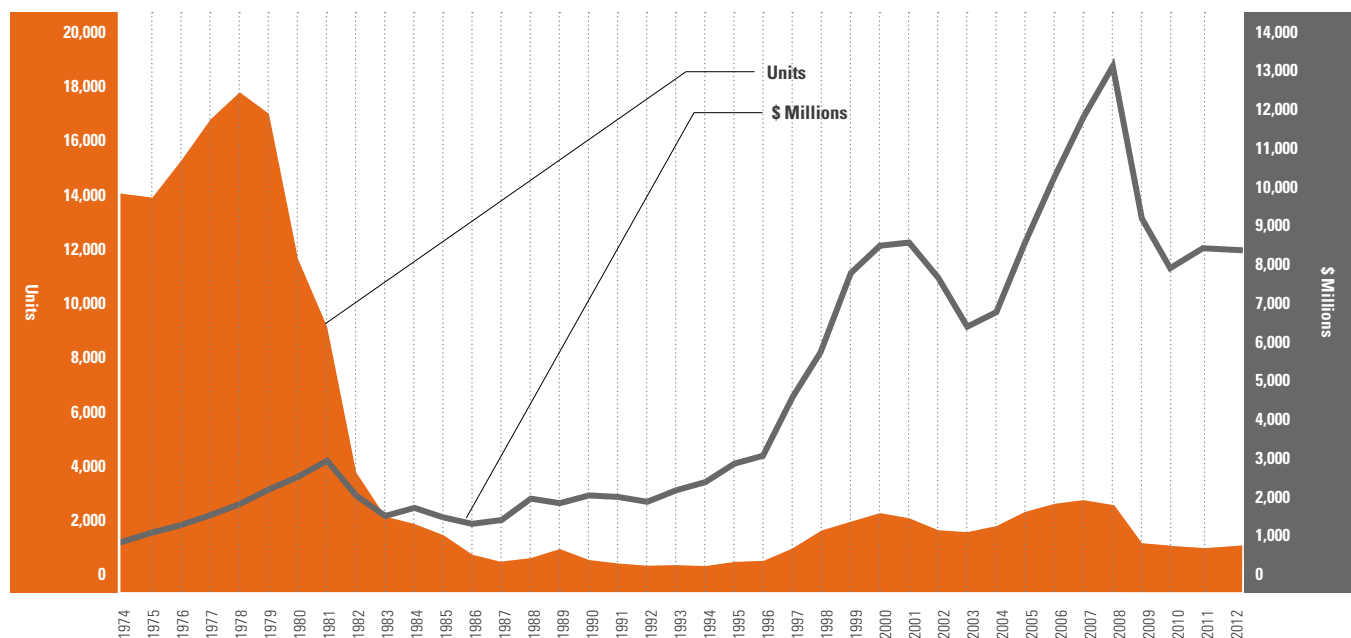
1.7 U.S. Manufactured General Aviation Airplane Billings by Type (1978–2012)

Year	Grand Total	Single-Engine	Multi-Engine	Total Piston	Turboprop	Business Jet	Total Turbine
1978	1,781	516	493	1,009	394	378	772
1979	2,165	523	555	1,078	548	540	1,088
1980	2,486	391	403	794	875	816	1,691
1981	2,920	327	348	675	1,120	1,125	2,245
1982	2,000	200	220	420	590	990	1,580
1983	1,470	145	115	260	460	750	1,210
1984	1,681	147	133	280	436	966	1,402
1985	1,431	126	68	194	524	713	1,237
1986	1,262	80	43	123	430	709	1,139
1987	1,364	80	18	98	477	789	1,266
1988	1,918	66	12	78	596	1,242	1,838
1989	1,804	104	24	128	524	1,149	1,673
1990	2,008	68	24	92	644	1,272	1,916
1991	1,968	*	*	93	527	1,348	1,875
1992	1,840	*	*	96	460	1,284	1,744
1993	2,144	*	*	76	595	1,473	2,068
1994	2,357	*	*	81	595	1,681	2,276
1995	2,842	*	*	123	653	2,066	2,719
1996	3,048	*	*	142	715	2,191	2,906
1997	4,580	*	*	200	727	3,653	4,380
1998	5,761	*	*	330	763	4,668	5,431
1999	7,843	*	*	385	658	6,800	7,458
2000	8,558	*	*	446	934	7,178	8,112
2001	8,641	*	*	471	742	7,428	8,170
2002	7,719	*	*	389	487	6,843	7,330
2003	6,434	*	*	440	411	5,583	5,994
2004	6,816	*	*	568	555	5,693	6,248
2005	8,667	*	*	712	749	7,205	7,954
2006	10,367	*	*	722	853	8,792	9,645
2007	11,941	*	*	712	1,001	10,227	11,228
2008	13,348	*	*	836	1,172	11,340	12,513
2009	9,082	*	*	389	872	7,821	8,693
2010	7,875	*	*	368	724	6,782	7,506
2011	8,266	*	*	368	831	7,068	7,898
2012	8,017	*	*	374	867	6,776	7,643

The 2011 and 2012 data includes the additional of agricultural airplanes manufacturers for piston and turboprop deliveries.
The data cannot be directly compared to 2010 and earlier entries. Refer to Table 1.4b and 1.4c for make and model detail.

Source: GAMA

FIGURE 1.2 U.S. Manufactured General Aviation Airplane Units and Billings (1974–2012)





1.8 U.S. Civil Airplane Imports (2005–2011) Units and Dollar Value (in Millions)

	2005		2006		2007		2008		2009		2010		2011	
	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars
Single-Engine	313	\$255.5	394	\$334.4	388	\$304.7	376	\$456.0	200	\$310.6	212	\$272.6	171	\$273.0
Multi-Engine Under 4,400 lbs	0	\$-	37	\$17.5	81	\$37.7	37	\$17.2	11	\$6.0	4	\$2.8	3	\$1.8
Multi-Engine 4,400-10,000 lbs	13	\$57.2	19	\$87.8	20	\$105.4	20	\$104.1	71	\$263.7	50	\$160.7	32	\$138.6
Multi-Engine–Turbojet/Turbofan 10,000-33,000 lbs.	184	\$3,367.0	189	\$3,496.0	219	\$3,998.3	188	\$3,489.2	82	\$1,684.3	86	\$1,657.4	115	\$2,084.3
Multi-Engine–Other (Including Turbohaft) 10,000-33,000 lbs.	2	\$6.2	6	\$50.7	4	\$69.5	-	-	3	\$72.8	5	\$97.1	7	\$169.4
Total	512	\$3,679.8	645	\$3,986.3	712	\$4,515.7	621	\$4,066.4	367	\$2,337.4	357	\$2,190.8	328	\$2,667.0

Note: Department of Commerce data includes regional jets and regional turboprop airplanes in the 10,000–33,000 lbs category.

Source: Aerospace Industries Association from
Department of Commerce Data

1.9 U.S. Manufactured General Aviation Airplane Exports (1978–2012)

Year	Units Exported	% of Total Production	Export Billings \$ (in Millions)	% of Total Billings
1978	3,612	20.3%	\$486.7	27.3%
1979	3,995	23.4%	\$600.9	27.8%
1980	3,555	29.9%	\$756.4	30.4%
1981	2,270	24.0%	\$749.0	25.7%
1982	1,162	27.2%	\$650.2	32.5%
1983	513	19.1%	\$316.5	21.5%
1984	334	13.7%	\$260.7	15.5%
1985	354	17.4%	\$230.0	16.1%
1986	441	29.5%	\$343.6	27.2%
1987	439	40.5%	\$469.3	34.4%
1988	425	37.2%	\$626.8	32.7%
1989	566	36.9%	\$587.0	32.5%
1990	458	40.0%	\$872.2	43.4%
1991	382	37.4%	\$807.0	41.0%
1992	353	39.0%	\$608.7	33.0%
1993	349	36.2%	\$856.8	40.0%
1994	277	29.8%	\$684.2	29.0%
1995	315	29.3%	\$815.9	28.7%
1996	345	30.5%	\$903.0	28.9%
1997	449	28.6%	\$1,504.6	32.2%
1998	535	24.1%	\$1,640.1	27.9%
1999	562	22.3%	\$2,503.8	31.6%
2000	569	20.2%	\$1,957.5	22.9%
2001	505	19.2%	\$2,380.6	27.5%
2002	372	16.8%	\$1,980.9	25.4%
2003	336	15.7%	\$1,218.2	18.9%
2004	333	14.1%	\$1,419.6	20.8%
2005	557	19.5%	\$2,585.9	29.8%
2006	891	28.3%	\$4,395.5	42.4%
2007	1,142	34.8%	\$4,587.0	38.4%
2008	1,161	37.7%	\$5,863.8	43.9%
2009	732	46.2%	\$4,612.7	50.8%
2010	689	51.6%	\$4,867.8	61.8%
2011	486	36.3%	\$4,585.8	55.5%
2012	720	47.7%	\$4,791.1	59.8%

Source: GAMA

1.10 U.S. Manufactured General Aviation Airplane Exports by Type (1978–2012)

Year	Single-Engine Piston	Multi-Engine Piston	Turboprop	Business Jet
1978	2,712	652	166	82
1979	2,942	774	181	98
1980	2,565	635	245	110
1981	1,546	363	259	102
1982	718	227	135	82
1983	298	119	66	30
1984	199	79	25	31
1985	208	69	49	28
1986	272	69	68	32
1987	252	60	78	49
1988	220	52	91	62
1989	385	46	78	57
1990	224	57	86	91
1991	204	25	74	79
1992	196	16	90	51
1993	149	23	109	68
1994	84	42	84	67
1995	130	30	85	70
1996	126	24	135	60
1997	199	25	126	99
1998	268	30	131	106
1999	237	23	42	158
2000	285	24	112	148
2001	175	42	118	170
2002	135	23	79	136
2003	168	22	52	94
2004	181	9	55	88
2005	301	18	66	172
2006	535	30	74	252
2007	665	33	131	313
2008	556	40	175	410
2009	341	15	121	255
2010	299	45	151	194
2011	249	50	121	112
2012	263	40	243	174

Source: GAMA





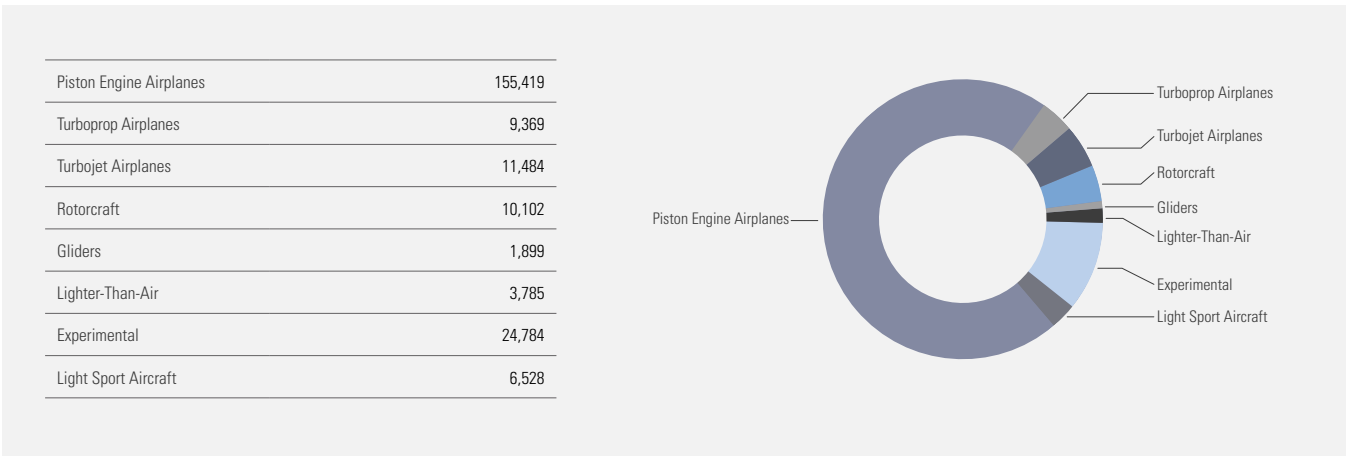
General Aviation Fleet and Flight Activity

2.1 Active U.S. General Aviation and On-Demand FAR Part 135 Number of Aircraft by Primary Use by Aircraft Type (2010)

		General Aviation FAR Part 91 Use												On-Demand FAR Part 135 Use		
Aircraft Type	Total Active	Personal	Business	Corporate	Instruc-tional	Aerial Apps	Aerial Obs	Aerial Other	External Load	Other Work	Sight See	Aero Med	Other	Air Taxi	Air Tours	Air Med
Total All Aircraft	223,370	150,854	21,666	10,405	15,404	3,313	5,929	659	223	806	1,457	232	4,311	6,547	466	1,099
% Std. Error	1.5	2.2	1.8	1.0	1.8	1.3	1.3	1.0	0.9	1.3	1.7	1.0	1.2	0.7	0.7	0.7
Piston Total	155,419	114,059	17,572	1,300	12,508	1,439	3,017	165	-	427	308	73	2,129	2,295	73	53
One Engine	139,519	106,125	13,630	407	11,611	1,397	2,593	43	-	403	291	22	1,683	1,244	67	3
Two Engine	15,900	7,934	3,942	893	897	43	423	122	-	24	17	51	447	1,051	6	49
Turboprop Total	9,369	1,771	1,716	1,980	124	1,266	582	123	-	178	3	29	195	1,188	39	175
One Engine Total	4,214	970	795	350	58	1,251	38	25	-	70	-	4	81	512	29	30
Two Engine Total	5,155	801	920	1,630	66	15	544	97	-	108	3	25	115	677	10	144
Turbojet Total	11,484	1,185	1,189	6,400	53	3	15	5	-	13	-	19	879	1,555	-	168
Rotorcraft Total	10,102	1,520	486	565	1,324	519	2,124	361	223	73	181	89	216	1,431	313	677
Piston Total	3,588	1,193	314	16	1,215	195	327	41	9	15	117	4	57	56	31	-
Turbine Total	6,514	327	173	550	109	325	1,798	319	213	58	65	85	159	1,375	282	677
- One Engine Turbine	5,012	302	146	186	89	322	1,690	266	143	55	65	24	92	1,040	270	322
- Two Engine Turbine	1,502	25	27	364	20	3	108	53	71	2	-	60	67	335	11	355
Gliders	1,899	1,621	-	-	211	-	3	-	-	-	30	-	34	-	-	-
Lighter-Than-Air	3,785	2,914	73	-	118	-	-	-	-	78	520	-	43	-	39	-
Experimental Total	24,784	22,047	575	160	445	85	164	5	-	30	415	22	731	77	3	26
Amateur Built	21,270	19,604	411	3	388	-	111	-	-	5	400	-	349	-	-	-
Exhibition	2,029	1,716	40	-	32	4	7	-	-	9	12	-	207	-	-	-
Other	1,485	726	125	157	25	80	46	5	-	16	2	22	175	77	3	26
Light Sport Total	6,528	5,738	55	-	621	-	24	-	-	7	-	-	83	-	-	-
Exp. Light Sport	4,878	4,464	7	-	368	-	17	-	-	7	-	-	16	-	-	-
Special Light Sport	1,650	1,274	49	-	253	-	7	-	-	-	-	-	67	-	-	-

Source: FAA Survey

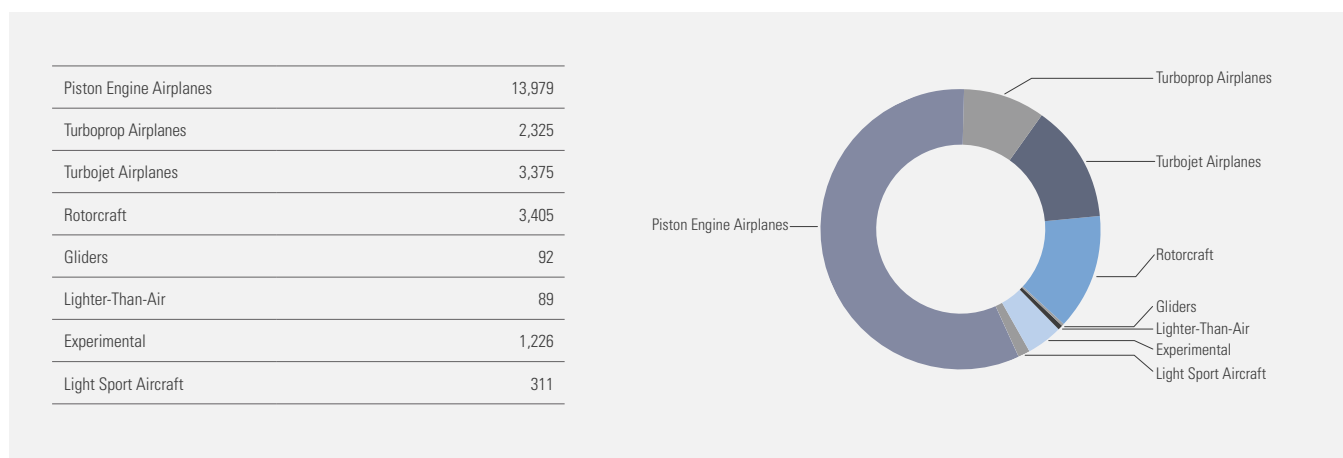
FIGURE 2.1 Active U.S. General Aviation and On-Demand FAR Part 135 Aircraft by Type (2010)



2.2 Active U.S. General Aviation and On-Demand FAR Part 135 Total Hours Flown (in Thousands) by Use by Aircraft Type (2010)

Aircraft Type	Total Active	General Aviation FAR Part 91 Use												On-Demand FAR Part 135 Use		
		Personal	Business	Corporate	Instruc-tional	Aerial Apps	Aerial Obs	Aerial Other	External Load	Other Work	Sight See	Aero Med	Other	Air Taxi	Air Tours	Air Med
Total All Aircraft	24,802	8,006	2,387	2,696	3,885	1,070	1,667	328	144	259	173	187	886	2,201	297	615
% Std. Error	1.1	1.3	2.6	3.7	3.4	6.6	5.3	16.5	22.2	15.3	10.2	9.9	4.3	4.5	16.4	9.8
Piston Total	13,979	6,248	1,804	251	3,135	398	831	103	0	147	47	113	276	576	24	27
One Engine	12,161	5,760	1,447	73	2,868	383	716	92	0	114	45	105	222	307	22	7
Two Engine	1,818	487	357	178	267	15	115	11	0	33	2	9	54	269	2	19
Turboprop Total	2,325	201	249	429	56	506	114	128	0	65	1	15	77	381	14	89
One Engine Total	1,086	102	111	81	13	475	12	6	0	14	0	7	35	197	12	20
Two Engine Total	1,238	99	138	348	43	30	102	122	-	51	1	8	42	183	2	69
Turbojet Total	3,375	223	214	1,836	16	0	3	0	0	8	0	8	349	649	1	68
Rotorcraft Total	3,405	125	62	133	529	133	676	94	143	30	60	42	122	575	255	426
Piston Total	794	89	37	2	443	31	96	4	2	2	39	0	25	13	12	-
Turbine Total	2,611	36	25	131	86	102	580	90	141	28	21	41	98	563	244	426
- One Engine Turbine	2,011	33	20	57	69	101	541	67	106	25	21	22	53	424	236	237
- Two Engine Turbine	600	4	5	74	17	1	39	24	35	4	0	19	45	138	7	189
Gliders Total	92	66	-	-	19	-	0	-	-	-	4	-	3	-	-	-
Lighter-Than-Air Total	89	53	2	0	3	-	0	-	-	2	27	-	1	-	1	-
Experimental Total	1,226	854	52	46	71	32	40	2	0	6	34	9	51	21	1	7
Amateur Built	911	746	38	0	63	2	9	2	0	3	32	0	17	-	-	-
Exhibition	98	68	2	-	2	1	13	-	-	1	1	-	9	-	-	-
Other	217	41	12	46	6	29	18	0	0	2	0	9	25	21	1	7
Light Sport Total	311	238	4	-	57	0	3	0	-	1	1	-	7	-	-	-
Exp. Light Sport	173	159	0	-	8	0	2	0	-	1	1	-	1	-	-	-
Special Light Sport	138	79	4	-	49	-	1	-	-	-	0	-	6	-	-	-

Source: FAA Survey

FIGURE 2.2 Active U.S. General Aviation and On-Demand FAR Part 135 Total Hours Flown (in Thousands) by Aircraft Type (2010)

