THE AOPA Pilot

General Aviation 1970

AN AOPA PILOT SPECIAL REPORT

Colloquially speaking, calendar 1969 was a "mixed bag of worms" for general aviation. When comparing overall development versus decline, most observers agreed it was not a good year. It "just didn't work out quite as well as we had hoped," said one of the largest lightplane manufacturers.

Based on actual shipments through October and projections for the final two months, unit sales of general aviation aircraft fell about 6½%, from 13,749 in 1968 to an estimated 12,856 in calendar 1969. Total retail dollar sales, however, rose approximately 11½%, from $553.2 million to an estimated $615.2 million. Most manufacturers earlier predicted 1969 sales increases ranging from 20% to 25% [Jan. 1969 PILOT, page 28].

Partially accounting for the anomalous sales situation—lower unit sales but higher retail dollar volume—were greater-than-anticipated sales of higher-priced twin-engine aircraft. Also, suggested list prices on historical sales leaders were raised an average of 10% in 1969. Price increases announced so far for 1970 on the same volume leaders were averaging about 5.8%.

Though unit and dollar sales were mixed, clouding a clear look at general aviation's current economic health, the third main indicator—student starts—revealed a definite reduction in the past growth rate of private air transportation. During 1969, student starts continued their downward trend for the second straight year. Growth of the pilot population, as well as the broad base of potential aircraft owners, inexorably is tied to the number of new persons taking up flying each year.

Based on actual student starts through Oct. 31 (116,591) and projections for the final two months, student starts for 1969 were estimated at 134,252. This compared with 149,444 in 1968 and 159,399 in 1967. A chart accompanying this article details growth of student starts from 1959 through 1969. After overcoming a decline in 1960, student starts grew steadily during the past decade until two years ago.

Lower general aircraft unit sales and the pronounced dip in student starts coincided with a flurry of new governmental restrictions on the utility of private airplanes and increases in their costs of operation. The governmental moves, all of which were battled, and continue to be battled, by AOPA, have included FAA-backed new "user charges" on general aviation and priorities for the airlines in use of major public airports.

Despite these and other restrictive measures, the overall general aviation fleet continued to grow with the injection of 1969's production units. Similarly, the number of combined hours flown by general aviation for business, instructional, personal, and commercial reasons continued to climb. The number of airports in the nation's air transportation system grew only slightly, and the quantity of aviation facilities and services provided by the FAA for private and business pilots remained almost static.

As of Jan. 1, 1970, the U.S. general aviation fleet numbered an estimated 134,522 aircraft. That figure included the following types and numbers of aircraft: single-engine piston, 1–3 place, 45,003 (an increase of 2,245); single-engine piston, 4-place or more, 66,677 (an increase of 5,700); single-engine turbine (turbojets and turboprops), 75 (an increase of three); multi-engine piston, 16,899 (an increase of 2,900); multi-engine turbine, 2,064 (an increase of 303); rotorcraft, 2,410 (an increase of 60); and gliders, balloons, etc., 1,394 (an increase of 74).

Charts accompanying this article detail the changes from Jan. 1, 1969, to Jan. 1, 1970, in the composition of the pilot population by the types of FAA certificates held and the estimated hours flown by general aviation during 1969. Accompanying charts also show the status of the private and public network of airports, along with information on how many are paved and lighted and their runway lengths.

Reactions to 1969 activities by general aviation's "Big Three" reflected public satisfaction over record dollar sales. There was, however, an undercurrent of concern over the decline in growth of total unit sales and the prolonged drop in student starts. The nation's "Big Three," who produce the lion's share of all new lightplanes, are Beech Aircraft Corporation, Cessna Aircraft Company, and Piper Aircraft Corporation.

Through October, the three companies shipped a combined total of 9,630 units. This represented about 9/10ths of the combined shipments of 10 major general aviation manufacturers reporting to the Utility Airplane Council (UAC), Aerospace Industries Association (AIA). As of Oct. 31, Beech had shipped 942 aircraft with a retail value of about $112.7 million; Cessna had shipped 5,142 units with a retail value of about $158.0 million, and Piper had shipped 3,546 units with a retail value of about $109.1 million.

Retail value of shipments for the first 10 months was based on a formula detailed in a report made public this year, entitled "The Magnitude and Economic Impact of General Aviation." Prepared for the UAC by R. Dixon Speas Associates, a private aviation consulting firm, the report said, "There is a general rule of thumb within the industry that the stated retail price [suggested list price—Ed.] involves mark-up of approximately 33% over the value of the completed units at the factory. The effective selling price, however, is considered to be 95% of this figure." The report explained that the missing 5% usually is a "negotiated discount" allowed at the retail level.