2.3 Active U.S. General Aviation and On-Demand FAR Part 135 Aircraft by Type (1980–2010)

Calendar Year	Total Aircraft	Airplane			Rotorcraft		Balloons, Dirigibles, Gliders	Experimental	Light Sport Aircraft		
		Piston	Turboprop	Turbojet	Piston	Turbine			Total	Experimental	Special ¹
1980	211,039	193,012	4,089	2,992	2,794	3,207	4,945	-	-	-	-
1981	213,219	193,367	4,659	3,170	3,250	3,724	5,049	-	-	-	-
1982	209,778	189,195	5,186	3,996	2,419	3,749	5,233	-	-	-	-
1983	213,292	191,479	5,453	3,898	2,541	3,998	5,923	-	-	-	-
1984	220,941	197,442	5,808	4,320	2,936	4,160	6,275	-	-	-	-
1985	210,853	188,191	5,607	4,374	2,877	3,541	6,263	-	-	-	-
1986	219,325	195,647	5,244	4,481	2,921	4,022	7,010	-	-	-	-
1987	217,202	194,454	5,274	4,358	2,813	3,520	6,783	-	-	-	-
1988	210,246	187,536	5,259	4,188	2,584	3,822	6,857	-	-	-	-
1989	219,738	193,815	6,324	4,402	3,244	4,232	7,721	-	-	-	-
1990	212,230	187,774	5,652	4,375	3,459	3,938	7,032	-	-	-	-
1991	196,874	173,518	4,941	4,126	2,390	3,848	8,051	-	-	-	-
1992	185,650	162,881	4,786	4,004	2,348	3,631	8,000	-	-	-	-
1993	177,120	149,156	4,116	3,663	1,846	2,875	5,037	10,426	-	-	-
1994	172,935	142,152	4,092	3,914	1,627	3,101	5,906	12,144	-	-	-
1995	188,089	152,788	4,995	4,559	1,863	3,967	4,741	15,176	-	-	-
1996	191,129	153,551	5,716	4,424	2,507	4,063	4,244	16,625	-	-	-
1997	192,414	156,056	5,619	5,178	2,259	4,527	4,092	14,680	-	-	-
1998	204,710	162,963	6,174	6,066	2,545	4,881	5,580	16,502	-	-	-
1999	219,464	171,923	5,679	7,120	2,564	4,884	6,765	20,528	-	-	-
2000	217,534	170,513	5,762	7,001	2,680	4,470	6,701	20,407	-	-	-
2001	211,446	163,314	6,596	7,787	2,292	4,491	6,545	20,421	-	-	-
2002R	211,244	161,087	6,841	8,355	2,351	4,297	6,377	21,936	-	-	-
2003	209,708	160,938	7,689	7,997	2,123	4,403	6,008	20,550	-	-	-
2004	219,426	165,189	8,379	9,298	2,315	5,506	5,939	22,800	-	-	-
2005	224,352	167,608	7,942	9,823	3,039	5,689	6,454	23,627	170	-	-
2006	221,942	163,743	8,063	10,379	3,264	5,895	6,278	23,047	1,273	-	-
2007	231,607	166,907	9,514	10,385	2,769	6,798	5,940	23,228	6,066	-	-
2008	228,663	163,013	8,906	11,042	3,498	6,378	5,652	23,364	6,811	-	-
2009	223,877	157,123	9,055	11,268	3,499	6,485	5,480	24,419	6,547	5,077	1,470
2010	223,370	155,419	9,369	11,484	3,588	6,514	5,684	24,784	6,528	4,878	1,650

R = Revised

Source: FAA Survey

1. The FAA started publishing data for Special Light-sport aircraft separately in 2009.

The Federal Aviation Administration’s (FAA) annual general aviation survey categorizes the uses of general aviation aircraft as follows: personal and recreational; corporate and executive (flying with a paid, professional crew); and business transportation (individual use of an airplane for business without a paid, professional crew). In addition, the following forms of business operations are included in general aviation operations: instructional (operations under the supervision of a flight instructor including solo flight); sight-seeing (commercial sight-seeing operations under FAR Part 91); and on-demand FAR Part 135 operations including air taxi (charter), air tours, and air medical operations.

2.4 Active U.S. General Aviation and On-Demand FAR Part 135 Estimated Hours Flown (in Thousands) by Type (1980–2010)

Calendar Year	Total Hours	Airplane			Rotorcraft		Balloons, Dirigibles, Gliders	Experimental	Light Sport Aircraft		
		Piston	Turboprop	Turbojet	Piston	Turbine			Total	Experimental	Special ¹
1980	41,016	34,747	2,240	1,332	736	1,603	359	-	-	-	-
1981	40,704	34,086	2,155	1,387	930	1,754	391	-	-	-	-
1982	36,457	29,950	2,168	1,611	579	1,771	379	-	-	-	-
1983	35,249	28,911	2,173	1,473	572	1,700	420	-	-	-	-
1984	36,119	29,194	2,506	1,566	592	1,903	358	-	-	-	-
1985	31,456	25,666	1,921	1,498	521	1,468	382	-	-	-	-
1986	31,782	24,805	2,661	1,527	742	1,682	364	-	-	-	-
1987	30,883	24,969	2,010	1,411	602	1,506	384	-	-	-	-
1988	31,114	24,291	2,195	1,554	533	1,974	568	-	-	-	-
1989	32,332	24,907	2,892	1,527	692	1,918	396	-	-	-	-
1990	32,096	25,832	2,319	1,396	716	1,493	341	-	-	-	-
1991	29,862	23,919	1,628	1,071	549	2,214	483	-	-	-	-
1992	26,747	21,417	1,582	1,076	423	1,842	407	-	-	-	-
1993	24,455	19,321	1,192	1,212	391	1,308	338	785	-	-	-
1994	24,092	18,823	1,142	1,238	369	1,408	388	724	-	-	-
1995	26,612	20,251	1,490	1,455	337	1,624	261	1,194	-	-	-
1996	26,909	20,091	1,768	1,543	591	1,531	227	1,158	-	-	-
1997	27,713	20,744	1,655	1,713	344	1,740	192	1,327	-	-	-
1998	28,100	20,402	1,765	2,226	430	1,912	295	1,071	-	-	-
1999	31,231	22,529	1,797	2,721	552	2,077	309	1,246	-	-	-
2000	29,960	21,493	1,986	2,648	530	1,661	362	1,280	-	-	-
2001	27,017	19,194	1,773	2,654	474	1,479	287	1,157	-	-	-
2002R	27,040	18,891	1,850	2,745	454	1,422	333	1,345	-	-	-
2003	27,329	19,013	1,922	2,704	448	1,687	263	1,292	-	-	-
2004	28,126	18,142	2,161	3,718	514	2,020	249	1,322	-	-	-
2005	26,982	16,434	2,106	3,771	617	2,439	267	1,339	9	-	-
2006	27,705	16,525	2,162	4,077	918	2,528	211	1,218	66	-	-
2007	27,852	16,257	2,661	3,938	704	2,541	215	1,275	260	-	-
2008	26,009	15,074	2,457	3,600	751	2,470	209	1,155	293	-	-
2009	23,763	13,634	2,215	3,161	755	2,248	178	1,286	286	171	115
2010	24,802	13,979	2,325	3,375	794	2,611	181	1,226	311	173	138

R = Revised

Source: FAA Survey

1. The FAA started publishing data for Special Light Sport aircraft separately in 2009.

Key changes to survey methodology by year:

2003: aircraft operating in commuter operations were excluded.

2004: the survey coverage was expanded for turbine airplanes and rotorcraft accounting for part of the increase in hours.

2007: the estimate of light sport aircraft increased significantly due to mandatory process for registration.

2.5 Active U.S. General Aviation and On-Demand FAR Part 135 Hours Flown (in Thousands) per Aircraft by Year (1998–2010)

Calendar Year	Total Aircraft	Airplane			Rotorcraft		Balloons, Dirigibles, Gliders	Experimental	Light Sport Aircraft	
		Piston	Turboprop	Turbojet	Piston	Turbine			Total	Special ¹
1998	137	125	286	367	169	392	53	65	-	-
1999	145	133	319	385	217	448	47	61	-	-
2000	142	130	353	393	198	398	56	64	-	-
2001	138	128	290	341	254	347	50	59	-	-
2002	128	117	270	329	193	331	53	61	-	-
2003	130	118	250	338	211	383	44	63	-	-
2004	128	110	258	400	222	367	42	58	-	-
2005	120	98	265	384	203	429	41	57	55	-
2006	125	101	268	393	281	429	34	53	52	-
2007	120	97	280	379	254	374	36	55	43	-
2008	114	93	276	326	215	387	37	50	43	-
2009	106	87	245	281	216	347	32	53	44	78
2010	111	90	248	294	221	401	32	50	48	84

Columns may not add due to rounding and estimation procedures

Source: FAA Survey

1. The FAA started publishing data for Special Light Sport aircraft separately in 2009.

2.6 Active General Aviation and On-Demand FAR Part 135 Aircraft by U.S. State or Territory (2001–2010)

State or Territory	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	3,012	3,423	3,249	3,712	3,495	4,477	3,719	3,549	3,145	5,095
Alaska	5,714	5,718	5,489	6,207	6,217	6,201	6,111	6,076	6,017	6,113
Arizona	6,707	5,506	5,072	6,607	5,867	6,438	7,636	5,767	6,896	7,531
Arkansas	2,730	2,807	3,286	2,621	2,467	2,382	2,575	2,291	2,661	3,028
California	22,708	24,448	23,501	23,700	25,337	23,854	23,813	25,292	24,811	22,830
Colorado	5,104	5,625	5,343	5,222	5,755	5,623	5,441	6,268	4,973	5,483
Connecticut	1,573	1,597	1,790	1,780	2,120	2,090	2,296	2,228	1,868	1,566
Delaware	1,938	1,957	2,256	2,365	2,596	2,409	2,494	1,830	2,261	1,934
District of Columbia	39	11	30	37	48	34	41	29	80	17
Florida	14,773	13,188	14,236	15,385	15,776	14,226	16,341	16,143	16,804	16,126
Georgia	5,324	6,098	4,981	5,490	5,381	5,762	4,758	6,674	5,970	5,843
Hawaii	282	356	414	331	481	619	531	530	499	741
Idaho	2,504	2,548	2,156	2,193	2,664	2,786	2,747	2,816	3,282	2,860
Illinois	6,041	5,976	5,895	6,942	6,283	5,841	6,872	5,480	6,786	6,112
Indiana	4,143	3,574	4,550	4,173	3,987	3,909	4,862	3,764	4,008	3,151
Iowa	3,156	2,742	2,899	3,035	2,943	2,798	2,982	3,361	2,935	2,629
Kansas	3,361	3,122	3,141	3,750	3,330	3,393	3,044	3,814	3,805	3,547
Kentucky	2,191	2,109	2,165	1,870	1,778	1,497	2,073	1,726	1,780	2,082
Louisiana	2,355	2,488	2,886	2,721	3,030	2,393	2,857	3,136	2,970	3,512
Maine	1,207	913	1,210	1,238	1,370	948	1,463	1,284	1,230	1,347
Maryland	2,784	2,367	3,214	2,550	3,123	2,317	2,699	2,671	2,971	2,774
Massachusetts	2,600	2,843	2,580	2,985	2,636	2,655	2,738	2,417	2,539	2,426
Michigan	6,234	7,375	5,694	6,975	6,274	6,229	6,443	8,668	6,068	6,112
Minnesota	5,928	5,229	4,241	4,861	5,728	5,414	5,086	4,840	5,187	4,690
Mississippi	1,893	1,811	2,198	2,563	2,068	2,159	1,939	1,298	2,237	2,543
Missouri	3,503	3,893	3,919	3,902	3,774	4,312	4,616	3,596	4,119	3,847
Montana	2,180	2,324	2,274	2,200	2,408	2,911	3,110	2,152	2,576	2,536
Nebraska	1,919	1,729	1,734	1,936	2,109	2,057	2,127	2,074	2,314	2,076
Nevada	2,563	2,427	2,034	3,033	2,990	3,374	3,512	3,093	2,022	2,030
New Hampshire	1,753	1,455	1,472	1,566	1,282	1,320	1,425	1,624	1,361	1,316
New Jersey	3,917	3,647	3,341	3,466	3,944	3,683	3,369	4,076	3,232	2,954
New Mexico	2,486	2,272	2,784	3,088	3,076	3,375	4,221	3,519	2,663	3,411
New York	5,570	6,180	6,205	5,959	5,437	5,829	5,661	6,074	5,577	6,457
North Carolina	5,272	5,727	5,830	5,602	6,298	6,106	5,917	5,376	6,004	5,883
North Dakota	1,434	1,224	1,322	812	1,350	1,533	1,236	1,276	1,101	1,366
Ohio	7,325	6,719	7,391	6,458	6,630	7,108	6,189	6,200	6,329	5,823
Oklahoma	3,421	3,693	3,770	4,347	3,910	4,734	4,021	4,911	4,229	4,794
Oregon	4,955	5,219	4,669	5,384	5,029	4,800	6,029	4,614	5,234	5,200
Pennsylvania	5,825	5,806	5,590	6,281	6,041	5,865	5,881	7,410	6,539	6,012
Puerto Rico	373	368	367	319	372	182	348	620	319	397
Rhode Island	232	294	384	383	523	320	243	299	234	352
South Carolina	2,152	2,422	2,505	2,271	2,690	2,236	3,214	2,845	2,425	2,634
South Dakota	971	1,331	960	1,156	1,281	1,293	1,143	1,554	1,843	1,024
Tennessee	3,610	3,912	3,909	3,906	4,148	4,156	4,286	4,438	3,820	3,993
Texas	17,564	16,915	16,889	17,999	18,338	18,415	20,235	18,117	19,416	17,595
Utah	1,653	1,805	1,316	1,923	1,936	1,856	2,057	2,583	1,859	2,298
Vermont	546	698	565	726	514	636	431	628	553	603
Virginia	4,451	4,524	4,472	4,455	4,590	4,809	4,642	5,605	3,961	5,178
Washington	6,666	6,043	6,143	6,623	7,154	7,042	7,722	7,198	6,604	7,585
West Virginia	1,071	1,196	862	888	1,208	957	1,101	1,247	1,160	1,292
Wisconsin	4,667	4,639	4,944	4,226	5,244	5,290	5,872	3,911	5,134	5,694
Wyoming	1,030	906	1,501	1,166	1,125	1,241	1,287	1,493	1,299	836
Other U.S. Territories	42	*	*	*	*	*	154	182	166	*
Grand Total	211,446	211,244	209,708	219,426	224,352	221,943	231,607	228,663	223,877	223,370

Columns may not add up due to rounding procedures

Beginning in 2007, the survey asked the state in which the aircraft was "primarily flown" rather than where the aircraft was "based."

Estimates by state and region may vary from previous years. State of registration is assigned if state primarily flown was not answered or cannot be coded.

Source: FAA Survey

2.7 Active General Aviation and On-Demand FAR Part 135 Est. Hours Flown (in Thousands) by U.S. State or Territory (2001–2010)

State or Territory	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	465	466	389	529	350	437	372	546	299	643
Alaska	717	656	605	753	815	734	783	701	688	681
Arizona	1,075	665	746	833	666	1,141	807	579	809	1,135
Arkansas	471	457	479	408	330	298	338	354	346	354
California	2,934	3,243	3,160	3,031	2,871	3,201	2,540	2,651	2,555	2,350
Colorado	632	754	644	608	702	596	663	626	525	716
Connecticut	203	211	250	506	380	401	380	445	355	201
Delaware	359	265	288	367	418	413	410	313	221	220
District of Columbia	9	1	14	10	18	14	15	88	4	4
Florida	2,256	1,880	2,183	2,043	2,137	1,662	2,198	2,382	2,047	1,839
Georgia	959	804	551	661	646	679	568	709	805	618
Hawaii	68	138	166	118	121	249	106	93	148	179
Idaho	265	314	401	207	227	324	319	234	300	204
Illinois	740	637	673	844	634	698	723	423	655	574
Indiana	484	369	544	438	346	363	358	294	412	255
Iowa	433	309	271	373	327	262	298	294	281	232
Kansas	466	413	308	580	396	421	442	397	366	344
Kentucky	274	250	308	186	192	131	186	131	137	157
Louisiana	463	510	472	482	658	651	756	777	913	862
Maine	143	116	108	106	153	101	128	112	81	86
Maryland	396	291	326	330	319	288	309	248	176	235
Massachusetts	366	341	273	315	261	275	317	310	224	244
Michigan	667	756	845	705	561	611	512	572	477	471
Minnesota	649	585	479	445	512	535	552	453	413	415
Mississippi	313	408	315	477	325	334	381	233	296	354
Missouri	474	444	447	508	381	489	376	272	412	303
Montana	459	259	240	254	258	260	349	239	188	164
Nebraska	369	199	188	220	238	308	255	201	197	183
Nevada	334	298	259	372	413	625	573	377	276	343
New Hampshire	196	230	222	183	136	139	107	150	123	148
New Jersey	543	405	452	393	420	476	315	742	331	315
New Mexico	291	317	446	352	384	334	461	276	190	246
New York	700	816	650	747	561	528	600	549	463	787
North Carolina	645	826	696	724	118	744	928	644	637	723
North Dakota	230	258	198	83	118	183	171	348	106	217
Ohio	869	780	1,084	824	999	788	741	700	608	631
Oklahoma	481	478	453	961	788	1,018	841	794	809	910
Oregon	620	753	551	716	611	558	725	431	559	784
Pennsylvania	887	681	973	754	654	620	624	851	652	662
Puerto Rico	104	39	54	86	36	57	54	78	50	154
Rhode Island	27	40	42	34	64	31	43	20	19	36
South Carolina	345	298	272	213	324	311	260	300	189	205
South Dakota	114	176	124	136	151	135	151	112	176	96
Tennessee	599	482	663	521	465	516	524	559	315	362
Texas	2,377	2,055	2,418	2,360	2,257	2,276	2,450	2,071	2,042	2,039
Utah	273	279	225	287	363	340	386	443	262	325
Vermont	40	73	65	67	48	71	39	35	35	49
Virginia	532	499	498	605	48	538	703	691	376	645
Washington	1,037	729	623	712	719	769	949	691	614	602
West Virginia	106	102	64	115	107	65	82	95	97	80
Wisconsin	501	583	490	420	606	482	487	297	376	318
Wyoming	151	93	179	113	103	158	167	144	118	88
Other U.S. Territories	23	9	13	11	37	10	32	15	10	-
Grand Total	29,134	27,040	27,329	28,126	26,982	27,705	27,854	26,009	23,763	24,802

Columns may not add up due to rounding procedures

Source: FAA Survey

2.8 Total Fuel Consumed and Average Fuel Consumption Rate by Aircraft Type Based on FAA's Survey (2010)

Fuel Type	Fixed Wing			Rotorcraft		Other Aircraft	Experimental	Light Sport	Total All Aircraft
	Piston	Turboprop	Turbojet	Piston	Turbine				
Jet Fuel									
Avg. Rate (GPH)	38.4	87.4	332.8	23.9	48.0	-	153.5	-	179.5
Estimated Fuel Use (Thousand Gal.)	6,178.7	197,100.4	1,084,594.3	196.5	120,835.6	-	42,607.6	-	1,451,513.0
% Standard Error	12.2	4.3	1.5	17.0	2.4	-	12.0	-	1.4
100 Low Lead									
Avg. Rate (GPH)	13.3	20.6	34.3	13.4	16.4	4.3	10.5	5.1	13.0
Estimated Fuel Use (Thousand Gal.)	180,139.5	1,943.7	13.5	9,495.4	16.7	112.8	8,332.4	428.1	200,482.0
% Standard Error	2.1	6.1	14.2	2.8	17.2	51.0	3.3	3.8	1.7
100 Octane									
Avg. Rate (GPH)	12.4	23.3	-	12.7	1.9	2.0	11.8	4.7	12.4
Estimated Fuel Use (Thousand Gal.)	8,934.4	73.2	-	395.1	0.2	0.6	364.0	26.1	9,793.6
% Standard Error	6.9	17.2	-	13.9	-	16.6	15.8	17.8	5.7
Automotive Gasoline									
Avg. Rate (GPH)	8.4	-	-	12.5	-	4.0	6.3	4.6	6.7
Estimated Fuel Use (Thousand Gal.)	3,972.9	-	-	6.2	-	11.2	1,562.2	1,036.2	6,588.7
% Standard Error	15.3	-	-	24.1	-	33.9	5.6	3.4	5.6
Other Fuel									
Avg. Rate (GPH)	6.2	-	-	14.0	-	16.9	12.8	5.1	16.2
Estimated Fuel Use (Thousand Gal.)	17.2	-	-	0.4	-	1,533.9	181.4	16.5	1,749.4
% Standard Error	15.0	-	-	0.0	-	6.3	12.2	13.6	5.6
Total Fuel Use									
Avg. Rate (GPH)	13.1	80.5	332.7	13.5	47.8	16.3	17.6	4.7	33.9
Estimated Fuel Use (Thousand Gal.)	199,527.1	199,117.3	1,084,607.8	10,093.6	120,852.4	1,658.5	53,229.8	1,506.8	1,670,593.4
% Standard Error	2.0	4.3	1.5	2.7	2.4	7.9	11.8	2.7	2.8

Columns may not add to totals due to rounding procedures.

An asterisk indicates no active aircraft of that type reporting use of the fuel.

Source: FAA Survey

2.9 Average Age of Registered General Aviation Fleet (2005–2010)

Aircraft Type	Engine Type	Seats	Average Age in 2005 in Years	Average Age in 2006 in Years	Average Age in 2007 in Years	Average Age in 2008 in Years	Average Age in 2009 in Years	Average Age in 2010 in Years
Single-Engine	Piston	1-3	37	38	38	48.1	-	-
		4	35	36	36	38.2	-	-
		5-7	30	31	32	33.5	-	-
		8+	44	44	43	49.3	-	-
		All	-	-	-	-	42.2	46.3
	Turboprop	All	13	10	14	13.6	16.1	15.2
	Jet	All	34	34	35	44.4	44.0	44.1
Multi-Engine	Piston	1-3	32	32	33	48.9	-	-
		4	35	35	35	36.0	-	-
		5-7	36	36	39	39.3	-	-
		8+	38	39	40	41.6	-	-
	All	All	-	-	-	-	41.2	39.0
	Turboprop	All	25	26	27	28.8	28.0	27.0
	Jet	All	16	16	16	16.2	17.0	16.2
All Airplanes			34	35	35	39.3	39.5	37.3

Source: GAMA

2.10 U.S. General Aviation Operations (in Thousands) at FAA and Contract Towers (1992–2012)

Year	General Aviation Operations at Towers						
	FAA Control Towers			Contract Towers			Grand Total
	Total	Itinerant & Overflight	Local	Total	Itinerant & Overflight	Local	
1992	36,945	21,281	15,664	1,409	767	642	38,355
1993	35,228	20,377	14,851	1,373	760	613	36,601
1994	34,092	20,208	14,484	1,561	855	706	36,254
1995	32,265	18,886	13,379	3,661	1,974	1,687	35,927
1996	29,250	17,575	11,675	6,049	3,249	2,801	35,298
1997	28,232	17,097	11,135	8,601	4,572	4,029	36,833
1998	28,522	17,157	11,365	10,118	5,240	4,877	38,046
1999	29,110	17,422	11,688	10,890	5,597	5,292	40,000
2000	27,002	16,286	10,717	12,876	6,558	6,318	39,879
2001	24,784	14,949	9,835	12,843	6,484	6,359	37,627
2002	24,092	14,553	9,539	13,562	6,898	6,634	37,653
2003	22,598	13,577	9,021	12,926	6,654	6,272	35,524
2004	21,762	13,190	8,572	13,205	6,817	6,388	34,968
2005	20,705	12,430	8,275	13,456	6,885	6,571	34,161
2006	19,728	11,897	7,830	13,392	6,844	6,549	33,120
2007	19,367	11,616	7,751	13,768	6,961	6,807	33,135
2008	18,336	10,828	7,509	12,953	6,540	6,413	31,289
2009	17,429	10,770	6,659	12,156	6,585	5,571	29,585
2010	16,741	10,430	6,310	11,837	6,517	5,319	28,577
2011	16,324	10,206	6,118	11,737	6,374	5,363	28,061
2012	16,265	10,111	6,154	11,878	6,479	5,399	28,143

R = Revised, E = Estimated

Location operations at FAA Control Towers captures all civil local operations

Facilities includes Control Towers, TRACONs, CERAPs and RAPCONs

Traffic Count for GA Operation Data are provided by ATADS

Source: FAA Air Traffic Activity

2.11 Summary of U.S. General Aviation Operations and Contacts (in Thousands) at FAA Facilities (1998–2011)

	1998	1999R	2000R	2001R	2002R	2003R	2004R	2005R	2006	2007	2008	2009	2010	2011
GA IFR Aircraft Handled at FAA Air Route Traffic Control Centers	8,745.0	8,807.7	8,744.4	8,024.0	8,180.7	7,999.8	8,350.4	8,367.7	8,197.0	8,294.3	7,670.7	6,331.6	6,550.3	6,557.3
GA Instrument Operations at FAA & Contract Facilities	20,087.0	20,897.8	21,221.7	19,705.5	19,655.8	18,629.8	18,619.5	17,985.9	-	-	-	-	-	-
GA Total TRACON Operations	-	-	20,799.2	19,274.9	19,212.5	18,094.2	18,006.8	17,388.9	17,005.3	16,747.4	15,763.0	14,151.1	13,863.6	13,503.1
Total Aircraft Contacts at FSS	2,600.0	2,524.0	2,438.0	2,196.0	2,170.0	2,050.0	1,976.0	-	-	-	-	-	-	-

R = Revised, E = Estimated.

Facilities include Control Towers, TRACONs, CERAPs and RAPCONs

Traffic Count for GA Operation Data provided by ATADS

FAA suspended tracking of IFR operations at Contract Facilities in 2005

GA Total TRACON Operations were titled "GA Instrument Operations at Airports with FAA Traffic Control Facilities" in previous publications

FAA suspended tracking of Flight Service Station (FSS) contacts in 2004

Source: FAA Air Traffic Activity

2.12 Estimated Active Experimental Aircraft Fleet (1997–2010)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Amateur Built	10,261	13,189	16,858	16,739	16,736	18,168	17,028	19,165	19,817	19,316	19,538	19,767	20,794	21,270
Exhibition	1,798	1,630	1,999	1,973	2,052	2,190	2,031	2,070	2,120	2,103	2,101	2,096	2,063	2,029
Other	2,620	1,684	1,671	1,694	1,633	1,578	1,491	1,565	1,691	1,629	1,589	1,501	1,562	1,485
Total Experimental	14,679	16,503	20,528	20,406	20,421	21,936	20,550	22,800	23,628	23,048	23,228	23,364	24,419	24,784
% of GA Fleet	7.6%	8.1%	9.4%	9.4%	9.7%	10.4%	9.8%	10.4%	10.5%	10.4%	10.0%	10.2%	10.9%	11.1%

Source: FAA Survey

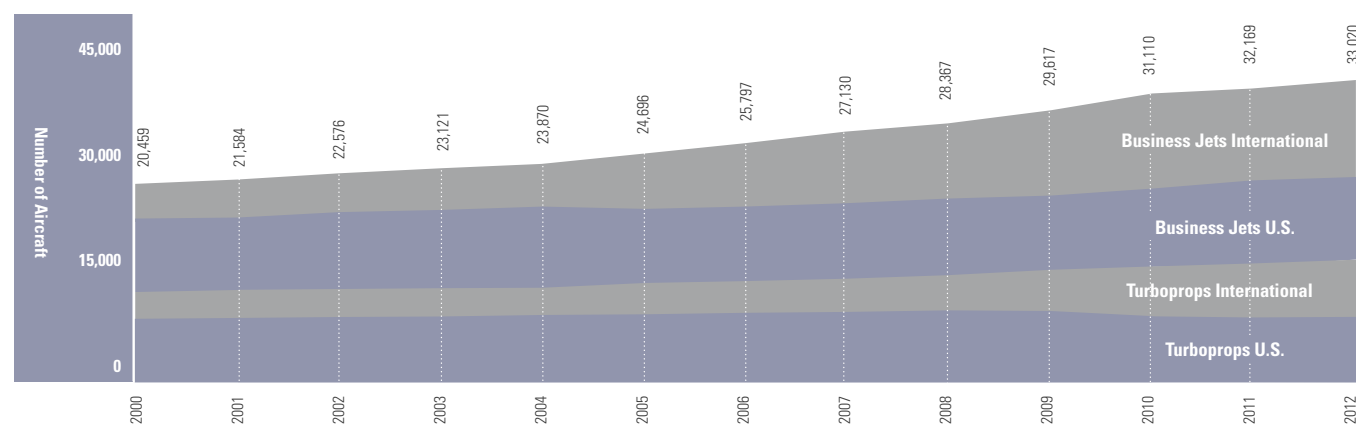
2.13 Estimated Hours Flown (in Thousands) of Experimental Aircraft Fleet (1997–2010)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Amateur Built	698	729	883	887	794	976	963	990	987	899	896	872	983	911
Exhibition	246	73	122	113	102	127	103	116	113	103	102	92	88	98
Other	382	269	242	279	261	242	226	216	239	216	277	192	215	217
Total Experimental	1,326	1,071	1,247	1,279	1,157	1,345	1,292	1,322	1,339	1,218	1,274	1,155	1,286	1,226
% of GA Hours	4.8%	3.8%	4.0%	4.3%	4.3%	5.0%	4.7%	4.7%	5.0%	4.4%	4.6%	4.4%	5.4%	4.9%

Note: Prior to 1994, experimental aircraft included those built without a production certificate. Beginning in 1994, experimental includes aircraft with an experimental airworthiness certificate. These include research and development, amateur built, exhibition, racing, crew training, and market survey aircraft and aircraft used to show compliance with the Federal Aviation Regulations.

Source: FAA Survey

FIGURE 2.3 Worldwide Turbine Airplane Fleet (2000–2012)



Source: JETNET LLC www.JETNET.com

FIGURE 2.4 Worldwide Turbine and Piston Helicopter Fleet (2007–2012)

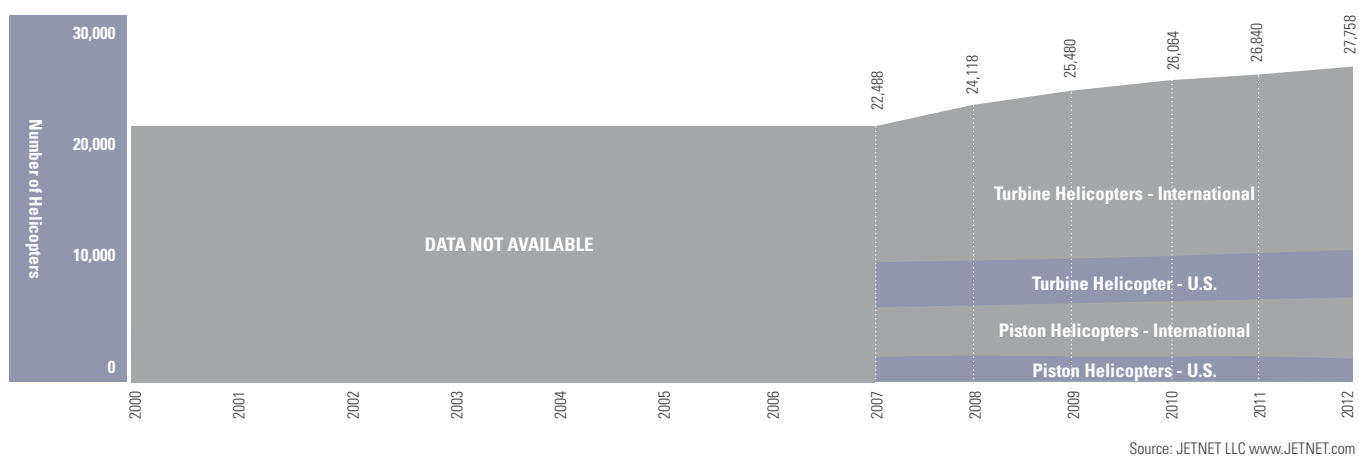


FIGURE 2.5 Worldwide Business Aircraft Operators (2000–2012)

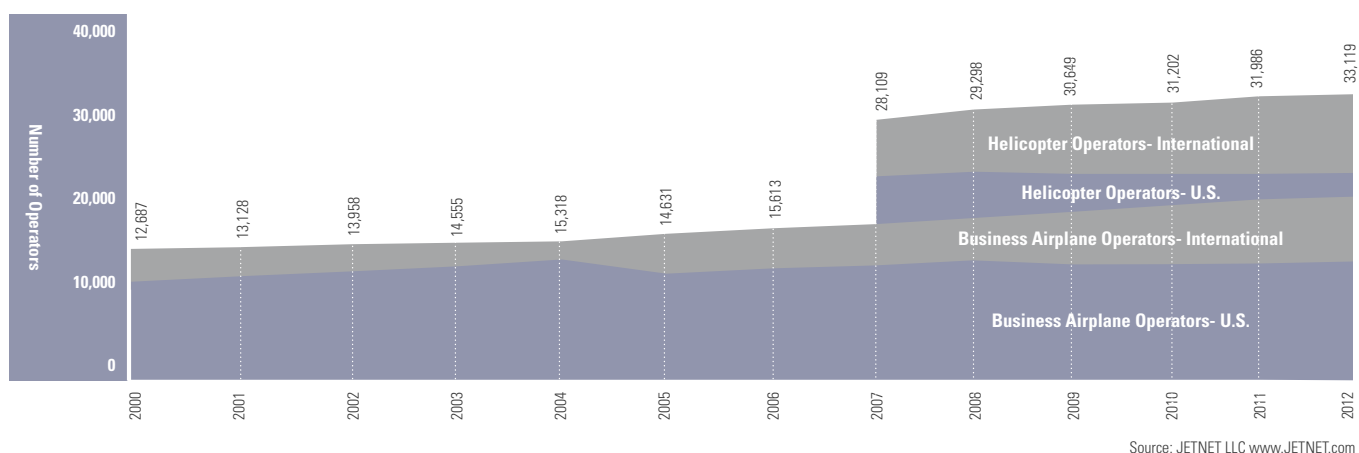
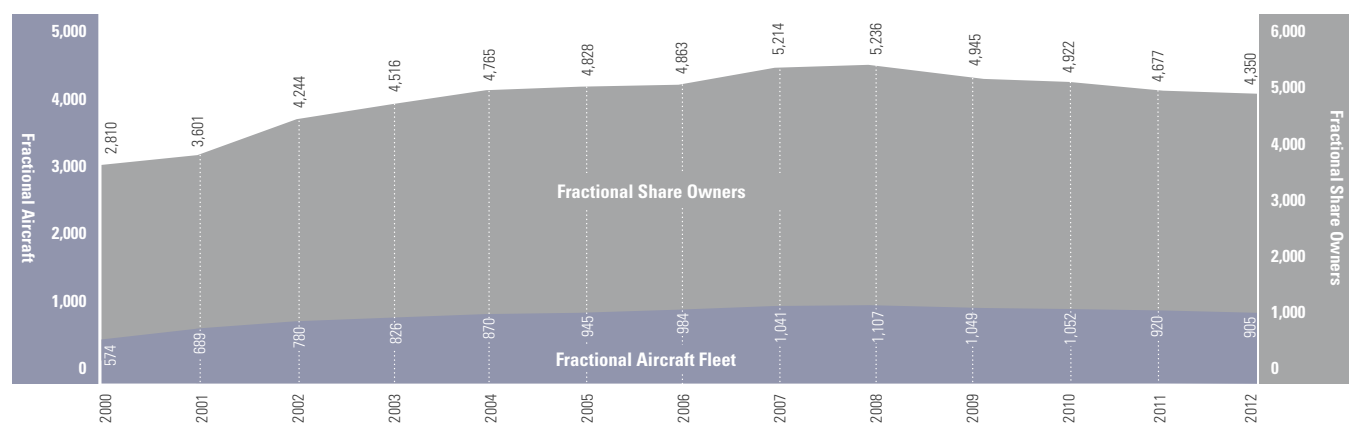


FIGURE 2.6 Fractional Aircraft and Share Owners (2000–2012)



The fractional owner and fleet information for 2007 and later also includes helicopters in fractional operations.

Source: JETNET LLC www.JETNET.com



03

Pilot Population



3.1 Active FAA Certificated Pilots and Non-Pilot Certificates Held (1991–2012)

Category	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Pilot–Total	610,576	617,128	627,588	594,285	613,746	590,349	597,109	609,737	618,633	625,011	631,762
Student ¹³	119,946	118,657	119,119	72,280	80,989	84,339	84,866	87,213	87,910	87,296	85,991
Recreational (only)	218	227	212	234	252	239	239	276	291	310	317
Sport (only) ¹⁰	4,493	4,066	3,682	3,248	2,623	2,031	939	134	*	*	*
Airplane ¹											
- Private	188,001	194,441	202,020	211,619	222,596	211,096	219,233	228,619	235,994	241,045	245,230
- Commercial	116,400	120,865	123,705	125,738	124,746	115,127	117,610	120,614	122,592	123,990	125,920
- Airline Transport	145,590	142,511	142,198	144,600	146,838	143,953	141,935	141,992	142,160	143,504	144,708
Rotorcraft (only)	15,126	15,220	15,377	15,298	14,647	12,290	10,690	9,518	8,586	7,916	7,770
Glider (only) ²	20,802	21,141	21,275	21,268	21,055	21,274	21,597	21,369	21,100	20,950	21,826
Flight Instructor³	98,328	97,409	96,473	94,863	93,202	92,175	91,343	90,555	89,596	87,816	86,089
Instrument Ratings ^{3,4}	311,952	314,122	318,001	323,495	325,247	309,865	309,333	311,828	313,545	315,413	317,389
Nonpilot–Total ^{5,6}	701,291	695,515	649,816	682,315	678,181	666,559	656,227	644,016	515,293	509,835	515,570
Mechanic	337,775	335,431	308,367	329,027	326,276	322,852	323,097	320,293	317,111	313,032	315,928
Repairmen ¹¹	40,444	40,802	41,196	41,389	41,056	40,277	40,329	40,030	39,231	37,248	37,114
Parachute Rigger	8,474	8,491	8,009	8,362	8,248	8,186	8,252	8,150	8,011	7,883	8,063
Ground Instructor	73,599	74,586	70,560	75,461	74,983	74,544	74,849	74,378	73,735	72,692	73,658
Dispatcher	21,862	21,363	16,576	20,132	19,590	19,043	18,610	18,079	17,493	16,955	16,695
Flight Navigator	141	146	171	181	222	250	264	298	336	382	431
Flight Engineer	172,357	167,037	156,368	156,741	154,671	147,013	134,874	125,032	*	*	*

Category	2001	2000	1999	1998	1997	1996	1995	1994 7	1993	1992	1991
Pilot–Total	612,274	625,581	635,472	618,298	616,342	622,261	639,184	654,088	665,069	682,959	692,095
Student	86,731	93,064	97,359	97,736	96,101	94,947	101,279	96,254	103,583	114,597	120,203
Recreational (only) ⁹	316	340	343	305	284	265	232	241	206	187	161
Airplane ¹											
- Private	243,823	251,561	258,749	247,226	247,604	254,002	261,399	284,236	283,700	288,078	293,306
- Commercial	120,502	121,858	124,261	122,053	125,300	129,187	133,980	138,728	143,014	146,385	148,385
- Airline Transport	144,702	141,596	137,642	134,612	130,858	127,486	123,877	117,434	117,070	115,855	112,167
Rotorcraft (only) ²	7,727	7,775	7,728	6,964	6,801	6,961	7,183	8,719	9,168	9,652	9,860
Glider (only) ²	8,473	9,387	9,390	9,402	9,394	9,413	11,234	8,476	8,328	8,205	8,033
Flight Instructor³	82,875	80,931	79,694	79,171	78,102	78,551	77,613	76,171	75,021	72,148	69,209
Instrument Ratings ^{3,4}	315,276	311,944	308,951	300,183	297,409	297,895	298,798	302,300	305,517	306,169	303,193
Nonpilot–Total ^{5,6}	513,100	547,453	538,264	549,588	540,892	534,427	651,341	571,358	559,726	540,548	517,462
Mechanic	310,850	344,434	340,402	336,670	332,254	329,239	405,294	411,071	401,060	384,669	366,392
Repairmen	40,085	38,208	35,989	52,909	51,643	50,768	61,233	*	*	*	*
Parachute Rigger	7,927	10,477	10,447	10,459	10,336	10,269	11,824	8,631	8,417	8,163	7,616
Ground Instructor	72,261	72,326	71,238	70,334	69,366	68,573	96,165	77,789	76,050	73,276	70,086
Dispatcher	16,070	16,340	15,655	14,804	13,967	13,272	15,642	13,410	12,883	12,264	11,607
Flight Navigator	509	570	642	712	782	847	916	990	1,039	1,154	1,225
Flight Engineer	65,398	65,098	63,891	63,700	62,544	61,459	60,267	59,467	60,277	61,022	60,236

- Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate. Prior to 1995, these pilots were categorized as private, commercial, or airline transport, based on their airplane certificate. In 1995 and after, they are categorized based on their highest certificate. For example, if a pilots holds a private airplane certificate and a commercial helicopter certificate, prior to 1995, the pilot would be categorized as private; 1995 and after as commercial.
- Glider pilots are not required to have a medical examination; however, the totals represent pilots who received a medical examination within the last 25 months.
- Not included in total.
- The instrument rating is a shown on pilot certificates, but does not indicate additional certificate.
- Number of non-pilot certificates represent all certificates on record since no medical examination s required. Data for 1996 and 1997 are limited to certificates held by those under 70 years of age.
- Starting in 1995 non-pilots includes those who were excluded in prior years because of incomplete addresses and/or a request to be excluded from any mailing list.
- 1994 counts based on medical certificates issued 27 or less months ago. All other years based on medical certificates issued 25 or less months ago.
- Flight attendant information was first available from FAA Registry in 2005.
- Recreational certificate was first issued in 1990.
- Sport pilot certificate was first issued in 2005.
- Prior to 1995 repairmen were included in the mechanic category.
- The FAA changed the validity of student pilot certificates in 2010 through an amendment to 14 CFR 61.19(b)(1) resulting in the duration of validity for student pilot certificates for pilots under the age of 40 increasing to 60 months. This created an increase in the active student pilot population to 119,119 active airmen at the end of 2010 compared to the 72,280 a year ago.