Complete production and shipment figures for calendar 1969 were not available as of press time, but reports detailing activities for fiscal 1969, which ended Sept. 30, 1969, for the "Big Three," provided a possible look at the future as viewed by general aviation's leading manufacturers.

Beech reported consolidated sales of $187.3 million for fiscal 1969, noting the figure was the highest in the company's history, and more than double sales 10 years ago. The 1969 figure compared with $184.4 million in fiscal 1968. Commercial sales, those dealing with general aviation aircraft sales, totaled $144.7 million, up 11% over the previous year. It was the seventh consecutive year of an increase in commercial sales dollar volume, Beech said.

Manufacturers report higher dollar sales on fewer aircraft shipments. Student starts, a prime barometer for general aviation's overall health and growth potential, slump for second straight year

Though dollar sales were up, Beech officials announced earnings dropped from $1.72 per share of common stock in 1968 to 43 cents in fiscal 1969. The lower earnings were attributed to a 26-day strike this past fall at Beech's main facility in Wichita and tight money. Higher production and development costs also were mentioned.

The company predicted "substantially improved earnings for 1970" and said that "an announcement of plans for entry into the business corporate jet market may be made in the near future." According to a press release accompanying Beech's annual report, a "letter to stockholders stated that research into suitable jet corporate and commuter airline aircraft has been accelerated . . ." Industry observers have been speculating for some time that Beech planned to enter the corporate jet market, a market soon to be penetrated by Cessna.

Cessna, which currently is developing a new corporate jet, the Cessna *Citation*, reported increases in fiscal 1969 in both sales and earnings. Dwane L. Wallace, Cessna board chairman, stated sales and earnings both reached record highs. Consolidated sales were $283 million, compared to $269 million in fiscal 1968. It was the eighth consecutive year of increased sales. After-tax earnings amounted to $2.25 per share, up from last year's $1.89 per share.

The company's general aviation sales amounted to $168 million of the total $283 million consolidated sales. General aviation sales for fiscal 1968 were $163 million. Wallace also reported, "This was the first year in Cessna's history in which dollar volume from multi-engine aircraft was greater than that from our single-engine products."

Speaking before a group of aerospace analysts in early November, Cessna Senior Vice President Robert P. Bauer predicted the company would become a "billion-dollar-a-year corporation" by the late 1970s. "General aviation, including both business and personal flying, will enjoy its greatest growth period in history during the seventies," Bauer stated.

Contrasting with the optimistic long-range prediction made to investment analysts were the slump in student starts for the second consecutive year, and comments by Cessna President Del Roskam to the company's dealers during a December meeting in Wichita. Discussing 1969 sales activities and the outlook for 1970 in a film prepared for showing during the sales meeting, Roskam was asked if the company's 1969 "Learn To Fly" program paid off in increased sales of lower-priced single-engine aircraft.

"Well, yes and no," Roskam replied. "Business has been good in 1969, but we should have done better. We had good products. We had a good marketplace. Our goals seemed to be reasonable, but just didn't work out quite as well as we had hoped. We didn't get the results we should have."

To stimulate sales growth in the company's volume leaders, Roskam said Cessna had launched "Operation Penetration" for 1970. "Our goal is to better penetrate and get a larger share of every segment of the retail market in our industry in 1970." Cessna's president predicted, "Business will be good in 1970, but competition will be tough. Business should be good because the gross national product should continue to have a good rate of growth."

Like Beech, Piper Aircraft Corporation mentioned introduction of a new airplane to compete in the high-performance corporate aircraft market. "Late in 1970, Piper will introduce a new aircraft which is expected to add significant volume and profits for the years ahead. The high degree of usage of general aviation aircraft by corporations has created a need for more speed and pressurization of the cabin to allow high-altitude flights. A market for this type is only now becoming an important segment of the business."

Piper's formal sales figures and earnings for fiscal 1969 had not been made public as of press time. Based on shipments reported to the Utility Airplane Council for the 12-month period from Oct. 1, 1968, to Sept. 30, 1969, retail sales were expected to be about $127 million, compared to $121.8 million in fiscal 1968.