Source: FAA

3.2 Active FAA Certificated Pilots and Flight Instructors by State and Region (December 31, 2012)

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Recreational	Sport	Flight Instr. ¹
Total²	610,576	119,946	205,077	131,725	149,116	219	4,493	98,328
United States - Total³	564,169	109,091	195,522	114,020	140,843	218	4,475	95,888
Non U.S. Total⁵	46,407	10,855	9,555	17,705	8,273	1	18	2,440
Alabama	7,626	1,503	2,584	2,172	1,310	3	54	1,404
Alaska	8,202	1,076	3,051	1,883	2,144	1	47	1,335
American Samoa	11	0	0	3	8	0	0	0
Arizona	18,929	4,037	5,445	4,008	5,324	2	113	3,671
Arkansas	5,002	1,057	1,781	1,233	866	2	63	753
California	61,185	11,832	24,730	12,744	11,544	5	330	9,429
Colorado	17,524	2,720	5,426	3,604	5,681	2	91	3,494
Connecticut	5,298	898	2,061	909	1,408	1	21	847
Delaware	1,382	325	433	261	354	0	9	235
District of Columbia	536	148	214	90	79	0	5	68
Federated States of Micronesia	2	1	0	1	0	0	0	1
Florida	52,566	11,946	14,302	10,336	15,577	8	397	9,138
Georgia	18,767	3,087	5,336	3,189	7,025	4	126	3,178
Guam	179	19	20	30	110	0	0	37
Hawaii	3,137	595	679	764	1,088	0	11	642
Idaho	4,850	876	1,950	1,100	868	1	55	789
Illinois	17,525	3,148	6,217	3,326	4,607	6	221	3,408
Indiana	10,125	1,801	3,985	2,046	2,112	8	173	1,679
Iowa	5,444	996	2,514	1,162	692	2	78	825
Kansas	7,174	1,273	2,993	1,565	1,280	3	60	1,410
Kentucky	5,969	981	1,714	1,001	2,224	4	45	1,107
Louisiana	5,783	1,233	1,951	1,448	1,103	2	46	863
Maine	2,521	390	1,018	541	531	2	39	390
Marshall Islands	5	0	0	2	3	0	0	0
Maryland	7,909	1,827	2,716	1,534	1,757	3	72	1,304
Massachusetts	8,137	1,712	3,372	1,499	1,506	4	44	1,204
Michigan	14,558	2,524	5,872	2,969	3,002	11	180	2,488
Minnesota	12,688	1,939	4,653	2,451	3,554	0	91	2,480
Mississippi	4,247	1,033	1,306	940	938	2	28	663
Missouri	9,284	1,714	3,431	1,868	2,158	2	111	1,603
Montana	3,925	743	1,579	957	622	2	22	647
Nebraska	3,576	781	1,455	762	549	0	29	478
Nevada	6,927	1,099	2,043	1,478	2,276	1	30	1,341
New Hampshire	3,725	519	1,174	658	1,336	4	34	678
New Jersey	9,234	1,873	3,335	1,712	2,276	4	34	1,643
New Mexico	4,744	917	1,852	1,224	702	2	47	625
New York	16,746	4,208	6,217	3,243	2,951	19	108	2,627
North Carolina	14,386	2,588	5,047	2,692	3,938	3	118	2,315
North Dakota	3,486	740	1,230	1,255	252	0	9	456
Northern Mariana Islands	17	6	2	3	6	0	0	5
Ohio	16,083	2,827	6,078	3,074	3,877	38	189	2,992
Oklahoma	8,155	2,118	2,960	1,631	1,402	1	43	1,264
Oregon	9,085	1,757	3,763	2,152	1,345	4	64	1,577
Palau	2	0	1	1	0	0	0	0
Pennsylvania	16,175	3,118	5,903	2,928	4,040	30	156	2,733
Puerto Rico	1,812	683	421	343	331	0	34	218
Rhode Island	1,011	209	387	197	211	1	6	145
South Carolina	6,596	1,158	2,368	1,321	1,694	0	55	996
South Dakota	2,267	397	898	572	354	1	45	401
Tennessee	11,831	1,942	3,540	2,198	4,069	2	80	2,037
Texas	49,886	9,752	15,304	9,304	15,224	4	298	8,310
Utah	8,075	1,702	2,511	1,764	2,046	0	52	1,529
Vermont	1,289	204	562	264	246	3	10	182
Virgin Islands	185	48	61	34	42	0	0	27
Virginia	14,620	2,799	4,650	3,047	4,007	9	108	2,525
Washington	19,448	3,430	6,510	3,856	5,500	3	149	3,415
West Virginia	1,835	420	731	363	287	2	32	255
Wisconsin	9,503	1,610	4,094	1,593	2,003	7	196	1,604
Wyoming	1,947	400	835	406	291	0	15	282
AA - Americas ⁴	27	3	6	12	6	0	0	5
AE - Europe and Canada ⁴	436	99	128	150	59	0	0	63
AP - Pacific ⁴	570	250	123	147	48	0	2	68

1. Not included in total.

2. Includes non-US total

3. Includes Federated States of Micronesia, Marshall Islands, North Mariana Islands and Palau

4. Military personnel holding civilian certificates and stationed in foreign country

5. Non US includes non-US nationals that hold FAA certificates

Source: FAA

3.3 Active FAA Pilot Certificates Held by Category and Age Group of Holder (December 31, 2012)

Age Group	Type of Pilot Certificate							
	Total Pilots	Student	Recreational	Sport Pilots	Private	Commercial	Airline Transport	CFI
Total	610,576	119,946	219	4,493	205,077	131,725	149,116	98,328
14-15	161	161	0	0	0	0	0	0
16-19	15,891	12,193	7	29	3,402	260	0	35
20-24	57,463	30,168	42	79	15,578	11,446	150	3,429
25-29	64,847	24,263	18	116	15,296	21,382	3,772	9,404
30-34	53,762	15,181	5	141	13,750	14,656	10,029	11,221
35-39	49,998	10,890	6	176	13,816	10,595	14,515	9,996
40-44	57,274	9,348	8	258	17,325	10,320	20,015	11,373
45-49	56,926	5,121	10	467	18,156	9,381	23,791	10,601
50-54	66,095	4,725	17	677	24,533	10,612	25,531	9,901
55-59	65,456	3,529	31	877	28,074	11,590	21,355	9,480
60-64	52,914	2,135	26	694	23,523	11,320	15,216	8,302
65-69	39,135	1,279	20	529	17,369	10,917	9,021	7,307
70-74	17,395	630	15	295	8,031	4,905	3,519	3,998
75-79	8,316	213	5	118	3,830	2,655	1,495	2,053
80 and over	4,943	110	9	37	2,394	1,686	707	1,228

Source: FAA

3.4 Average Age of Active FAA Pilots by Category (1993–2012)

Year	Average All Pilots	Type of Pilot Certificate					
		Student	Recreational	Sport Pilot	Private	Commercial	Airline Transport
1993	41.3	33.7	45.5	*	42.7	41.9	44.1
1994	41.9	34.3	46.5	*	43.2	42.4	44.4
1995	42.9	34.5	48.3	*	44.6	43.7	44.9
1996	43.2	34.6	49.3	*	45.1	44.1	45.1
1997	43.6	34.6	49.5	*	45.6	44.6	45.6
1998	43.8	34.7	49.8	*	45.9	45.0	45.4
1999	43.6	34.6	49.5	*	45.6	44.6	45.3
2000	43.7	34.1	49.8	*	45.6	44.9	45.8
2001	44.0	33.3	50.8	*	46.0	45.0	46.0
2002	44.4	33.7	51.0	*	46.2	45.5	46.6
2003	44.7	34.0	51.5	*	46.5	45.6	47.0
2004	45.1	34.2	51.3	*	47.0	45.9	47.5
2005	45.5	34.6	50.9	53.2	47.4	46.0	47.8
2006	45.6	34.4	51.5	52.9	47.7	46.1	48.1
2007	45.7	34.0	52.4	52.9	48.0	46.1	48.3
2008	45.1	33.6	50.1	53.2	46.9	44.8	48.5
2009	45.3	33.5	50.4	53.5	47.1	44.2	48.9
2010	44.2	31.4	50.8	53.8	47.6	44.2	49.4
2011	44.4	31.4	48.8	54.4	47.9	44.4	49.7
2012	44.7	31.5	47.8	54.7	48.3	44.8	49.9

Source: FAA

3.5 Active FAA Women Pilots and Non-Pilot Certificates Held (2002–2012)

Category	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Pilot—Total	40,621	41,316	39,464	36,808	37,981	35,784	36,101	36,584	37,243	37,694	38,257
Student	14,643	14,683	13,913	8,450	9,127	9,559	9,640	9,717	9,857	9,897	10,082
Recreational (only)	16	18	12	13	20	17	17	20	21	24	23
Sport (only)	152	135	117	98	79	64	26	7	*	*	*
Airplane ¹											
- Private	12,456	12,927	12,911	14,322	15,015	13,694	14,111	14,517	15,036	15,487	15,906
- Commercial	7,536	7,956	7,137	8,289	8,083	7,101	7,236	7,315	7,421	7,436	7,454
- Airline Transport	5,818	5,597	5,404	5,636	5,657	5,349	5,071	5,008	4,908	4,850	4,792
Flight Instructor ²	6,371	6,350	6,217	6,362	6,293	6,232	6,158	6,067	5,970	5,811	5,667
Nonpilot—Total ³	160,452	155,918	146,239	147,052	144,968	138,452	19,633	19,220	18,666	18,030	17,612
Mechanic ³	7,729	7,487	7,078	6,980	6,740	6,524	6,345	6,152	5,932	5,734	5,995
Repairmen ³	2,307	2,278	2,310	2,335	2,284	2,193	2,180	2,108	2,039	1,800	1,722
Parachute Rigger ³	697	683	609	633	615	594	584	556	540	521	500
Ground Instructor ³	5,853	5,880	5,609	5,860	5,785	5,726	5,669	5,612	5,500	5,385	5,321
Dispatcher ³	3,930	3,744	3,064	3,381	3,230	3,087	2,934	2,805	2,647	2,520	2,410
Flight Navigator	1	1	1	1	1	1	1	1	1	0	0
Flight Engineer	1,712	1,731	1,761	1,828	1,894	1,901	1,920	1,986	2,007	2,070	2,100
Flight Attendant	138,223	134,114	125,807	126,034	124,419	118,426	108,559	100,630	*	*	*

1. Includes pilots with an airplane only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.

2. Not included in total.

3. No medical examination required. Numbers represent all certificates on record.

Source: FAA

3.6 Total FAA Active and Instrument-Rated Pilots (1982–2012)

Calendar Year	Total Active Pilots	Instrument Rated	Percent of Total
1982	576,894	255,073	44.2%
1983	570,807	254,271	44.5%
1984	572,295	256,584	44.8%
1985	562,888	258,559	45.9%
1986	558,845	262,388	47.0%
1987	553,637	266,122	48.1%
1988	557,103	273,804	49.1%
1989	557,466	282,804	50.7%
1990	573,909	297,073	51.8%
1991	571,731	306,193	53.6%
1992	568,175	306,169	53.9%
1993	561,280	305,517	54.4%
1994	557,593	302,300	54.2%
1995	537,673	298,798	55.6%
1996	527,049	297,895	56.5%
1997	520,241	297,409	57.2%
1998	520,257	300,183	57.7%
1999	537,770	308,951	57.5%
2000	532,177	311,944	58.6%
2001	525,227	315,276	60.0%
2002	545,454	317,389	58.2%
2003	537,405	315,413	58.7%
2004	530,432	313,545	59.1%
2005	522,112	311,828	59.7%
2006	511,062	309,333	60.5%
2007	503,740	309,865	61.5%
2008	529,882	325,247	61.4%
2009	518,519	323,495	62.4%
2010	504,572	318,001	63.0%
2011	494,177	314,122	63.6%
2012	485,919	311,952	64.2%

Total pilots excludes student, sport and recreational pilots.

Source: FAA

3.7 FAA Pilot Certificates Issued by Category (1978–2011)

Year	Student		Private		Commercial		Airline Transport		Helicopter (only)		Glider (only)	
	Original	Additional	Original	Additional	Original	Additional	Original	Additional	Original	Additional	Original	Additional
1978	137,032	*	58,064	16,048	11,789	17,501	6,912	5,921	1,122	287	759	188
1979	135,956	*	54,466	16,466	12,627	17,793	8,981	6,603	1,300	283	642	157
1980	102,301	*	50,458	16,035	12,452	16,015	7,116	6,289	1,721	272	583	151
1981	111,531	*	45,713	14,897	10,657	12,146	4,763	5,991	1,985	302	629	164
1982	90,816	*	52,144	16,276	11,048	11,910	5,037	7,956	2,256	330	793	184
1983	92,239	*	41,210	12,721	8,789	9,513	5,643	8,187	1,932	315	606	162
1984	90,167	*	36,545	11,784	7,702	8,895	5,099	9,335	1,808	319	524	139
1985	86,060	*	35,402	11,636	8,404	7,197	6,081	9,192	2,105	207	537	138
1986	88,699	*	34,816	12,672	8,889	9,241	6,498	10,372	2,209	234	514	109
1987	85,611	*	42,287	16,302	11,314	11,635	7,678	11,956	2,217	293	542	74
1988	86,193	*	39,900	15,800	12,042	10,597	7,461	11,209	1,947	287	475	28
1989	87,698	*	35,360	22,240	13,759	11,778	7,829	12,698	2,240	252	336	22
1990	88,586	*	41,749	19,299	15,500	12,584	8,013	13,540	2,700	266	378	41
1991	82,205	*	49,580	23,630	16,869	13,506	8,437	13,979	3,344	291	487	29
1992	78,377	*	39,968	19,419	14,354	11,630	7,699	13,391	2,684	291	376	32
1993	69,178	*	39,060	18,801	12,645	10,466	6,129	12,995	2,310	30	341	28
1994	66,501	*	32,787	14,568	9,237	8,630	5,360	10,963	1,801	267	320	25
1995	60,497	*	28,333	15,331	9,133	9,042	5,965	13,641	1,724	290	373	83
1996	56,653	*	24,714	18,199	10,245	10,494	7,444	17,229	1,638	349	633	195
1997	60,941	*	21,552	13,522	8,988	9,587	7,045	16,266	1,385	296	501	161
1998	63,037	756	26,297	15,966	10,042	10,269	7,547	19,085	1,530	211	472	105
1999	58,278	1,030	24,630	15,222	9,737	9,963	6,721	19,380	1,514	222	423	98
2000	58,042	1,070	27,223	17,223	11,813	11,652	7,715	20,558	1,776	234	455	62
2001	61,897	1,161	25,372	16,807	11,499	11,115	7,070	21,357	1,698	218	403	77
2002	65,421	1,317	28,659	18,607	12,299	11,628	4,718	18,502	2,073	275	336	38
2003	58,842	1,230	23,866	14,899	9,670	8,872	3,892	13,196	2,013	269	312	47
2004	59,202	1,302	23,031	14,234	9,836	9,635	4,255	15,328	2,736	366	309	43
2005	53,576	1,418	20,889	12,952	8,834	8,874	4,750	15,534	2,917	521	290	27
2006	61,448	1,551	20,217	13,079	8,687	9,603	4,748	15,942	3,569	816	298	42
2007	66,953	1,450	20,299	13,970	9,318	9,574	5,918	15,973	4,073	1,041	263	14
2008	61,194	1,507	19,052	14,409	10,595	10,202	5,204	15,658	3,639	930	204	11
2009	54,876	2,006	19,893	14,570	11,350	9,399	3,113	11,605	3,648	1,011	249	10
2010	54,064	1,057	14,977	10,260	8,056	7,778	3,072	10,890	2,686	670	222	8
2011	55,298	857	16,802	10,703	8,559	10,027	4,677	13,694	3,123	894	219	10

An additional rating is added to an existing pilot certificate (e.g., instrument rating added to a private certificate.)

Source: FAA



DEFINITIONS

Active Pilot — A pilot who holds a pilot certificate and a valid medical certificate.

Air Carrier — An aircraft with a seating capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds carrying passengers or cargo for hire or compensation.

Airmen — A pilot, mechanic, or other licensed aviation technician. The term refers to men and women.

Airmen Certificate — A document issued by the Administrator of the Federal Aviation Administration certifying that the holder complies with the regulations governing the capacity in which the certificate authorizes the holder to act as an airman in connection with aircraft.



PILOT CATEGORIES

Student Pilot — A student pilot must be 16 years old, medically certificated by an FAA medical examiner and may only fly solo or with an instructor. Each solo flight must be approved as to destination and duration. A student pilot may not operate an aircraft that is carrying passengers or that is carrying property for compensation or hire.

Recreational Pilot — A recreational pilot may fly no more than one passenger in a light, single engine aircraft with no more than four seats, during good weather and daylight hours, and unless otherwise authorized, no more than 50 miles from the home airport. A recreational pilot may not operate an aircraft that is carrying passengers or that is carrying property for compensation or hire.

Sport Pilot — A sport pilot may operate a light-sport aircraft (a small, low-powered aircraft), under a limited set of flight conditions. The certificate does not require an FAA medical examination, but the pilots can carry a driver's license as proof of medical competence. Holders of a sport pilot certificate may fly an aircraft with a standard airworthiness certificate if the aircraft meets the definition of a light-sport aircraft.

Private Pilot — A private pilot may, with appropriate training, ratings and endorsements, carry passengers in any aircraft, day or night, good weather or bad. The private pilot may not act as pilot-in-command of an aircraft that is carrying passengers for compensation or hire nor act as pilot-in-command of an aircraft that

is being operated for compensation or hire (e.g.: one that has been hired to do pipeline patrol but carries no passengers).

Commercial Pilot — A commercial pilot may act as pilot-in-command of an aircraft that is carrying passengers for compensation or hire, but not an aircraft in air carrier service, or act as pilot-in-command of an aircraft that is being operated for compensation or hire (e.g.: one that has been hired to do pipeline patrol but carries no passengers).

Airline Transport Pilot — An airline transport pilot may act as pilot-in-command of an aircraft in air carrier service.



04

Airports and Aeronautical Facilities



4.1 U.S. Civil and Joint Use Airports, Heliports, and Seaplane Bases on Record by Type of Ownership (January 1, 2010)

State or Territory	State Total	Public Use		Civil Private Use Landing Facilities							Military Only Use
		Total	Part 139	Total	Airports	Heliports	Seaplane Bases	Other			
								Gliderports	Balloon-ports	Ultralight Flight-parks	
Grand Total	19,750	5,178	559	14,120	8,405	5,425	290	31	13	134	274
United States - Total	19,729	5,168	551	14,111	8,403	5,418	290	31	13	134	272
Alabama	281	98	10	172	87	81	4	-	-	-	11
Alaska	734	408	26	307	245	38	24	-	-	-	19
American Samoa	4	3	3	1	1	-	-	-	-	-	-
Arizona	314	79	14	219	107	112	-	2	-	6	8
Arkansas	307	99	9	199	118	81	-	2	-	4	3
California	960	257	36	671	263	404	4	3	-	1	28
Colorado	449	76	16	365	186	179	-	1	1	1	5
Connecticut	146	23	5	122	35	82	5	-	-	1	-
Delaware	42	11	1	30	21	9	-	-	-	-	1
District of Columbia	20	3	2	13	-	13	-	-	-	-	4
Florida	857	127	25	697	370	289	38	2	-	5	26
Georgia	461	110	10	339	227	110	2	1	-	1	10
Guam	3	1	1	1	-	1	-	-	-	-	1
Hawaii	50	14	7	30	14	16	-	-	-	-	6
Idaho	280	119	7	158	108	49	1	-	-	2	1
Illinois	788	115	17	665	413	247	5	2	-	5	1
Indiana	610	107	12	487	348	123	16	-	-	11	5
Iowa	289	121	8	162	79	83	-	-	-	3	3
Kansas	383	141	10	238	203	35	-	1	1	-	2
Kentucky	223	60	7	157	95	62	-	-	-	4	2
Louisiana	480	75	9	381	150	219	12	-	-	20	4
Maine	175	68	6	104	64	17	23	-	-	2	1
Maryland	226	37	3	182	111	67	4	-	-	-	7
Massachusetts	241	40	8	198	39	142	17	-	1	1	1
Michigan	467	228	20	236	142	89	5	-	-	2	1
Midway Atoll	2	1	1	1	1	-	-	-	-	-	-
Minnesota	469	154	9	313	203	59	51	-	-	1	1
Mississippi	244	80	11	157	107	50	-	-	-	1	6
Missouri	518	132	11	380	251	128	1	-	-	3	3
Montana	258	121	15	134	102	31	1	-	-	1	2
N. Mariana Islands	11	5	3	6	-	6	-	-	-	-	-
Nebraska	244	86	9	156	122	34	-	-	-	-	2
Nevada	125	49	5	69	43	26	-	1	-	1	5
New Hampshire	139	25	3	114	28	79	7	-	-	-	-
New Jersey	314	46	4	256	54	196	6	-	5	-	7
New Mexico	174	61	9	107	81	26	-	-	-	1	5
New York	603	148	24	448	263	175	10	2	1	3	1
North Carolina	429	112	15	300	212	88	-	1	1	4	11
North Dakota	281	89	8	190	175	15	-	-	-	-	2
Ohio	729	170	13	554	344	209	1	2	1	1	1
Oklahoma	390	140	4	240	160	80	-	-	-	4	6
Oregon	420	97	10	322	231	90	1	1	-	-	-
Pennsylvania	821	132	16	662	316	339	7	2	-	18	7
Puerto Rico	52	12	4	39	6	31	2	-	-	-	1
Rhode Island	31	8	1	22	3	17	2	-	1	-	-
South Carolina	196	68	8	119	86	31	2	1	-	3	5
South Dakota	178	74	7	103	70	33	-	-	-	-	1
Tennessee	311	81	8	226	124	101	1	-	-	2	2
Texas	2,006	391	31	1,578	1,050	528	-	6	-	9	22
Utah	142	46	9	93	44	49	-	-	-	-	3
Vermont	81	16	2	65	45	14	6	-	-	-	-
Virgin Islands	8	2	2	6	-	4	2	-	-	-	-
Virginia	427	66	7	340	213	125	2	1	1	1	18
Wake Island	1	-	-	-	-	-	-	-	-	-	1
Washington	552	137	11	403	240	157	6	-	-	3	9
West Virginia	120	35	8	83	38	35	10	-	-	1	1
Wisconsin	565	133	9	422	315	95	12	-	-	8	2
Wyoming	119	41	10	78	52	26	-	-	-	-	-

Source: FAA Airport Engineering Division

4.2 FAA Air Route Facilities and Services (1972–2012)

Year	VOR VORTAC	Non-Directional Beacons	Air Route Traffic Cont. Ctr.	Air Traffic Cont. Towers	Flight Service Stations	Int'l Flight Service Stations	Instrument Landing Systems	WAAS-Enabled Procedures	Airport Surveillance Radar	ADS-B Radios (IOC)
1972	991	706	27	355	324	7	403	*	125	*
1973	995	739	27	403	315	7	467	*	142	*
1974	1,000	793	26	417	320	7	490	*	156	*
1975	1,011	848	25	487	321	7	580	*	177	*
1976	1,020	920	25	488	321	7	640	*	175	*
1977	1,021	959	25	495	319	7	678	*	182	*
1978	1,020	988	25	494	319	6	698	*	185	*
1979	1,028	1,015	25	499	318	6	753	*	192	*
1980	1,037	1,055	25	502	317	6	796	*	192	*
1981	1,033	1,123	25	501	316	6	840	*	199	*
1982	1,029	1,143	25	492	316	6	884	*	197	*
1983	1,032	1,183	25	494	316	5	934	*	197	*
1984	1,035	1,211	25	497	310	5	955	*	197	*
1985	1,039	1,222	25	500	302	4	968	*	198	*
1986	1,043	1,239	25	686	293	3	977	*	312	*
1987	1,039	1,212	25	500	302	4	968	*	312	*
1988	1,043	1,239	25	686	293	3	977	*	311	*
1989	1,046	1,263	25	686	255	3	1,100	*	312	*
1990	1,045	1,271	25	686	235	3	1,120	*	311	*
1991	1,045	1,295	24	694	192	3	1,114	*	318	*
1992	1,044	1,314	24	691	179	3	1,177	*	312	*
1993	1,046	1,263	24	686	255	3	1,100	*	312	*
1994	1,045	1,271	24	686	235	3	1,120	*	311	*
1995	1,045	1,295	24	694	192	3	1,114	*	318	*
1996	1,044	1,314	24	691	179	3	1,177	*	312	*
1997	1,041	1,344	24	684	135	3	1,231	*	310	*
1998	1,039	1,348	24	683	128	3	1,238	*	307	*
1999	1,041	1,320	24	680	75	3	1,327	*	295	*
2000	993	1,199	25	663	75	3	1,370	*	297	*
2001	1,116	1,675	24	678	76	3	1,388	*	292	*
2002	*	*	21	*	76	3	*	*	*	*
2003	*	*	21	*	76	3	*	*	*	*
2004	1,119	1,685	21	688	76	3	1,473	*	227	*
2005	1,111	1,613	21	693	76	3	1,490	*	226	*
2006	*	*	21	496	76	*	*	*	*	*
2007	*	*	21	502	76	*	*	*	*	*
2008	*	*	21	504	4	*	*	*	*	*
2009	*	*	21	509	4	*	*	*	*	*
2010	*	*	21	511	4	*	*	*	*	202
2011	*	*	21	511	4	*	*	11,828	*	339
2012	*	*	22	*	4	*	*	12,876	*	440

The FAA stopped publishing the "Air Traffic Factbook" in 2008. GAMA is working to backfill missing data.

Source: FAA Air Traffic Organization

Air Traffic Control data shows federal, non-federal and military through 2005. 2006 through 2011 are FAA and contract.

Honolulu control facility as well as San Juan and Guam CERAP not included in ARTCC data.

ADS-B radios only lists those that have reached Initial Operating Capability (IOC). The 2010 figure is from November.

WAAS-capable approach procedures include LNAV, LNAV/VNAV, LPV, LPV with 200' HAT, LP procedures and GPS stand-alone procedures of which 3,029 are LPV in 2011 data.

4.3 U.S. Airports by Type (2001–2011)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Civil Public Use Airports	5,294	5,286	5,286	5,288	5,270	5,233	5,221	5,202	5,178	5,175	5,172
Civil Public Use Part 139	635	633	628	599	575	604	565	560	559	551	547
Civil Public Use Non-Part 139	*	*	*	*	*	*	4,556	4,642	4,619	4,624	4,625
Civil Public Use Abandoned	26	16	19	10	14	27	18	16	18	14	20
Newly Established Public Use	*	*	*	*	*	*	9	3	5	16	6
Total Civil Private Use Airports	14,062	14,286	14,295	14,532	14,584	14,757	14,839	14,451	14,298	14,353	14,339
Civil Private Use Airports Abandoned	220	121	214	117	115	133	297	461	360	121	183
Newly Established Private Use	*	*	*	*	*	*	274	151	214	212	20
Military Airports	75	75	73	57	*	*	261	277	274	274	271
Total Airports by Type	19,356	19,572	19,581	19,820	19,854	19,983	20,341	19,930	19,750	19,802	19,782
Airports	*	*	*	*	*	*	13,822	13,589	13,494	13,473	13,450
Heliports	*	*	*	*	*	*	5,708	5,568	5,571	5,650	5,686
Seaplane Bases	*	*	*	*	*	*	527	503	497	496	497
Gliderports	*	*	*	*	*	*	35	35	35	35	35
Stolports	*	*	*	*	*	*	87	82	*	*	*
Balloon Ports	*	*	*	*	*	*	15	14	14	13	13
Ultralight Flightparks	*	*	*	*	*	*	147	139	139	135	131

The category "stolport" was eliminated in 2009.

The data is for December 31 for the year listed.

Certificated airports service air carrier operations with aircraft seating more than 9 passenger seats (Part 139).

Source: FAA Administrator's Factbook

4.4 U.S. Airports Ranked by Number of General Aviation Operations at Tower (2012)

Rank 2012	Facility	Airport Name and State	General Aviation Operations					Total Airport Operations	Total GA Operations	GA as % of Total	Tower Operations
			IFR GA		VFR GA		Local Civil GA				
			Itinerant	Overflight	Itinerant	Overflight					
1	DVT	Phoenix Deer Valley, AZ	5,842	449	122,946	6,297	205,136	338,486	340,670	98.6%	345,476
2	VNY	Van Nuys, CA	33,070	5,759	110,818	38,461	87,839	242,045	275,947	90.5%	304,955
3	SFB	Sanford-Orlando, FL	31,783	76	68,374	1,938	163,875	277,520	266,046	95.1%	279,622
4	DAB	Daytona Beach, FL	38,999	295	145,863	2,993	77,333	269,410	265,483	97.2%	273,074
5	GFK	Grand Forks Int'l, ND	6,304	14	10,008	262	231,046	347,581	247,634	71.2%	347,995
6	APA	Centennial Airport, CO	31,236	113	93,644	5,728	114,972	277,290	245,693	85.9%	286,092
7	PRC	Ernest A. Love Field, AZ	1,991	9	75,446	485	156,568	238,548	234,499	98.0%	239,320
8	LGB	Long Beach, CA	24,208	491	68,443	13,878	114,535	239,933	221,555	87.0%	254,663
9	TMB	Kendall-Tamiami Executive Airport, FL	21,330	249	87,728	3,785	81,174	192,428	194,266	98.7%	196,778
10	FRG	Republic Airport, NY	13,666	254	87,448	4,528	86,368	196,752	192,264	94.4%	203,704
11	HIO	Portland-Hillsboro Airpor, OR	14,786	390	51,242	3,586	120,597	192,890	190,601	96.8%	196,967
12	CHD	Chandler Municipal Airport	1,646	23	64,643	4,925	114,424	183,204	185,661	98.3%	188,920
13	SEE	Gillespie Field, CA	10,586	353	62,813	3,608	101,929	176,041	179,289	99.5%	180,270
14	MYF	Montgomery Field Airport, CA	20,892	279	64,489	9,244	81,530	169,975	176,434	97.5%	180,940
15	FFZ	Falcon Field, AZ	2,383	166	80,976	7,908	84,163	174,020	175,596	96.2%	182,513
16	SNA	John Wayne-Orange County, CA	32,008	504	58,829	11,109	68,901	245,236	171,351	66.3%	258,320
17	PAO	Palo Alto Airport, CA	5,194	2,179	63,635	7,470	88,899	159,349	167,377	97.8%	171,098
18	CNO	Chino, CA	12,454	1,187	42,373	8,415	99,061	154,916	163,490	99.2%	164,767
19	BFI	Boeing Field, King County Airport, WA	24,013	1,049	68,135	23,169	44,033	182,981	160,399	71.7%	223,837
20	DWH	David Wayne Hooks Mem. Airport	15,705	92	61,571	3,760	75,992	160,091	157,120	95.2%	164,969
21	MLB	Melbourne International Airport, FL	25,160	184	59,174	1,164	67,136	157,720	152,818	95.0%	160,943
22	RVS	Richard Lloyd Jones, OK	13,409	60	51,551	1,323	86,367	153,912	152,710	97.7%	156,241
23	PUB	Pueblo Memorial Airport, CO	5,953	26	62,213	753	81,372	158,442	150,317	94.3%	159,449
24	DTO	Denton Municipal Airport, TX	11,398	134	49,660	1,948	84,618	146,911	147,758	99.1%	149,061
25	BED	Laurence G Hanscom Field Airport, MA	24,760	309	46,983	5,478	67,069	157,601	144,599	88.0%	164,285
26	FXE	Fort Lauderdale Executive Airport, FL	31,744	354	72,263	11,431	28,496	145,396	144,288	91.2%	158,174
27	XFL	Flagler Country Airport, FL	2,332	2	36,527	184	104,466	144,443	143,511	99.2%	144,691
28	PMP	Pompano Beach Airpark, FL	5,355	6,917	34,539	12,265	84,386	124,737	143,462	98.2%	146,052
29	TOA	Torrance (Zamperini Field), CA	9,034	198	55,301	10,221	65,090	131,805	139,844	97.8%	143,004
30	VRB	Vero Beach Municipal Airport, FL	17,354	699	45,889	2,561	72,708	139,301	139,211	97.6%	142,639
31	SDL	Scottsdale Airport, AZ	21,212	51	44,404	15,181	56,371	135,936	137,219	89.5%	153,251
32	RHV	Reid-Hillview, CA	2,462	4,512	43,449	3,662	81,774	128,324	135,859	81.9%	165,962
33	BUR	Bob Hope Airport, CA	14,836	6,072	19,979	62,762	29,430	125,286	133,079	67.8%	196,231
34	EVV	New Smyrna Beach Municipal, FL	6,776	126	39,077	2,034	84,366	130,852	132,379	99.5%	133,088
35	GYR	Phoenix Goodyear Airport, AZ	756	303	50,766	3,199	76,217	133,933	131,241	94.8%	138,435
36	FPR	Saint Lucie Country Int'l Airport, FL	18,615	277	42,326	2,543	66,911	129,513	130,672	98.6%	132,476
37	PDK	Dekalb-Peachtree Airport, GA	42,420	422	45,687	8,769	33,334	134,959	130,632	88.5%	147,675
38	IWA	Phoenix-Mesa Gateway Airport, AZ	4,522	176	45,803	7,035	73,016	148,234	130,552	83.0%	157,265
39	CRQ	McClellan-Palomar Airport, CA	28,796	439	47,359	6,004	47,748	133,192	130,346	90.2%	144,561
40	CMA	Camarillo Airport, CA	11,485	4,362	49,620	4,387	58,148	122,626	128,002	94.4%	135,570
41	VGJ	North Las Vegas Airport, NV	9,701	281	41,572	5,317	68,176	130,238	125,047	90.5%	138,153
42	LVK	Livermore Municipal Airport, CA	8,625	56	41,822	2,204	71,546	122,882	124,253	99.3%	125,154
43	ISP	Long Island, Mac Arthur Airport, NY	12,912	219	38,391	2,485	69,132	140,491	123,139	85.9%	143,430
44	HWO	North Perry Airport, FL	2,080	222	41,178	5,190	72,239	115,616	120,909	99.6%	121,416
45	ISM	Kissimmee Gateway Airport, FL	21,081	0	43,912	5,086	46,408	113,657	116,487	97.5%	119,447
46	HPN	Westchester Country Airport, NY	34,801	198	50,379	1,569	27,352	170,303	114,299	66.2%	172,568
47	PTK	Oakland County International Airport, MI	22,830	276	37,435	2,516	48,482	120,789	111,539	90.2%	123,695
48	MRI	Merril Field Airport, AK	1,942	174	50,806	2,695	54,534	120,061	110,151	87.5%	125,937
49	SMO	Santa Monica, CA	16,419	98	41,846	19,043	31,962	96,549	109,368	94.1%	116,255
50	OMN	Ommond Beach Municipal Airport, FL	7,819	169	50,824	718	49,498	108,151	109,028	100.0%	109,067

General aviation operations are defined by the FAA based on the traffic operations counted in the ATADS.

Total operations include general aviation operations as well as commercial and military operations. GA does not include FAR Part 135 on-demand operations.

Source: FAA Air Traffic Activity System (ATADS)

4.5 Airport by Country, Europe, 2010–2012 Estimates

Country	Albania	Andorra	Austria	Belgium	Bosnia-Herz	Bulgaria	Croatia	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtenstein
Airports with Paved Runways	4	-	24	27	7	124	24	13	41	28	13	75	297	322	67	20	6	16	99	19	-
Over 10,000 ft	-	-	1	6	-	2	2	-	2	2	2	3	14	14	6	2	1	1	9	1	-
8,000 ft to 10,000 ft	3	-	5	9	4	17	6	6	9	7	8	26	26	48	15	6	-	1	31	3	-
5,000 ft to 8,000 ft	1	-	1	2	1	15	3	3	12	4	2	10	98	60	19	5	3	4	18	5	-
3,000 ft to 5,000 ft	-	-	4	1	-	-	3	3	2	12	1	21	83	70	18	6	2	5	29	3	-
Under 3,000 ft	-	-	13	9	2	90	10	1	16	3	-	15	76	130	9	1	-	5	12	7	-
Airports with Unpaved Runways	1	-	28	18	18	78	45	2	87	61	5	73	176	219	15	21	93	23	31	23	-
Over 10,000 ft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8,000 ft to 10,000 ft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5,000 ft to 8,000 ft	-	-	1	-	1	-	1	-	1	-	1	-	-	2	-	2	3	-	1	-	-
3,000 ft to 5,000 ft	1	-	3	-	6	6	6	-	26	2	1	3	67	32	2	8	27	2	11	-	-
Under 3,000 ft	-	-	24	16	11	72	38	2	60	59	3	70	109	185	13	11	63	21	19	23	-
Heliports	1	-	1	1	6	2	1	9	1	-	1	-	1	22	9	3	-	-	5	1	-

Country	Lithuania	Luxembourg	Macedonia	Malta	Monaco	Montenegro	Netherlands	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	Europe Total	United States
Airports with Paved Runways	26	1	10	1	-	5	20	67	86	43	26	11	19	7	98	149	41	89	272	2,197	5,194
Over 10,000 ft	3	1	-	1	-	-	2	1	5	5	4	2	2	1	18	3	3	16	7	142	189
8,000 ft to 10,000 ft	1	-	2	-	-	2	10	12	29	7	10	3	2	1	12	12	2	35	31	401	235
5,000 ft to 8,000 ft	7	-	-	-	-	1	2	11	37	8	11	3	3	1	19	74	13	17	93	566	1,479
3,000 ft to 5,000 ft	2	-	-	-	-	1	5	19	9	13	-	3	3	3	25	23	6	17	76	468	2,316
Under 3,000 ft	13	-	8	-	-	1	1	24	6	10	1	-	9	1	24	37	17	4	65	620	975
Airports with Unpaved Runways	55	1	4	-	-	1	7	31	39	22	27	19	18	9	54	81	23	9	190	1,607	9,885
Over 10,000 ft	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
8,000 ft to 10,000 ft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
5,000 ft to 8,000 ft	-	-	-	-	-	-	-	-	1	-	-	1	-	1	2	-	-	1	2	21	155
3,000 ft to 5,000 ft	2	-	1	-	-	1	3	6	17	1	6	10	10	3	14	5	-	4	25	311	1,752
Under 3,000 ft	52	1	3	-	-	-	4	25	21	21	21	8	8	5	38	76	23	4	163	1,272	7,971
Heliports	-	1	-	2	1	1	1	1	6	-	4	2	1	-	10	2	1	20	9	126	126

Source: CIA World Factbook





05

Forecast Information

5.1 FAA Forecast—U.S. General Aviation and On-Demand FAR Part 135 Aircraft

As of Dec. 31	Fixed Wing				Rotorcraft		Experimental	Light Sport Aircraft	Other	Total General Aviation Fleet
	Piston		Turbine							
	Single Engine	Multi-Engine	Turbo Prop	Turbo Jet	Piston	Turbine				
Historical										
2000	149,422	21,091	5,762	7,001	2,680	4,470	20,407	NA	6,700	217,533
2001	145,034	18,192	6,596	7,787	2,292	4,491	20,421	NA	6,633	211,446
2002	143,503	17,483	6,841	8,355	2,351	4,297	21,936	NA	6,478	211,244
2003	143,265	17,491	7,689	7,997	2,123	4,403	20,550	NA	6,088	209,606
2004	146,613	18,469	8,379	9,298	2,315	5,506	22,800	NA	5,939	219,319
2005	148,101	19,412	7,942	9,823	3,039	5,689	23,627	170	6,454	224,257
2006	145,036	18,708	8,063	10,379	3,264	5,895	23,047	1,273	6,277	221,942
2007	147,569	19,337	9,514	10,385	2,769	6,798	23,228	6,066	5,940	231,606
2008	145,497	17,515	8,907	11,042	3,498	6,378	23,364	6,811	5,652	228,664
2009	140,649	16,474	9,055	11,268	3,499	6,485	24,419	6,547	5,480	223,876
2010	139,519	15,900	9,369	11,484	3,588	6,514	24,784	6,528	5,684	223,370
2011E	138,560	15,810	9,430	11,760	3,685	6,725	24,225	6,645	5,680	222,520
Forecast										
2012	137,600	15,735	9,505	12,050	3,780	6,940	24,480	6,930	5,670	222,690
2013	136,650	15,660	9,570	12,410	3,875	7,165	24,810	7,180	5,665	222,985
2014	135,790	15,615	9,645	12,835	3,975	7,415	25,170	7,365	5,655	223,465
2015	135,010	15,570	9,720	13,340	4,075	7,675	25,500	7,530	5,650	224,070
2016	134,285	15,500	9,795	13,880	4,165	7,930	25,835	7,690	5,640	224,720
2017	133,650	15,425	9,870	14,470	4,250	8,180	26,165	7,845	5,635	225,490
2018	133,090	15,340	9,950	15,060	4,335	8,435	26,500	8,000	5,630	226,340
2019	132,645	15,260	10,030	15,650	4,420	8,685	26,830	8,160	5,625	227,305
2020	132,335	15,175	10,120	16,265	4,505	8,940	27,160	8,315	5,615	228,430
2021	132,125	15,090	10,205	16,915	4,590	9,200	27,490	8,470	5,610	229,695
2022	132,010	15,010	10,300	17,620	4,680	9,465	27,825	8,630	5,605	231,145
2023	131,975	14,935	10,400	18,370	4,775	9,745	28,155	8,785	5,600	232,740
2024	132,015	14,875	10,515	19,170	4,875	10,040	28,490	8,940	5,590	234,510
2025	132,150	14,815	10,625	20,020	4,975	10,345	28,820	9,100	5,585	236,435
2026	132,370	14,745	10,740	20,865	5,075	10,650	29,150	9,255	5,580	238,430
2027	132,660	14,680	10,860	21,760	5,180	10,965	29,480	9,410	5,575	240,570
2028	133,020	14,610	10,975	22,700	5,285	11,275	29,815	9,570	5,570	242,820
2029	133,470	14,540	11,090	23,690	5,390	11,590	30,145	9,725	5,560	245,200
2030	134,000	14,470	11,205	24,730	5,495	11,905	30,480	9,880	5,555	247,720
2031	134,625	14,405	11,320	25,805	5,600	12,225	30,810	10,040	5,550	250,380
2032	135,340	14,350	11,445	26,935	5,705	12,550	31,140	10,195	5,545	253,205
Avg. Annual Growth	-0.1%	-0.5%	0.9%	4.0%	2.1%	3.0%	1.2%	2.1%	-0.1%	0.6%

E = Estimated

Historical data is from 2000-2010, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.