A marketing division for one of the "Big Three" recapitulated Piper's sales activities during the first nine months of calendar 1969 by saying, "Twin deliveries continued to run sharply higher . . . The company sold 674 twin-engine aircraft during the first nine months of 1969, compared to 465 for the like period in 1968. Single-engine units followed the general industry trend and were off 13% for the period."

J. Willard Miller, Piper vice president of marketing, forecast a "significant upswing" in sales for 1971 and beyond. For 1970, he said, "Piper has good years and better years. Next year does not appear to be a better year, but it will be a good one." Tight money, decline in student starts, and the "furor over our airports/airways system and the resultant publicity" contributed to the decline in single-engine sales, he said.

Miller expressed confidence FAA and Congress would improve the airports/airways system and allow general aviation to "resume the same growth vitality which it enjoyed during the early and middle 1960s."

While the three largest general aviation aircraft manufacturers enjoyed a semblance of higher dollar sales for 1969, a sprinkling of the smaller producers ran into some problems. Mooney Aircraft underwent two changes of ownership during the year, the first time when American Electronics Laboratories, Inc. (AEL), acquired the company early in the year following bankruptcy proceedings. In late November, shortly after announcing a net loss for the first nine months, Mooney reported that Butler Aviation International, Inc., a leading aviation service corporation, had agreed to acquire 100% stock ownership of Mooney.

Others encountering problems during 1969 were Wing Aircraft Company, which earlier placed hopes of gaining a niche in the general aviation airframe industry on the introduction of its twin-engine, two-place Wing *Derringer*. Aimed at the corporate market, production of the aircraft hit snags during the year, and its future was still unannounced near year's end. Wren Aircraft Company, Fort Worth, Tex., suffered setbacks in 1969 and reportedly filed a petition for bankruptcy late in the year.

On the brighter side, Lear Jet Industries, Inc., reported fiscal 1969 was a "turnaround year" for the company as far as sales and profits were concerned, and American Aviation Corporation, youngest of the general aviation aircraft companies, announced plans to expand its facilities to meet demands and obtain a larger part of the lower-priced aircraft market. Also, Aero Com-

This Is U.S. General Aviation 1970

	As of Jan. 1, 1969	As of Jan. 1, 1970*
Aircraft	124,237	134,522
Single-engine, 1–3 place, piston	42,758	45,003
Single-engine, 4-place or more, piston	60,977	66,677
Single-engine turbine (turbojets, turboprops)	72	75
Multi-engine piston	14,999	16,899
Multi-engine turbine (turbojets, turboprops)	1,761	2,064
Rotorcraft	2,350	2,410
Gliders, Balloons, etc.	1,320	1,394
Airmen	691,695	758,821
Student	209,406	214,959
Private	281,728	326,479
Commercial	164,458	179,377
Airline Transport	28,607	29,650
Helicopter (Only)	3,166	3,765
Glider (Only)	2,193	2,394
Other Pilot	2,137	2,197
General Aviation Hours Flown		
Total	24,053,000	26,097,268
Business	5,168,000	5,741,399
Commercial	4,621,000	4,958,481
Instructional	6,549,000	7,046,262
Personal	7,405,000	8,090,153
Other	310,000	260,973

*All figures in the Jan. 1, 1969, column are taken from official FAA records. The remaining figures are based on actual aircraft shipments and student starts for first 10 months of 1969, utilizing estimates for the final two months of the year. Hours flown during 1969 were computed by taking the average number of hours flown by aircraft in 1968 (194) and multiplying that figure times the estimated fleet of 134,522. Average percentages for each type of flying as computed by FAA for 1968 were used to compute the breakdown by types of flying for 1969.

mander, a division of North American Rockwell Corporation, posted increased dollar sales for the first 10 months of 1969, compared to the same period a year earlier.

The following comparisons of unit shipments during the first 10 months of 1969 with unit shipments for the same period in 1968 provide a look at 1969 trends established by companies reporting to the Utility Airplane Council: Aero Commander, 1969—295, 1968—384; American Aviation, 1969—221, 1968—16; Beech, 1969—942, 1968—1,149; Bellanca, 1969—93, 1968—77; Cessna, 1969—5,142, 1968—5,544; Champion, 1969—247, 1968—215; Lake, 1969—31, 1968—27; Lear Jet, 1969—53, 1968—34; Maule, 1969—18, 1968—20; Mooney, 1969—319, 1968—520; Piper, 1969—3,546, 1968—3,669.