Source: FAA 2012–2032 Aerospace Forecast

5.2 FAA Forecast—U.S. General Aviation and On-Demand FAR Part 135 Aircraft Hours Flown (in Thousands)

As of Dec. 31	Fixed Wing				Rotorcraft		Experimental	Light Sport Aircraft	Other	Total General Aviation Fleet
	Piston		Turbine							
	Single Engine	Multi-Engine	Turboprop	Turbojet	Piston	Turbine				
Historical										
2000	18,089	3,400	1,986	2,755	530	1,661	1,307	NA	374	30,102
2001	16,549	2,644	1,773	2,654	474	1,478	1,157	NA	287	27,016
2002	16,325	2,566	1,850	2,745	453	1,422	1,345	NA	333	27,039
2003	16,680	2,317	1,922	2,704	448	1,687	1,293	NA	264	27,315
2004	15,363	2,763	2,161	3,719	514	2,020	1,322	NA	249	28,111
2005	13,739	2,677	2,106	3,771	617	2,439	1,339	9	267	26,964
2006	13,976	2,550	2,162	4,077	918	2,528	1,218	66	211	27,705
2007	13,571	2,686	2,661	3,938	704	2,541	1,275	260	215	27,852
2008	12,746	2,328	2,457	3,600	751	2,470	1,155	293	209	26,009
2009	11,730	1,903	2,215	3,161	755	2,248	1,286	286	178	23,763
2010	12,161	1,818	2,325	3,375	794	2,611	1,226	311	181	24,802
2011E	11,841	1,780	2,324	3,394	789	2,561	1,211	317	181	24,397
Forecast										
2012	11,391	1,776	2,409	4,037	812	2,550	1,236	337	182	24,728
2013	11,091	1,758	2,471	4,330	834	2,611	1,315	356	183	24,949
2014	10,820	1,744	2,523	4,605	858	2,674	1,401	372	183	25,180
2015	10,594	1,728	2,554	4,865	881	2,739	1,462	388	184	25,396
2016	10,409	1,703	2,591	5,106	903	2,819	1,525	404	185	25,645
2017	10,285	1,689	2,624	5,321	924	2,903	1,591	421	185	25,943
2018	10,205	1,678	2,657	5,558	944	2,988	1,627	438	186	26,281
2019	10,150	1,668	2,685	5,774	965	3,071	1,664	455	187	26,619
2020	10,125	1,667	2,704	6,009	986	3,156	1,702	473	188	27,009
2021	10,092	1,665	2,723	6,251	1,006	3,242	1,731	487	188	27,387
2022	10,124	1,667	2,745	6,516	1,028	3,336	1,761	501	189	27,866
2023	10,159	1,668	2,762	6,802	1,051	3,431	1,791	515	190	28,368
2024	10,247	1,673	2,782	7,102	1,075	3,531	1,821	530	190	28,951
2025	10,391	1,675	2,802	7,420	1,099	3,636	1,851	544	191	29,610
2026	10,545	1,684	2,822	7,726	1,124	3,742	1,882	559	192	30,276
2027	10,708	1,696	2,841	8,044	1,149	3,852	1,913	574	193	30,970
2028	10,866	1,709	2,859	8,381	1,174	3,963	1,944	590	193	31,678
2029	10,997	1,719	2,879	8,753	1,200	4,076	1,975	605	194	32,398
2030	11,145	1,729	2,897	9,149	1,225	4,191	2,007	621	195	33,159
2031	11,300	1,743	2,912	9,557	1,250	4,313	2,039	637	196	33,948
2032	11,467	1,760	2,930	9,987	1,275	4,438	2,071	654	197	34,779
Avg. Annual Growth	-0.2%	-0.1%	1.1%	5.3%	2.3%	2.7%	2.6%	3.5%	0.4%	1.7%

E = Estimated

Historical data is from 2000-2010, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.

Source: FAA 2012–2032 Aerospace Forecast

5.3 FAA Forecast—U.S. General Aviation and On-Demand Part 135 Aircraft Fuel Consumption (in Millions of Gallons)

As of Dec. 31	Fixed Wing				Rotorcraft		Experimental	Light Sport Aircraft	Total Fuel Consumed		
	Piston		Turbine								
	Single Engine	Multi-Engine	Turboprop	Turbojet	Piston	Turbine			AvGas	Jet Fuel	Total
Historical											
2000	200.8	108.4	176.3	736.7	8.4	59.0	15.2	NA	332.8	972.0	1,304.8
2001	180.4	76.4	149.1	726.7	7.2	42.6	15.3	NA	279.2	918.4	1,197.6
2002	177.9	74.2	152.3	745.5	6.9	40.5	17.8	NA	276.7	938.3	1,215.0
2003	181.8	66.7	154.5	729.0	6.8	48.8	17.1	NA	272.4	932.3	1,204.7
2004	167.5	80.1	167.0	1,004.9	7.9	59.0	17.5	NA	272.9	1,230.9	1,503.8
2005	173.1	89.7	196.1	1,181.3	14.6	149.2	17.7	0.0	295.0	1,526.7	1,821.7
2006	164.9	79.9	190.1	1,303.9	16.7	148.6	21.6	0.3	283.4	1,642.6	1,926.0
2007	157.6	83.0	205.2	1,148.0	9.3	132.4	22.6	1.2	273.6	1,485.6	1,759.2
2008	143.0	69.5	230.4	1,313.2	10.7	162.1	23.3	1.5	248.1	1,705.7	1,953.8
2009	132.3	57.1	208.7	1,104.6	10.7	133.6	25.8	1.4	227.4	1,447.0	1,674.4
2010	133.1	53.9	187.1	1,122.9	10.7	124.8	21.6	1.5	220.7	1,434.8	1,655.6
2011E	129.0	52.4	188.0	1,123.6	10.5	121.8	21.3	1.5	214.8	1,433.4	1,648.1
Forecast											
2012	124.1	52.3	194.9	1,336.3	10.7	120.1	21.7	1.6	210.5	1,651.2	1,861.7
2013	120.8	51.8	197.9	1,426.3	11.0	122.3	23.1	1.7	208.4	1,746.5	1,954.9
2014	117.9	51.7	202.1	1,509.2	11.2	124.7	24.5	1.7	207.0	1,835.9	2,042.9
2015	114.8	51.2	204.5	1,586.6	11.5	127.0	25.6	1.8	205.0	1,918.2	2,123.1
2016	112.8	50.2	205.4	1,656.7	11.8	129.4	26.6	1.9	203.3	1,991.6	2,194.8
2017	111.5	49.8	208.1	1,717.8	12.1	132.6	27.7	1.9	203.0	2,058.5	2,261.5
2018	110.6	49.4	210.7	1,785.3	12.4	135.8	28.4	2.0	202.8	2,131.9	2,334.7
2019	110.0	49.1	212.9	1,845.6	12.6	139.6	29.0	2.1	202.9	2,198.1	2,401.0
2020	109.2	49.1	213.3	1,911.0	12.9	143.5	29.7	2.2	203.1	2,267.8	2,470.8
2021	107.7	48.6	212.7	1,968.1	13.1	145.9	29.9	2.2	201.5	2,326.7	2,528.3
2022	108.1	48.6	214.4	2,031.0	13.4	149.4	30.4	2.3	202.8	2,394.8	2,597.5
2023	108.4	48.7	215.8	2,098.9	13.7	152.9	30.9	2.4	204.1	2,467.5	2,671.6
2024	109.4	48.8	217.3	2,169.5	14.0	156.5	31.4	2.4	206.0	2,543.4	2,749.4
2025	109.8	48.9	218.9	2,244.0	14.3	161.2	31.9	2.5	207.4	2,624.0	2,831.5
2026	110.3	49.1	218.2	2,313.4	14.6	164.2	32.1	2.5	208.7	2,695.8	2,904.5
2027	111.5	49.5	217.5	2,384.3	14.9	168.2	32.7	2.6	211.1	2,770.1	2,981.2
2028	112.6	49.9	218.8	2,459.4	15.2	172.2	33.2	2.7	213.5	2,850.4	3,063.9
2029	113.3	50.2	220.4	2,542.8	15.6	177.1	33.7	2.7	215.5	2,940.3	3,155.8
2030	114.3	50.5	221.7	2,631.5	15.9	180.3	34.3	2.8	217.7	3,033.5	3,251.3
2031	115.3	50.9	223.0	2,721.3	16.2	185.5	34.8	2.9	220.1	3,129.7	3,349.8
2032	116.4	51.3	224.3	2,815.2	16.5	190.9	35.4	3.0	222.6	3,230.4	3,453.1
Avg. Annual Growth	-0.5%	-0.1%	0.8%	4.5%	2.2%	2.2%	2.4%	3.3%	0.2%	3.9%	3.6%

E = Estimated

Source: FAA 2012–2032 Aerospace Forecast

5.4 FAA Forecast—U.S. Pilot Population

As of Dec. 31	Students	Recreational	Sport Pilot	Private	Commercial	Airline Transport Pilot	Rotorcraft Only	Glider Only	Total Pilots
Historical									
2000	93,064	340	NA	251,561	121,858	141,596	7,775	9,387	625,581
2001	94,420	316	NA	243,823	120,502	144,702	7,727	8,473	619,963
2002	85,991	317	NA	245,230	125,920	144,708	7,770	21,826	609,936
2003	87,296	310	NA	241,045	123,990	143,504	7,916	20,950	625,011
2004	87,910	291	NA	235,994	122,592	142,160	8,586	21,100	618,633
2005	87,213	278	134	228,619	120,614	141,992	9,518	21,369	609,737
2006	84,866	239	939	219,233	117,610	141,935	10,690	21,597	597,109
2007	84,339	239	2,031	211,096	115,127	143,953	12,290	21,274	590,349
2008	80,989	252	2,623	222,596	124,746	146,838	14,647	21,055	613,746
2009	72,280	234	3,248	211,619	125,738	144,600	15,298	21,268	594,285
2010	119,119	212	3,682	202,020	123,705	142,198	15,377	21,275	627,588
2011	118,657	227	4,066	194,441	120,865	142,511	15,220	21,141	617,128
Forecast									
2012	117,340	230	4,800	193,000	119,200	142,500	15,225	21,165	613,460
2013	116,140	230	5,550	192,200	114,250	143,100	15,365	21,200	608,035
2014	115,050	230	5,850	191,300	118,600	143,700	15,630	21,220	611,580
2015	114,115	230	6,150	190,550	118,950	144,500	16,000	21,260	611,755
2016	113,335	230	6,500	189,800	119,000	145,200	16,445	21,275	611,785
2017	112,765	230	6,850	189,250	119,050	145,900	16,955	21,315	612,315
2018	112,370	230	7,200	188,850	119,200	146,600	17,550	21,350	613,350
2019	112,105	230	7,600	188,750	119,450	147,400	18,150	21,390	615,075
2020	111,950	230	8,000	188,800	119,750	148,100	18,800	21,405	617,035
2021	111,820	225	8,400	189,100	120,150	148,900	19,450	21,445	619,490
2022	111,860	225	8,800	189,600	120,650	149,800	20,100	21,480	622,515
2023	111,960	225	9,200	190,300	121,250	150,700	20,800	21,520	625,955
2024	112,225	225	9,650	191,250	122,000	151,600	21,550	21,535	630,035
2025	112,685	225	10,100	192,250	122,750	152,600	22,300	21,570	634,480
2026	113,230	220	10,600	193,250	123,550	153,600	23,100	21,610	639,160
2027	113,830	220	11,100	194,300	124,450	154,700	23,900	21,645	644,145
2028	114,430	220	11,600	195,400	125,450	155,700	24,750	21,680	649,230
2029	114,965	220	12,150	196,300	126,500	156,800	25,600	21,700	654,235
2030	115,520	220	12,700	197,350	127,600	158,000	26,450	21,735	659,575
2031	116,100	220	13,300	198,250	128,800	159,100	27,350	21,770	664,890
2032	116,720	220	13,900	199,300	130,100	160,300	28,250	21,805	670,595
Avg. Annual Growth	-0.1%	-0.1%	6.0%	0.1%	0.4%	0.6%	3.0%	0.1%	0.4%

E = Estimated

Source: FAA 2012–2032 Aerospace Forecast

Except for sport pilots, an active pilot is a person with a pilot certificate with a valid medical certificate.

In March 2001, the FAA changed the definition of glider pilot only. This added approximately 13,000 to this pilot category in 2002.

In July 2010, the FAA issued a rule that increased the duration of validity for student pilot certificates for pilots under the age of 40 from 36 to 60 months. This resulted in the increase in active student pilots to 119,119 from 72,280 at the end of 2009.





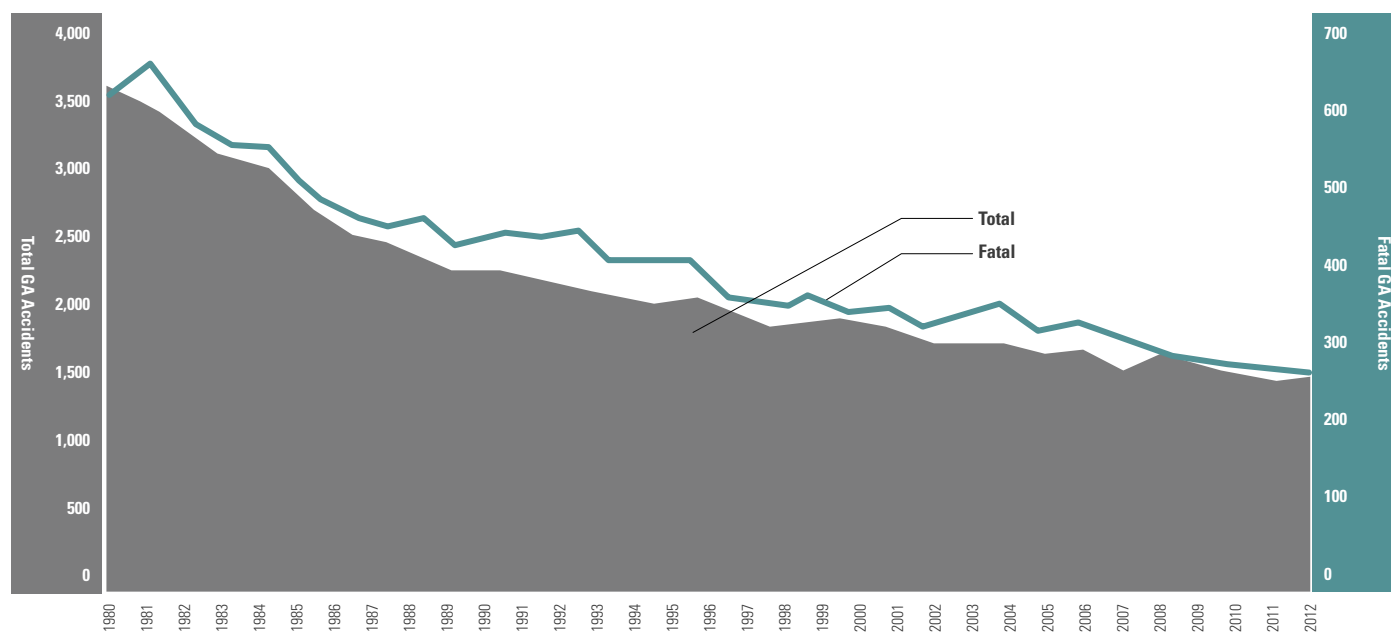
06

General Aviation Safety Data

6.1 U.S. General Aviation Accidents, Fatal Accidents, and Fatalities (1938–2012) (CONTINUED ON NEXT PAGE)

Year	Accidents		Accidents		Fatalities		Flight Hours	Rate	
	All	Excluded	Fatal	Excluded	Total	Aboard		All	Fatal
1938	1,861	*	176	*	*	*	1,478,000	125.90	11.90
1939	2,222	*	203	*	*	*	1,922,000	115.60	10.60
1940	3,471	*	232	*	*	*	3,202,000	108.40	7.30
1941	4,252	*	217	*	*	*	4,462,000	95.30	4.90
1942	3,324	*	143	*	*	*	3,790,000	87.70	3.80
1943	3,871	*	167	*	*	*	*	*	*
1944	3,343	*	169	*	*	*	*	*	*
1945	4,652	*	322	*	*	*	*	*	*
1946	7,618	*	690	*	*	*	9,792,000	77.80	7.00
1947	9,253	*	882	*	*	*	16,348,000	56.60	5.30
1948	7,850	*	850	*	*	*	15,154,000	51.80	5.60
1949	5,459	*	562	*	*	*	11,051,000	49.40	5.00
1950	4,505	*	499	*	*	*	9,667,000	46.60	5.10
1951	3,824	*	441	*	*	*	8,460,000	45.20	5.20
1952	3,657	*	401	*	*	*	8,200,000	44.60	4.80
1953	3,232	*	387	*	*	*	8,528,000	37.90	4.50
1954	3,381	*	393	*	*	*	8,968,000	37.70	4.30
1955	3,343	*	384	*	*	*	9,524,000	35.10	4.00
1956	3,474	*	356	*	*	*	10,218,000	34.00	3.40
1957	4,200	*	438	*	*	*	10,938,000	38.40	4.00
1958	4,584	*	384	*	*	*	12,593,000	36.40	3.10
1959	4,576	*	450	*	*	*	12,890,000	35.50	3.50
1960	4,793	*	429	*	*	*	13,132,000	36.50	3.27
1961	4,625	*	426	*	*	*	13,603,000	34.00	3.13
1962	4,840	*	430	*	*	*	14,491,000	33.40	2.97
1963	4,690	*	482	*	*	*	15,129,000	31.00	3.19
1964	5,069	*	526	*	*	*	15,742,000	32.20	3.34
1965	5,196	*	538	*	*	*	16,707,000	31.10	3.22
1966	5,712	*	573	*	*	*	21,000,000	27.20	2.73
1967	6,115	*	603	*	*	*	22,156,000	27.60	2.72
1968	4,968	*	692	*	*	*	24,117,000	20.60	2.86
1969	4,767	*	647	*	*	*	25,356,000	18.80	2.55
1970	4,712	*	641	*	*	*	26,033,000	18.10	2.46
1971	4,648	*	661	*	*	*	25,538,000	18.20	2.59
1972	4,256	*	695	*	*	*	26,937,000	15.80	2.67
1973	4,255	*	723	*	*	*	29,965,000	14.20	2.52
1974	4,234	*	689	*	*	*	27,855,000	15.20	2.47
1975	4,001	*	636	*	*	*	28,784,000	13.90	2.20

FIGURE 6.1 Accidents in U.S. General Aviation (1980–2012)



P = Preliminary, R = Revised

6.1 U.S. General Aviation Accidents, Fatal Accidents, and Fatalities (1938–2012) (CONTINUED FROM PREVIOUS PAGE)

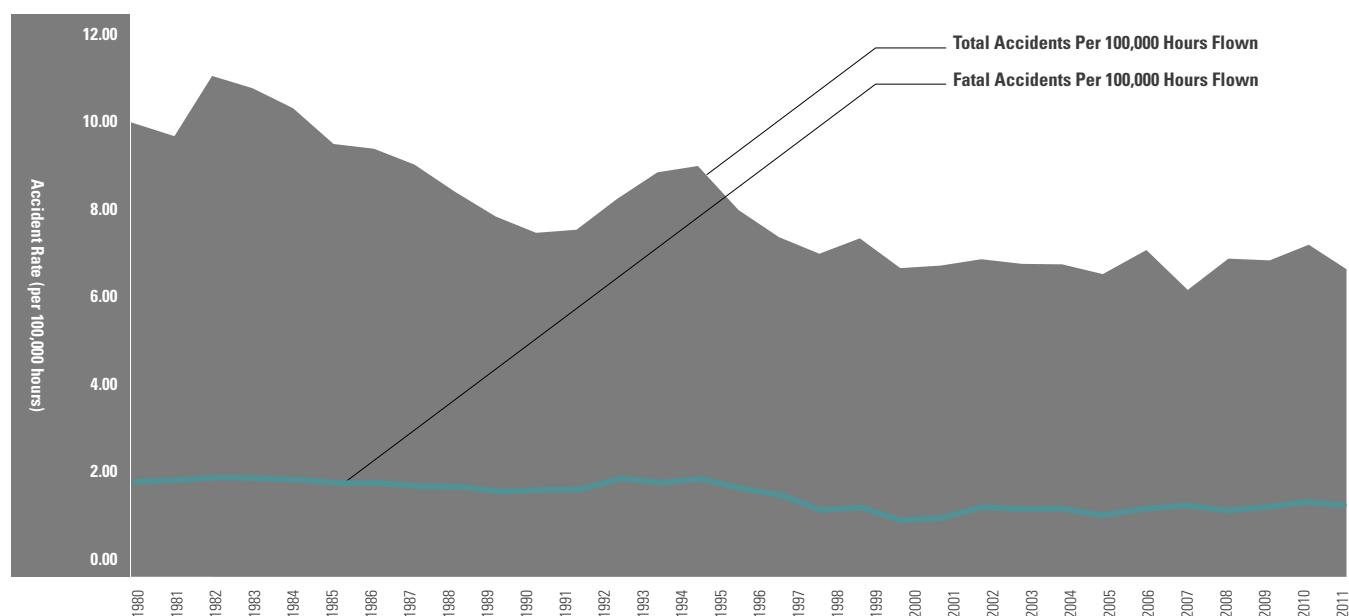
Year	Accidents		Accidents		Fatalities		Flight Hours	Rate	
	All	Excluded	Fatal	Excluded	Total	Aboard		All	Fatal
1976	4,023	*	662	*	*	*	30,477,000	13.20	2.16
1977	4,083	*	663	*	*	*	31,651,000	12.90	2.09
1978	4,218	*	721	*	*	*	34,860,000	12.10	2.06
1979	3,625	*	636	*	*	*	36,690,000	9.88	1.63
1980	3,597	*	622	*	*	*	36,481,000	9.86	1.69
1981	3,502	*	654	*	*	*	36,824,000	9.51	1.78
1982	3,233	*	591	*	1187	1170	29,640,000	10.91	1.99
1983	3,075	15	555	5	1068	1061	28,673,000	10.67	1.92
1984	3,017	26	545	11	1042	1021	29,099,000	10.28	1.84
1985	2,739	11	498	6	956	945	28,322,000	9.63	1.73
1986	2,581	11	474	5	967	879	27,073,000	9.49	1.73
1987	2,495	18	446	7	837	822	26,972,000	9.18	1.62
1988	2,388	13	460	4	797	792	27,446,000	8.65	1.66
1989	2,242	17	432	8	769	766	27,920,000	7.97	1.52
1990	2,242	4	444	1	770	765	28,510,000	7.85	1.55
1991	2,197	8	439	5	800	786	27,678,000	7.91	1.57
1992	2,110	2	450	1	866	864	24,780,000	8.51	1.81
1993	2,064	5	401	4	744	740	22,796,000	9.03	1.74
1994	2,021	3	404	2	730	723	22,235,000	9.08	1.81
1995	2,055	10	412	6	734	727	24,906,000	8.21	1.63
1996	1,908	4	361	0	636	619	24,881,000	7.65	1.45
1997	1,840	5	350	2	631	625	25,591,000	7.17	1.36
1998	1,902	6	364	4	624	618	25,518,000	7.43	1.41
1999	1,905	3	340	1	621	615	29,246,000	6.50	1.16
2000	1,837	7	345	7	596	585	27,838,000	6.57	1.21
2001	1,727	3	325	1	562	558	25,431,000	6.78	1.27
2002	1,716	7	345	6	581	575	25,545,000	6.69	1.33
2003	1,741	4	352	3	633	630	25,998,000	6.68	1.34
2004	1,619	3	314	0	559	559	24,888,000	6.49	1.26
2005	1,671	2	321	1	563	558	23,168,000	7.20	1.38
2006	1,523	2	308	1	706	547	23,963,000	6.35	1.28
2007	1,653	2	288	2	496	491	23,819,000	6.93	1.20
2008	1,569	2	276	0	495	486	22,805,000	6.87	1.21
2009	1,480	3	275	0	479	470	20,862,000	7.08	1.32
2010	1,439	2	268	1	454	451	21,688,000	6.63	1.23
2011	1,466	0	263	0	444	433	22,514,000	6.51	1.17
2012	1,422	*	270	*	*	*	*	*	*

P = Preliminary, R = Revised since previous NTSB annual update.

Source: NTSB, FAA, and GAMA

General Aviation as defined by NTSB includes operations under Part 91, Part 91K, Part 125, Part 133 and Part 137 for the purpose of accident statistics. Excluded "Accidents" and "Fatalities" are suicide/sabotage and stolen/unauthorized events, which are not included in rates.

FIGURE 6.2 Accident Rates in U.S. General Aviation (1980–2011)



6.2 U.S. On-Demand FAR Part 135 Accidents, Fatal Accidents, and Fatalities (1987–2012)

Year	Accidents		Accidents		Fatalities		Flight Hours	Rate	
	All	Excluded	Fatal	Excluded	Total	Aboard		All	Fatal
1987	96	*	30	*	65	63	2,657,000	3.61	1.13
1988	102	*	28	*	59	55	2,632,000	3.88	1.06
1989	110	*	25	*	83	81	3,020,000	3.64	0.83
1990	107	*	29	*	51	49	2,249,000	4.76	1.29
1991	88	*	28	*	78	74	2,241,000	3.93	1.25
1992	76	*	24	*	68	65	2,844,000	2.67	0.84
1993	69	*	19	*	42	42	2,324,000	2.97	0.82
1994	85	*	26	*	63	62	2,465,000	3.45	1.05
1995	75	*	24	*	52	52	2,486,000	3.02	0.97
1996	90	*	29	*	63	63	3,220,000	2.80	0.90
1997	82	*	15	*	39	39	3,098,000	2.65	0.48
1998	77	*	17	*	45	41	3,802,000	2.03	0.45
1999	74	*	12	*	38	38	3,204,000	2.31	0.37
2000	80	*	22	*	71	68	3,930,000	2.04	0.56
2001	72	*	18	*	60	59	2,997,000	2.40	0.60
2002	60	*	18	*	35	35	2,911,000	2.06	0.62
2003	73	*	18	*	42	40	2,927,000	2.49	0.61
2004	66	*	23	*	64	63	3,238,000	2.04	0.71
2005	65	*	11	*	18	16	3,815,000	1.70	0.29
2006	52	*	10	*	16	16	3,742,000	1.39	0.27
2007	62	*	14	*	43	43	4,033,000	1.54	0.35
2008	58	*	20	*	69	69	3,205,000	1.81	0.62
2009	47	*	2	*	17	14	2,901,000	1.62	0.07
2010	31	*	6	*	17	17	3,113,000	0.99	0.19
2011	50	*	16	*	41	41	3,325,000	1.50	0.48
2012P	40	*	9	*	*	*	*	*	*

P = Preliminary, R = Revised

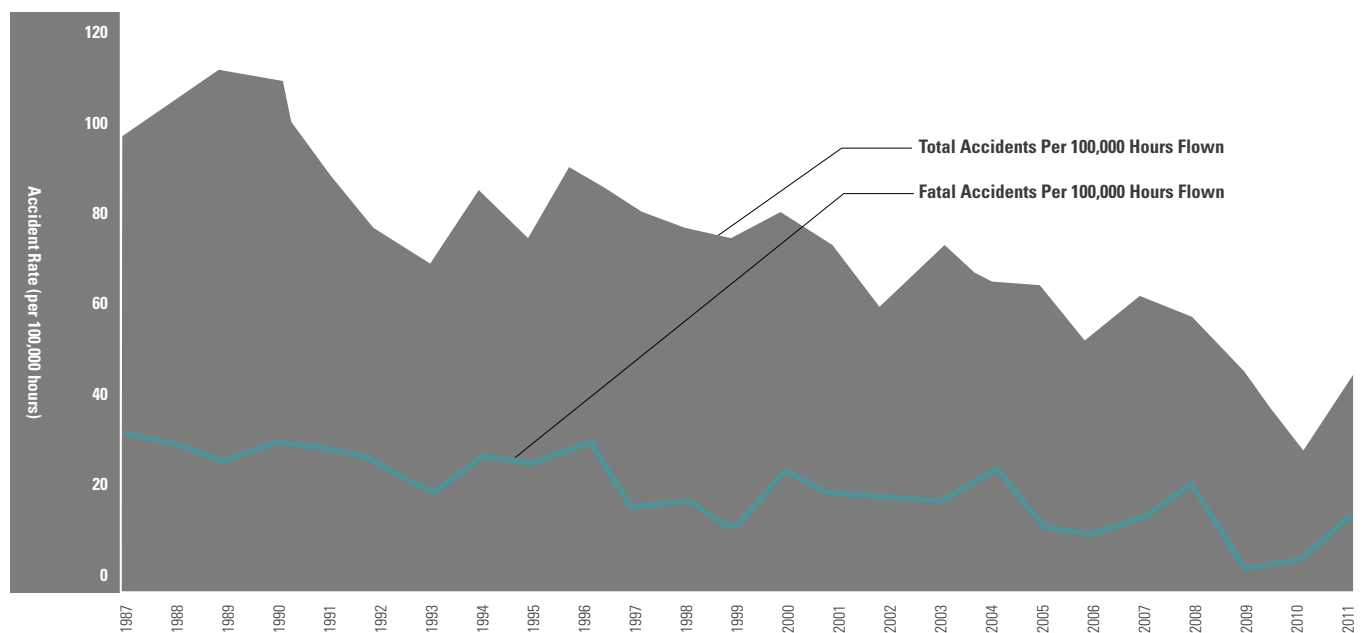
Source: NTSB

Excluded "Accidents" and "Fatalities" are suicide/sabotage and stolen/unauthorized events, which are not included in rates.

In 2002, FAA changed their estimate of air taxi activity. The revision was retroactively applied to the years 1992 to present. In 2003, the FAA again revised flight activity estimates for 1999 to 2002. See Table 9a for further details surrounding this revision.

U.S. air carriers operating under 14 CFR Part 135 were previously referred to as Scheduled and Nonscheduled Services. Current tables now refer to these same air carriers as Commuter Operations and On-Demand Operations, respectively, in order to be consistent with definitions in 14 CFR 119.3 and terminology used in 14 CFR 135.1. On-Demand Part 135 operations encompass charters, air taxis, air tours, or medical services (when a patient is on board).

FIGURE 6.3 Accident Rates in U.S. On-Demand FAR Part 135 Operations (1987–2011)



6.3 European Union General Aviation and Aerial Work Accident Data (2006–2011)

Year	Aircraft with Mass Below 2,250 Kg				Aircraft with Mass Above 2,250 Kg				All Aircraft	
	Accidents		Fatalities		Accidents		Fatalities		Accidents	
	Total	Fatal	On Board	Ground	Total	Fatal	On Board	Ground	Total	Fatal
2006	1,121	151	231	3	36	10	29	-	1,157	161
2007	1,157	142	238	5	30	10	18	1	1,187	152
2008	1,145	140	216	2	32	10	23	1	1,177	150
2009	1,234	163	253	4	19	9	18	-	1,253	172
2010	1,047	129	189	1	31	6	14	-	1,078	135
2011	1,109	169	253	1	34	12	29	-	1,143	181

The European Aviation Safety Agency (EASA) includes aircraft registered in Member States that are balloon, aeroplane, glider, gyroplane, helicopter, microlight, motorgliders and other aircraft among general aviation accidents that occurred in general aviation operations and while conducting aerial work.

Data from 2006–2008 does not include Italy, Liechtenstein, Luxembourg and Slovenia.

Source: EASA Annual Safety Review







07

International GA
Statistical Information

7.1 Australia—Number of General Aviation and Regional Aircraft by Category (1995–2010)

Year	Aircraft Type					Total
	Amateur Built	Fixed Wing		Rotorcraft	Balloon & Airship	
		Single Engine	Mutli Engine			
1995	*	6,787	1,779	739	243	9,548
1996	*	6,861	1,799	739	266	9,665
1997	*	6,994	1,803	768	284	9,849
1998	*	7,137	1,783	791	295	10,006
1999	*	7,247	1,743	868	310	10,168
2000	*	7,302	1,755	743	325	10,125
2001	673	6,680	1,736	979	334	10,402
2002	707	6,668	1,706	1,038	336	10,455
2003	789	6,727	1,696	1,121	338	10,671
2004	848	6,794	1,718	1,194	350	10,904
2005	896	6,908	1,733	1,292	351	11,180
2006	910	6,838	1,730	1,320	319	11,117
2007	968	6,955	1,804	1,481	333	11,541
2008	1,037	7,180	1,871	1,619	338	12,045
2009	1,071	7,230	1,885	1,703	340	12,229
2010	1,111	7,375	1,932	1,800	346	12,564

Prior to 2000, Amateur Built are included in Fixed Wing Single Engine

Source: Statistical Report, General Aviation Activity, Dept. of Transportation and Regional Services, Bureau of Transport and Regional Economics, www.bitre.gov.au

7.2 Austria—Number of General Aviation Aircraft by Type (2011–2012)

Year	Aircraft Type								Total Aircraft
	Airplanes				Helicopter				
	Below 1,999 kg	2,000 - 5,699 kg	Above 5,700kg	Motor Glider	Single Engine	Multi Engine	Gyroplane	Federal Aircraft	
2011	723	110	323	186	99	57	5	17	1,520
2012	706	102	331	184	95	51	5	17	1,491

Source: Austrocontrol at www.austrocontrol.at

7.3 Brazil—Number of Aircraft Registrations by Type (1996–2012)

Year	Aircraft Type									Total Aircraft
	Airplanes				Other Aircraft					
	Piston Engine	Agricultural	Turboprop	Jet Turbine	Helicopter	Sailplane	Ballon	Dirigible	Experimental	
1996	7,987	*	1,013	462	547	302	4	*	*	10,315
1997	8,055	*	1,111	488	649	304	4	*	*	10,611
1998	8,172	*	1,182	513	749	306	4	1	*	10,927
1999	8,273	684	1,192	497	791	307	4	1	3,152	14,217
2000	8,333	724	1,218	500	841	308	4	1	3,348	14,553
2001	8,412	767	1,260	542	897	309	3	1	3,513	14,937
2002	8,445	810	1,303	579	940	310	3	1	3,684	15,265
2003	8,496	862	1,323	560	955	316	3	1	3,882	15,536
2004	8,604	900	1,348	559	981	316	3	1	4,069	15,881
2005	8,718	955	1,361	596	989	316	3	1	4,286	16,270
2006	8,798	978	1,399	603	1,011	309	3	1	3,001	15,125
2007	8,909	1,005	1,488	647	1,097	303	3	1	3,225	15,673
2008	9,164	1,049	1,617	773	1,194	299	3	1	3,525	16,576
2009	9,354	1,044	1,700	820	1,325	3,000	3	1	3,764	19,765
2010	*	1,581	*	*	1,524	*	*	*	4,051	*
2011	*	1,695	*	*	1,717	*	*	*	4,474	*
2012	*	1,800	*	*	1,909	*	*	*	4,750	*

The experimental category includes ultra-lights, balloons, gyrocopters, sailplanes, motorpowered sailplanes, dirigibles, and experimental airplanes. From 2006, for statistical purposes, only re-registered ultra-lights were included. ANAC began identification of Agricultural aircraft in 2012. The data set for agricultural aircraft captures aircraft also identified in other columns.

Source: Agência Nacional de Aviação Civil (ANAC), Brazil www.anac.gov.br

7.4a Canada—Number of Aircraft Registrations by Type and Weight Group (1983–1999)

Year	Number of Registered Aircraft by Type						By Weight Group		Total Aircraft
	Aeroplane	Ultralight	Helicopter	Glider	Balloon	Gyroplanes	<= 12,500 lbs	> 12,500 lbs	
1983	22,354	1,282	1,410	560	177	116	*	*	25,899
1984	22,330	1,971	1,326	572	197	118	*	*	26,514
1985	22,231	2,376	1,276	582	219	117	*	*	26,801
1986	22,105	2,706	1,264	589	247	116	*	*	27,027
1987	22,270	2,946	1,299	602	279	121	*	*	27,517
1988	22,469	3,105	1,338	613	308	122	*	*	27,955
1989	22,463	3,212	1,366	614	339	127	*	*	28,121
1990	22,278	3,363	1,416	609	361	128	27,173	982	28,155
1991	21,973	3,477	1,433	601	384	135	23,553	981	28,003
1992	21,795	3,607	1,502	602	405	155	27,070	996	28,066
1993	21,452	3,744	1,533	597	424	162	26,977	935	27,912
1994	21,212	3,840	1,582	601	444	169	26,885	963	27,848
1995	21,169	3,956	1,605	601	440	166	26,914	1,023	27,937
1996	21,089	4,070	1,643	592	440	168	26,919	1,084	28,002
1997	20,985	4,208	1,655	587	450	169	26,862	1,192	28,054
1998	20,830	4,305	1,676	592	440	174	26,809	1,208	28,017
1999	20,768	4,346	1,711	596	444	182	26,783	1,264	28,047

7.4b Canada—Number of Aircraft Registrations by Type and Weight (2000–2012)

Year	Private Registrations						Total Private	Commercial Registrations		Total Aircraft	Total Aircraft
	Normal	Restricted	Amateur Built	Ultra-Light	Experimental	Owner Maintained		Normal	Restricted		
2000	14,278	309	2,618	4,467	61	*	21,733	5,843	404	262	28,242
2001	14,252	386	2,706	4,584	43	*	21,971	5,856	397	269	28,493
2002	14,206	291	2,777	4,746	44	192	22,256	5,792	429	267	28,744
2003	14,258	312	2,893	4,922	39	226	22,650	5,766	435	261	29,112
2004	14,357	329	2,993	5,123	29	292	23,123	5,761	467	263	29,614
2005	14,573	361	3,120	5,339	26	352	23,771	5,734	467	272	30,244
2006	14,781	382	3,251	5,568	27	388	24,397	5,842	502	277	31,018
2007	15,037	444	3,376	5,745	33	421	25,056	6,022	535	273	31,886
2008	15,336	542	3,510	5,985	30	456	25,859	6,212	589	273	32,933
2009	15,532	571	3,635	6,184	31	483	26,436	6,234	598	265	33,533
2010	15,706	657	3,744	6,396	31	519	27,053	6,268	593	261	34,175
2011	15,934	749	3,881	6,585	32	546	27,727	6,336	619	265	34,947
2012	16,106	769	3,979	6,803	31	583	28,271	6,387	624	258	35,540

Transport Canada has changed how it publishes aircraft registry statistics.
GAMA is including historical data in the old format and 2000 and later data in the new format.

Source: Transport Canada and Canadian Civil Aircraft Registry www.tc.gc.ca

7.5 China—Number of Aircraft (2012)

Year	Airplane						Helicopter	Balloon	Airship	Other	Total Aircraft
	Piston Engine		Turbine		Agricultural	Amphibious					
	Single	Twin	Turboprop	Turbojet							
2012	705	102	129	2,134	*	*	298	21	6	*	3,395

Aircraft statistics by type based on GAMA analysis of B-registry data.
Other aircraft include light sport aircraft, ultralight, and experimental aircraft.
Turbojet data includes scheduled airlines.

Source: GAMA

7.6 France—Number of General Aviation Aircraft by Type (1990–2010)

Year	Activity at Aeroclubs														Total Aircraft
	Airplanes			Gliders			Helicopters			Hand Gliders		Ultralight			
	Number of Aircraft	Hours Flown	Active Pilots	Number of Aircraft	Hours Flown	Active Pilots	Number of Aircraft	Hours Flown	Active Pilots	Number of Vehicles	Number of Pilots	Number of Aircraft	Hours Flown	Active Pilots	
1990	*	836,248	50,665	*	332,217	12,415	*	*	296	*	23,405	*	*	5,238	*
1995	*	699,892	47,397	*	322,874	11,389	*	6,015	324	*	26,162	*	*	5,360	*
2000	*	693,681	46,501	*	270,834	10,430	*	3,501	302	*	23,009	*	*	7,501	*
2004	2,096	643,845	44,937	1,808	267,902	10,837	*	5,672	432	*	18,553	*	191,061	9,842	*
2005	2,109	645,138	44,045	1,989	260,578	10,374	*	*	403	18,200	17,985	6,866	304,374	10,532	29,164
2006	2,103	619,323	43,266	1,956	240,739	10,311	*	*	403	18,500	18,296	6,993	371,838	11,262	29,552
2007	2,054	597,238	42,730	2,050	226,995	10,219	*	*	316	18,700	18,147	8,049	376,710	12,496	30,853
2008	2,057	568,704	41,266	1,853	228,000	9,951	*	4,120	249	18,900	18,354	8,214	378,032	13,108	31,024
2009	2,029	582,054	40,187	1,958	255,576	9,633	*	*	223	19,200	19,371	8,534	386,084	13,398	31,721
2010	1,980	558,730	40,113	2,353	247,381	9,668	*	3,320	193	19,700	19,949	8,713	376,477	13,534	32,746

Active pilots includes student pilots

Gliders include motor gliders, towed gliders, and gliders launched by winch. Starting in 2005.