Due to the nearly 30% decline in single-engine 1–3 place aircraft sales in 1969 (3,083 in 1968 versus an estimated 2,245 in 1969), manufacturers were expected to seek new ways for stimulating student starts. An industry-wide campaign in 1969, entitled "Discover Flying," failed to halt the downward trend or create an abundance of new persons learning to fly.

Based on monthly student starts, the decline established the previous year held firm throughout 1969 except during the month of June. June was the "target" month of the "Discover Flying" program. June 1969 student starts totaled 12,811, compared to 11,549 in June 1968 and 17,968 in June 1967. Overall, 1969 student starts ran about 6½% behind 1968 and approximately 15% below 1967 figures.

While the manufacturing officials awaited the final tallies of calendar 1969 sales and prepared for 1970, FAA statisticians pieced together information on how the general aviation fleet was utilized in calendar 1968.

The information revealed an 8% increase during 1968 in the use of general aviation aircraft for private transportation and an 8% decrease in their use for business purposes. The figures were based on the number of hours

Runway Lengths Of Landing Facilities*

	Publicly Owned				Privately Owned			
Up To:	Airports	Heliports	Seaplane Bases	Total	Airports	Heliports	Seaplane Bases	Total
2,999 feet	1,196	97	50	1,343	4,569	458	44	5,067
3,999 "	1,098	0	8	1,106	846	0	8	854
4,999 "	524	0	4	528	215	0	9	224
5,999 "	483	0	12	495	106	0	38	144
6,999 "	173	0	7	180	19	0	17	36
7,999 "	99	0	4	103	8	0	8	16
8,999 "	63	0	3	66	5	0	14	19
9,999 "	44	0	1	45	0	0	2	2
10,000-plus	55	0	65	120	1	0	117	122
Grand Totals	3,735	97	154	3,986	5,769	458	257	6,484

*As of Jan. 1, 1969. Source: FAA.

General Aircraft Shipments 1960-1969*

As Of Dec. 31	Production In Units	Estimated Retail Value**	Total Active U.S. Fleet
1969	12,856	$614.2 million	134,522
1968	13,749	553.2 million	124,237
1967	13,536	453.1 million	114,186
1966	15,723	514.3 million	104,706
1965	12,053	401.6 million	95,442
1964	9,459	250.6 million	88,742
1963	7,628	193.3 million	85,088
1962	6,797	172.4 million	84,121
1961	6,943	156.6 million	80,632
1960	7,588	190.5 million	76,549

*1969 figures based on actual shipments through October and estimates for November and December.

**Dollar values exclude Grumman, Lockheed and North American Sabreliner sales.

Air Traffic Recorded By FAA Control Towers 1960-69*

	Number of Towers	Total Aircraft Operations	Airlines	General Aviation	Military
1960	229	25,773,990	28%	57%	15%
1961	254	26,300,767	27%	59%	14%
1962	270	28,200,570	25%	62%	13%
1963	277	30,976,773	24%	64%	12%
1964	278	34,194,659	22%	67%	11%
1965	292	37,870,535	21%	70%	9%
1966	304	44,952,806	18%	75%	7%
1967	313	49,886,840	19%	74%	7%
1968	322	55,292,035	19%	75%	6%
1969	326	55,900,642	19%	75%	6%

*Source: FAA. All figures, except those for 1969, are as of Dec. 31. Figures for 1969 are based on the fiscal year, which ended June 30. FAA also reported that over the past decade, general aviation operations at FAA-tower airports comprised about 55% itinerant and 45% local movements.