Source: French DGAC, Observatoire de l'Aviation civile at www.developpement-durable.gouv.fr

7.7 Germany—Number of General Aviation Aircraft by Type (2001–2012)

Year	Aircraft Type												Total Aircraft
	Airplanes							Helicopters	Motor Gliders	Air Ships	Balloons	Gliders	
	Single Engine		Multi-Engine		5,701 kg to 14,000 kg	14,001 kg to 20,000 kg	Above 20,000 kg						
	Below 2,000 kg	2,000 to 5,700 kg	Below 2,000 kg	2,000 to 5,700 kg									
2001	6,813	95	207	476	191	60	612	721	2,434	5	1,474	7,771	20,859
2002	6,731	92	208	467	184	55	619	731	2,494	5	1,400	7,728	20,714
2003	6,658	97	205	452	179	54	653	725	2,533	6	1,362	7,686	20,610
2004	6,670	94	199	440	172	55	619	720	2,584	4	1,351	7,703	20,611
2005	6,682	93	212	417	176	54	651	721	2,664	4	1,305	7,728	20,707
2006	6,704	102	224	417	181	56	663	729	2,766	4	1,278	7,741	20,865
2007	6,705	120	230	417	200	51	702	731	2,824	4	1,264	7,769	21,017
2008	6,738	126	232	436	224	45	734	739	2,948	4	1,286	7,815	21,327
2009	6,752	144	241	445	231	43	757	780	3,022	3	1,261	7,891	21,570
2010	6,801	153	242	444	228	40	772	811	3,081	4	1,260	7,867	21,703
2011	6,744	155	243	428	236	38	770	773	3,122	3	1,257	7,834	21,603
2012	6,757	150	239	414	217	30	767	774	3,185	5	1,215	7,793	21,546

Source: German Civil Aviation Authority (Luftfahrt-Bundesamtes / Statistiken) www.lba.de

7.8 New Zealand—Number of General Aviation Aircraft by Type and Airmen Certificates (1933–2012)

Year	Aircraft Type						Total Aircraft
	Airplanes by Mass				Sport	Helicopter	
	Below 2,721 kg	2,721 to 5,670 kg	5,670 to 13,608 kg	13,608 kg and Above			
1933	*	*	*	*	*	*	65
1947	*	*	*	*	*	*	154
1959	*	*	*	*	*	*	647
1974	*	*	*	*	*	*	1,430
1992	1,334	77	46	56	1,092	338	2,976
1993	1,410	77	49	61	1,121	356	3,076
1994	1,482	92	59	65	1,136	392	3,226
1995	1,522	101	61	69	1,150	426	3,329
1996	1,548	111	67	67	1,178	449	3,420
1997	1,559	113	68	67	1,163	435	3,405
1998	1,559	113	68	67	1,163	435	3,405
1999	1,539	104	67	73	1,124	420	3,327
2000	1,522	109	69	75	1,127	411	3,313
2001	1,506	107	67	77	1,129	420	3,306
2002	1,492	105	82	77	1,172	450	3,378
2003	1,505	117	74	83	1,245	506	3,530
2004	1,548	132	68	95	1,358	594	3,795
2005	1,564	143	65	103	1,419	643	3,937
	Agricultural	Small	Medium	Large	Sport	Helicopter	
2006	127	1,420	78	117	1,638	653	4,033
2007	124	1,449	82	116	1,723	698	4,192
2008	120	1,492	81	121	1,793	747	4,354
2009	110	1,510	84	118	1,833	760	4,415
2010	110	1,515	84	119	1,853	761	4,442
	Aeroplane	Microlight 1 & 2	Amateur Built Aircraft	Gliders	Other	Helicopter	
2012	1,985	1,029	316	417	311	793	4,851

The data does not differentiate if aeroplane is used for GA or commercial operations.
 In 2006, the CAA stopped publishing the number of registered aircraft by weight in favor of classes.
 In 2012, the CAA began publishing aircraft registry statistics by aircraft class
 - Amateur Built Aircraft include aeroplanes, gliders, and helicopters
 - Gliders include gliders, para-gliders, power gliders, amateur built gliders, and hang gliders.
 - Other includes parachutes, gyroplanes, and balloons.

Source: Annual Profile, Aviation Safety Summary Report by Civil Aviation Authority of New Zealand www.caa.govt.nz

7.9 South Africa—Number of General Aviation Aircraft by Type (1999–2012)

Year	Aircraft Type														Total Aircraft
	Aeroplane											Helicopter		Sport, Rec., Glider, & Other	
	Piston Engine Powered				Turboprop				Turbojet						
	One Engine	Two Engine	Other	Agricul-tural	One Engine	Two Engine	Other	Agricul-tural	Two Engine	Three Engine	Other	Piston	Turbine		
1999	2,282	695	4	144	66	201	10	43	157	17	21	228	251	3,103	7,222
2000	2,285	706	6	143	68	215	10	45	160	20	21	248	263	3,294	7,484
2001	2,280	701	6	144	79	237	10	48	164	27	22	258	271	3,470	7,717
2002	2,299	698	10	144	83	249	8	46	176	29	27	263	279	3,616	7,927
2003	2,338	716	12	148	91	271	8	52	197	31	34	308	290	3,907	8,403
2004	2,422	724	11	151	88	306	9	54	189	34	41	348	318	4,127	8,822
2005	2,459	731	10	150	93	310	8	56	206	21	44	385	337	4,253	9,063
2006	2,608	738	8	159	110	331	6	53	261	18	58	514	384	4,941	10,189
2007	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2008	2,666	755	7	153	108	324	10	55	299	18	74	575	434	5,215	10,693
2009	2,712	751	7	154	105	329	9	54	315	15	82	604	461	5,352	10,950
2010	2,745	713	8	154	111	353	9	55	339	15	92	635	474	5,500	11,203
2011	2,808	710	9	152	112	353	9	54	365	16	93	669	459	5,674	11,483
2012	2,851	707	10	153	113	349	8	54	377	18	87	671	502	5,846	11,746

2007 data is not available from the South African Aircraft Registry.

Source: South African Civil Aviation Authority www.caa.co.za and Registry www.avdex.co.za

7.10 Switzerland—Number of General Aviation Aircraft by Type and Airmen Certificates (1990–2011)

Year	Aircraft Type									Total Aircraft	Airmen Certificates					Total Airmen Certificates
	Airplanes by Weight			Total Airplanes	Helicopter	Motor Glider	Glider	Free Balloons	Airship		Private Pilots	Commercial Pilots	ATPL	Helicopter Pilots	Other Airmen Certificates	
	Below 2,250 kg	2,250 - 5,700 kg	Above 5,700 kg													
1990	*	*	*	1,952	199	131	1,035	335	1	3,653	8,179	*	886	*	4,610	*
1991	*	*	*	1,992	218	148	1,035	388	4	3,785	*	*	*	*	*	*
1992	*	*	*	2,026	233	173	1,045	433	4	3,914	*	*	*	*	*	*
1993	*	*	*	2,041	240	192	1,061	467	4	4,005	*	*	*	*	*	*
1994	*	*	*	2,043	246	196	1,058	492	4	4,039	*	*	*	*	*	*
1995	*	*	*	2,069	238	199	1,072	524	5	4,107	*	*	*	*	*	*
1996	*	*	*	2,058	234	202	1,080	516	6	4,096	*	*	*	*	*	*
1997	1,549	271	193	2,013	238	209	1,076	516	6	4,058	*	*	*	*	*	*
1998	1,581	197	227	2,005	244	228	1,046	510	6	4,039	*	*	*	*	*	*
1999	1,579	167	265	2,011	246	232	1,033	493	6	4,021	*	*	*	*	*	*
2000	1,572	157	285	2,014	254	246	1,024	504	6	4,048	6,792	1,421	2,223	1,008	4,058	15,502
2001	1,564	154	306	2,024	266	252	1,028	492	5	4,067	6,336	1,396	2,160	951	3,822	14,665
2002	1,537	151	304	1,992	265	260	1,016	490	7	4,030	6,294	1,399	2,185	950	3,646	14,474
2003	1,539	156	257	1,952	280	259	1,000	474	7	3,972	6,673	1,190	2,094	980	3,384	14,321
2004	1,528	142	248	1,918	275	254	974	465	7	3,893	6,553	1,628	2,104	1,064	3,281	14,630
2005	1,502	149	241	1,892	285	254	949	452	9	3,841	5,928	1,000	2,086	1,082	3,265	13,361
2006	1,497	148	248	1,893	284	248	941	445	11	3,822	5,911	900	2,055	1,101	3,243	13,210
2007	1,492	161	260	1,913	290	244	908	447	11	3,813	5,740	959	2,076	1,098	3,101	12,974
2008	1,468	147	285	1,900	307	246	875	427	10	3,765	5,431	916	2,133	1,063	3,030	12,573
2009	1,436	140	293	1,869	320	246	843	397	10	3,685	5,586	940	2,203	1,135	2,855	12,719
2010	1,413	197	303	1,913	327	251	824	381	9	3,705	5,581	952	2,266	1,168	3,023	12,990
2011	1,419	214	299	1,932	334	254	800	379	10	3,709	5,565	947	2,201	1,208	2,767	12,688

Other Airmen Certificates include Glider Pilots, Balloon Pilots, Validations, Flight Engineers, Multi-Crew Pilots and Radio Navigators

Source: Swiss Federal Office of Civil Aviation, Bundesamt für Zivilluftfahrt (BAZL) www.bazl.admin.ch

7.11 United Kingdom—Number of General Aviation Aircraft by Type (1989–2012)

Year	Number of Registered Aircraft by Type															Total
	Aeroplane Fixed Wing								Micro-light	Heli-copter	Glider	Hang Glider	Balloon & Min. Lift	Airship	Gyro-plane	
	Amph.	1 to 750 kg	751 to 5,700 kg	5,701 to 15,000 kg	15,001 to 50,000 kg	Over 50,000 kg	SLMG ¹	Sea-plane								
1989	11	2,143	5,003	236	251	324	196	2	3,298	842	6	-	1,391	53	202	13,958
1990	13	2,295	5,176	255	273	336	209	2	3,050	912	6	-	1,545	50	228	14,350
1991	14	2,289	5,228	282	274	358	214	3	3,194	902	9	-	1,682	51	210	14,710
1992	16	2,385	5,187	298	261	380	238	4	3,347	876	9	-	1,744	54	218	15,017
1993	16	2,507	5,130	278	263	388	234	3	3,337	832	9	-	1,668	47	229	14,941
1994	16	2,593	5,075	279	261	396	239	3	3,266	828	8	-	1,758	47	246	15,015
1995	16	2,657	5,043	285	241	401	239	2	3,207	838	8	-	1,821	44	257	15,059
1996	17	2,712	5,111	267	246	406	245	2	3,231	859	8	-	1,898	40	261	15,303
1997	18	2,758	5,190	257	251	439	255	2	3,314	906	7	-	1,896	40	261	15,594
1998	18	2,827	5,292	247	280	499	263	2	3,450	980	7	-	1,843	40	265	16,013
1999	17	2,813	5,347	254	289	541	268	2	3,548	1,013	7	1	1,907	42	244	16,293
2000	15	2,824	5,429	262	288	592	273	2	3,478	1,057	1	7	1,979	33	233	16,473
2001	15	2,832	5,442	276	296	624	273	2	3,531	1,090	1	10	1,812	28	242	16,474
2002	14	2,859	5,461	267	307	645	270	2	3,618	1,134	1	11	1,799	31	244	16,663
2003	15	2,914	5,556	254	264	644	274	3	3,828	1,159	1	12	1,812	30	247	17,013
2004	17	2,994	5,647	254	271	662	276	3	4,070	1,238	2	12	1,862	29	251	17,588
2005	18	3,022	5,711	254	256	679	280	3	4,118	1,314	45	13	1,905	27	249	17,894
2006	19	3,077	5,822	253	272	712	280	2	4,254	1,386	149	13	1,922	24	260	18,445
2007	21	3,153	5,887	258	257	760	286	2	4,392	1,490	1,107	13	1,962	24	278	19,890
2008	21	3,186	6,000	270	270	760	295	3	4,447	1,495	2,258	13	1,983	24	306	21,331
2009	21	3,235	5,907	256	292	766	292	3	4,375	1,428	2,306	12	1,842	22	306	21,063
2010	20	3,217	5,764	253	306	742	287	2	4,071	1,364	2,295	8	1,720	18	312	20,379
2011	20	3,199	5,663	228	297	742	285	2	4,043	1,299	2,256	8	1,655	19	324	20,040
2012	21	3,245	5,564	219	293	755	296	2	4,045	1,260	2,248	9	1,639	21	322	19,939

¹SLMG = Self-Launching Motor Glider

Does not differentiate if aeroplane is used for GA or commercial operations.

Data from December 31 of specified year (published first day of the following year).

The UK CAA restated statistics for 5,701-15,000 and 15,001-50,000 in January 2013. This re-statement does not change the total number of aircraft.

Source: UK Civil Aviation Authority, Civil Registry Statistics, G-INFO Database www.caa.co.uk

7.12 Total Number of Registered Aircraft by Select Countries (1989–2012)

Year	Australia	Austria	Brazil	Canada	China	France	Germany	New Zealand	South Africa	Switzerland	United Kingdom	United States
1989	*	*	*	*	*	*	*	*	*	*	13,958	219,738
1990	*	*	*	*	*	*	*	*	*	3,653	14,350	212,230
1991	*	*	*	*	*	*	*	*	*	3,785	14,710	196,874
1992	*	*	*	*	*	*	*	2,976	*	3,914	15,017	185,650
1993	*	*	*	*	*	*	*	3,076	*	4,005	14,941	177,120
1994	*	*	*	*	*	*	*	3,226	*	4,039	15,015	172,935
1995	9,548	*	*	*	*	*	*	3,329	*	4,107	15,059	188,089
1996	9,665	*	10,315	*	*	*	*	3,420	*	4,096	15,303	191,129
1997	9,849	*	10,611	*	*	*	*	3,405	*	4,058	15,594	192,414
1998	10,006	*	10,927	*	*	*	*	3,405	*	4,039	16,013	204,710
1999	10,168	*	14,217	*	*	*	*	3,327	7,222	4,021	16,293	219,464
2000	10,125	*	14,553	21,733	*	*	*	3,313	7,484	4,048	16,473	217,534
2001	10,402	*	14,937	21,971	*	*	20,859	3,306	7,717	4,067	16,474	211,446
2002	10,455	*	15,265	22,256	*	*	20,714	3,378	7,927	4,030	16,663	211,244
2003	10,671	*	15,536	22,650	*	*	20,610	3,530	8,403	3,972	17,013	209,708
2004	10,904	*	15,881	23,123	*	*	20,611	3,795	8,822	3,893	17,588	219,426
2005	11,180	*	16,270	23,771	*	29,164	20,707	3,937	9,063	3,841	17,894	224,352
2006	11,117	*	15,125	24,397	*	29,552	20,865	4,033	10,189	3,822	18,445	221,942
2007	11,541	*	15,673	25,056	*	30,853	21,017	4,192	*	3,813	19,890	231,607
2008	12,045	*	16,576	25,859	*	31,024	21,327	4,354	10,693	3,765	21,331	228,663
2009	12,229	*	19,765	26,436	*	31,721	21,570	4,415	10,950	3,685	21,063	223,877
2010	12,564	*	*	27,053	*	32,746	21,703	4,442	11,203	3,705	20,379	223,370
2011	*	1,520	*	27,727	*	*	21,603	*	11,483	3,709	20,040	*
2012	*	1,491	*	28,271	3,395	*	21,546	4,851	11,746	*	19,939	*

Source: See Table 7.1 through 7.11

7.13 ICAO—Number of General Aviation Aircraft by Region (1985–1997)

Region	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Europe	30,800	31,200	31,500	32,000	33,100	33,200	31,300	31,100	36,200	36,100	N/A	N/A	N/A
Africa	4,600	4,650	4,600	4,500	4,970	4,950	6,200	5,500	6,200	6,050	N/A	N/A	N/A
Middle East	520	540	550	600	690	670	610	580	590	580	N/A	N/A	N/A
Asia & Pacific	8,400	8,500	9,200	9,800	10,300	10,200	10,240	10,250	11,100	11,500	N/A	N/A	N/A
North America	236,000	224,300	224,150	229,320	223,030	232,080	224,750	219,000	188,300	185,890	N/A	N/A	N/A
Latin America & Caribbean	13,700	13,900	13,800	13,500	15,200	15,200	18,900	18,600	18,800	18,600	N/A	N/A	N/A
Total-ICAO States	294,020	283,090	283,800	289,720	287,290	296,300	292,000	285,030	261,190	258,720	268,000	269,000	273,500

Source: ICAO

7.14 ICAO—General Aviation Hours Flown (in Thousands) by Region (1985–1997)

Region	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Europe	6,080	6,400	6,500	6,600	6,720	6,870	6,730	6,700	7,260	7,240	6,880	6,270	6,000
Africa	790	820	800	800	820	820	700	700	800	770	800	780	700
Middle East	260	240	260	260	270	310	300	180	300	290	300	300	290
Asia & Pacific	2,420	2,740	3,060	3,250	3,380	3,470	3,500	3,770	4,180	4,250	4,260	4,680	4,880
North America	33,920	32,100	31,070	31,110	31,610	31,950	32,100	26,200	24,220	23,120	25,520	25,550	26,820
Latin America & Caribbean	3,850	3,380	3,550	3,570	3,400	3,300	3,150	3,150	3,340	3,280	3,110	3,150	3,300
Total-ICAO States	47,320	45,680	45,240	45,590	46,200	46,720	46,480	40,700	40,100	38,950	40,870	40,730	41,990

Excludes the Russian Federation

Source: ICAO



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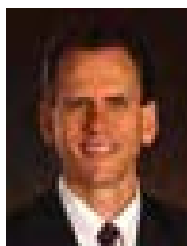
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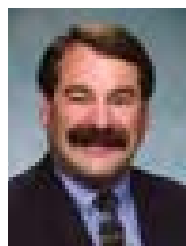
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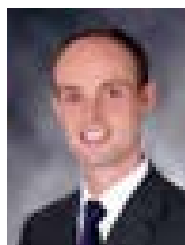
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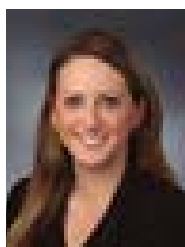
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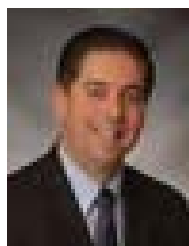
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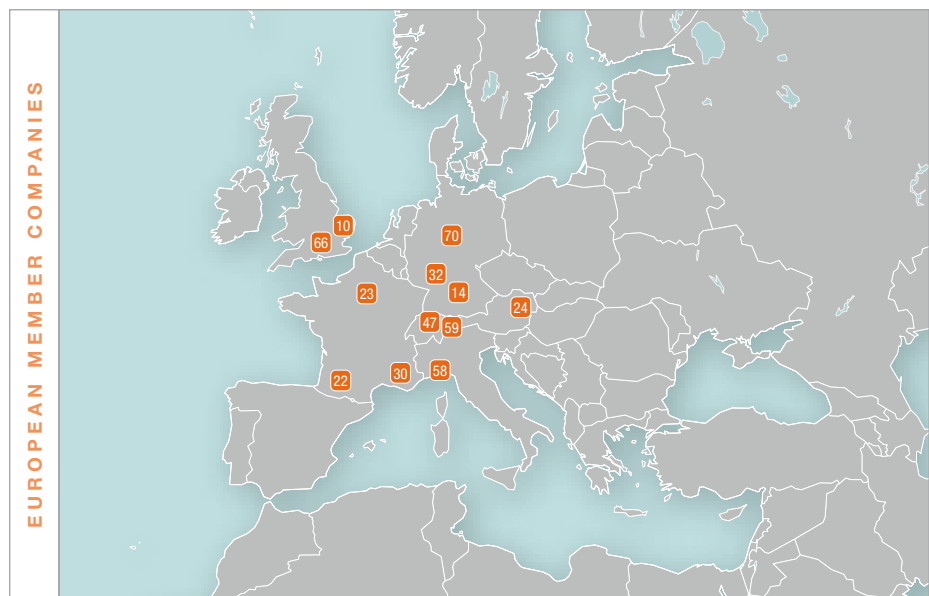
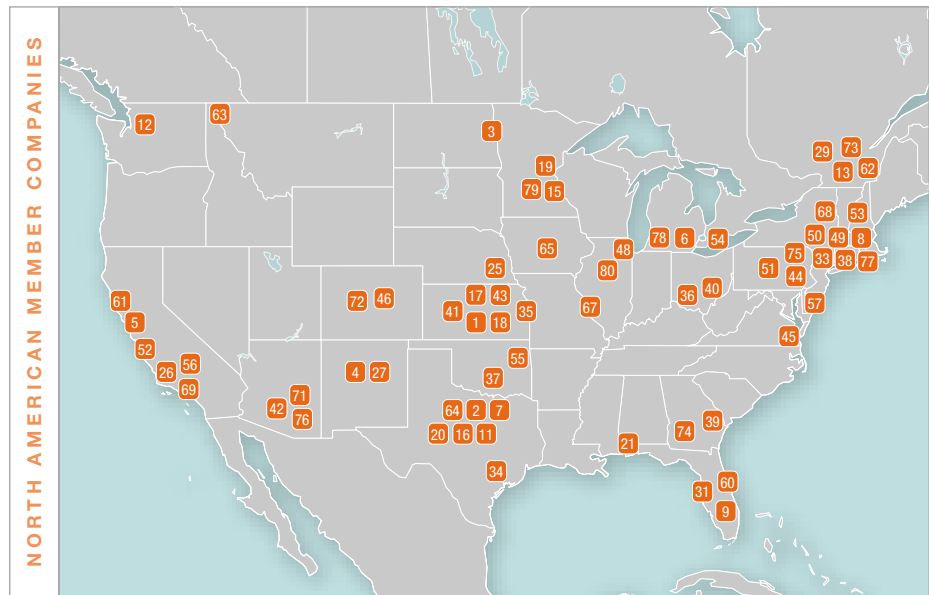


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