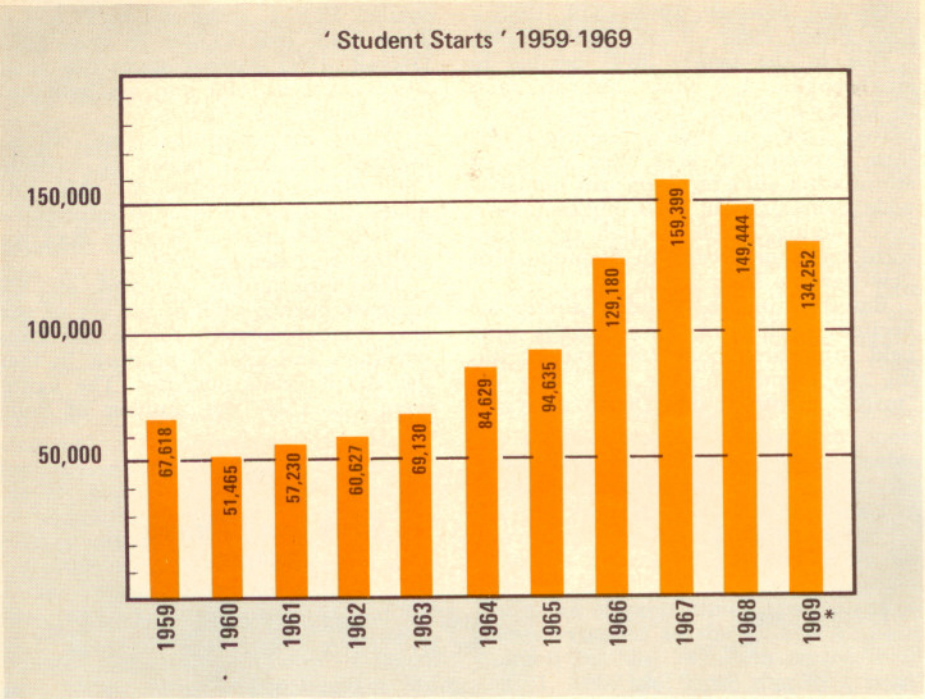
U.S. Landing Facilities* 1960-1969

	Total U.S. Facilities	By Ownership: Public	By Ownership: Private	Paved Airports: Lighted	Paved Airports: Unlighted	Unpaved Airports: Lighted	Unpaved Airports: Unlighted
1969**	10,690	4,069	6,621	2,474	1,005	892	6,319
1968	10,470	3,986	6,484	2,415	938	897	6,220
1967	10,126	3,830	6,296	2,235	874	914	6,095
1966	9,673	3,630	6,043	2,062	797	926	5,888
1965	9,566	3,570	5,996	1,977	770	901	5,918
1964	9,490	3,644	5,846	1,888	732	885	5,985
1963	8,814	3,451	5,363	1,775	676	897	5,466
1962	8,084	3,178	4,906	1,657	698	824	4,905
1961	7,715	—	—	1,499	599	800	4,857
1960	6,881	—	—	1,364	529	—	—

Source: FAA.

*Includes all U.S. civil and joint-use airports, heliports, and seaplane bases as of Aug. 1, 1969, and as of Dec. 31 for prior years.

**As of Aug. 1, 1969, FAA reported 7,082 of the 10,690 landing facilities were "open to the public without restrictions."



**1969 figures based on actual student starts January through October (116,591) and estimates for remaining two months of the year.*

flown by the entire fleet for business, commercial, instructional, and personal reasons. FAA statisticians also put together figures on the number of aircraft flown for each type of flying: executive transportation, business transportation, personal, aerial application, instructional, air taxi, special industrial use, and other.

According to the FAA, 31% of all hours flown by general aviation during 1968 were "personal." A year earlier, the figure was only 23% of the total hours. Business flying accounted for 22% of the total hours in 1968, compared to 30% the preceding year. Commercial flying inched upward from 18% of the total, in 1967, to 19% in 1968. Instructional flying dropped one percentage point, from 28% in 1967 to 27% in 1968, and the remaining 1% of the hours was lumped under "other."

The FAA's recently completed compilation of eligible general aviation aircraft "by type of aircraft and primary use" as of Jan. 1, 1969, provided the most current governmental statistics on this aspect of the general aviation fleet. A chart accompanies this article showing the complete breakdown of aircraft by type and primary use. Briefly, the information showed: more than one-half (66,877) of the total fleet was being used for personal transportation; almost 20% (21,830) were being used for business transportation; approximately 12% (14,547) were used for instructional purposes; and air taxi and aerial application uses each accounted for about 4½% of the total fleet (5,514 and 5,529 aircraft, respectively).

The FAA breakdown, which had not been compiled in recent years and was made available to The PILOT, showed that as of Jan. 1, 1969, there were 799 single-engine and multi-engine jets in the general aviation fleet. There also were 1,034 turboprop aircraft. This total of 1,833 "high performance" aircraft compared with 1,781 turbojets and 458 turboprops in the airline inventory as of the same date.

Based on the new estimate of 134,522 general aviation aircraft as of Jan. 1, 1970, the private air transportation segment of civil aviation outnumbered airline aircraft by about 60 to 1, compared to an earlier 50-to-1 ratio. Despite the growing number of privately owned and operated aircraft, FAA policymakers during 1969 continued a regulatory program that, according to several observers, seemed designed to ban all but airline aircraft from the nation's major urban areas.

What those moves portend for the future of private air transportation in the United States continued to be the main unknown as general aviation entered the year 1970. □