## General Aviation: 1961

Phenomenal growth of private and business flying, which totaled about 13,000,000

hours in 1960, expected to continue during current year; 16,000,000 hours

\$1,000,000,000 (one billion) annually.

forecast for 1965. Aircraft sales continue to climb

eneral aviation activity during the year 1960 has again evidenced the vigorous growth and continued encouraging development of a lusty, young American industry based on the sale and use of private and business aircraft. Industry leaders predict that 1961 will see a continuation of the upward trend.

Last year, aircraft sales set an alltime high in total and unit retail value, according to reports of manufacturers who produce in excess of 90% of all general aviation aircraft. There were 7,588 new planes delivered at a total retail value of \$201,626,000. Although deliveries in 1959 amounted to a higher total of 7,689 units, the total retail value for that year was \$173,168,000. This sharp upswing in 1960's retail value was a result of increased demand for heavier single and twin-engine aircraft types plus a demand for all types and sizes of craft to be more fully outfitted with better communications and navigational equipment. The number of twin-engine planes delivered in 1960 was 1,225 units, up from 1959's total of 996.

Operations are worthy of note. During fiscal year 1960, the latest 12-month period for which statistics are available, FAA control towers at 226 airports handled a total of 26,367,000 takeoffs and landings. Of this number, air carriers accounted for 7,333,000 operations (28%), the military accounted for 4,045,000 (15%) and general aviation accounted for 57% of the total operations with 14,989,000 takeoffs and landings. Figures showing the total operations of general aviation aircraft at the remaining 6,200 airports can only be left to the imagination.

Out of a statistical count of 6,426 registered airports, the airlines use 566 of these. Of the 226 tower controlled airports, only about eight are

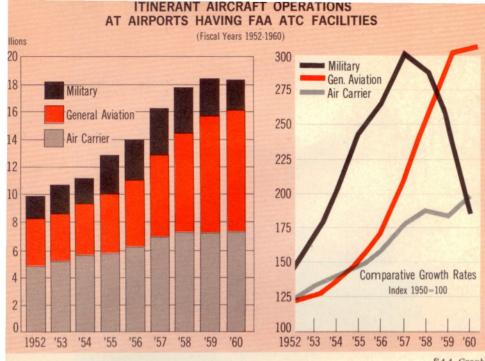
## THIS IS GENERAL AVIATION

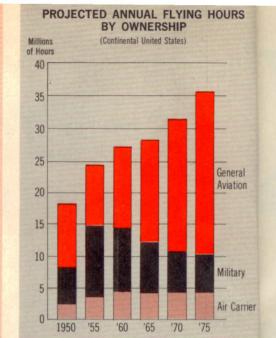
▶ PILOTS:		
Total number of pilots, general aviat	349,000	
Instrument rated pilots, general avia	54,000	
▶ PLANES:		
Total registered civil aircraft as of Ja	an. 1, 1961	108,000
Air carrier aircraft	2,000	
Registered inactive aircraft	30,000	
	32,000	32,000
Total active general aviation aircraft		76,000
► OPERATIONS:  Total hours flown by usage category	, 1960:	
	Business	6,100,000
	Commercial	2,500,000
	Instructional	2,000,000
	Pleasure and miscellaneous	2,400,000
Total hours flown, general aviation, 1960 (AOPA estimate)		13,000,000
▶ PASSENGERS:	wisting flying (1000)	102 700 000
Total passengers emplaned in civil a Airline passengers (43%)	103,790,868 44,630,073	
Total passengers emplaned, general	aviation (57%)	59,160,795
▶ DOLLARS:	707	
General aviation sales and services	estimated at more than	

used solely for general aviation. That still leaves over 5,850 airports used only for general aviation operations which have no towers to control and count traffic. It is also common knowledge that there are also hundreds of additional uncounted strips used by ranchers, farmers and other private operators, from which general aviation flights originate. The fact that

general aviation's users of the common airspace conduct the bulk of their operations at airports other than the 226 tower-controlled fields is clear.

One area of statistical survey that does show a complete picture, however, is the FAA's air route traffic control center report of 1,051,000 instrument approaches made during fiscal year 1960. This is the second





FAA Graph

consecutive year that a slight decrease in the total of instrument approaches was noted, due to a 20% drop in military approaches of this nature, but air carrier and general aviation operations showed increases in instrument approaches of 2% and 7%, respectively.

In terms of hours flown annually, general aviation planes flew approximately 13,000,000 hours during 1960, more than three times the total number of hours flown by air carrier aircraft in the same period. These data, estimated from trends by the FAA, showed an increase in hours flown by general aviation from 1959's total of 12,400,000 hours. The hour total is expected to increase to 16,000,000 by 1965.

Dwane L. Wallace, president of the Cessna Aircraft Company, observed that general aviation's contribution to the nation's economy is now substantially in excess of \$1,000,000,000, based on the sale of airplanes, fuel, oil, parts and supplies and wages paid to personnel for the operation and maintenance of planes, alone. This coincides with AOPA's estimates. General aviation adds to the nation's productivity, as well. Business flying enables sales personnel to contact more widespread markets in a shorter period of time and maintain better customer service and relations. Small companies and individual businessmen have found that the time saving convenience and flexibility of airplane use enables them to reach whole new horizons of business and professional opportunity, giving them a real competitive edge. Larger businesses use airplanes to increase the number of effective working hours of valuable management and technical talent,

diminishing wasteful travel time between diversified activities throughout a widespread system of plants and offices.

General aviation also makes great contributions to agriculture, ranching and conservation. A large percentage of this aircraft use is in the application of chemical dusts and sprays. During 1957, the most recent year for which figures pertaining to aerial application activities were compiled, 61,000,000 acres were treated with 325,000 tons of dry chemicals and 95,000,000 gallons of spray, accounting for almost 1,000,000 flight hours. Several billions of dollars have been added to agricultural and forestry income as a result of these improvements in productivity.

Wallace also pointed out that the radio-navigation equipment industry has not only enjoyed a parallel growth with general aviation, but that it has also been a major contributor to this growth by producing communication and navigation instruments of such size, weight, dependability, accuracy and cost as to make them especially suitable for small aircraft use.

General aircraft manufacturers are confident of a future of continued growth. 1960 saw extensive plant expansion, with intensified engineering effort that came about as a result of industry growth and profits. These industry leaders are a portion of a vast aerospace enterprise which is composed of manufacturers that, on the average, retain 70% of their earnings for expansion and necessary development. Manufacturers in other industries retain an average of only 45% for their development costs. These airplane manufacturers made good money in 1960 and they indicate,

in general, that they have put forth a great deal of effort on expansion of production facilities and product development, in preparing to serve a market, the growth potential of which is almost unlimited, and in anticipation of the demand for a wider variety of different types and sizes of aircraft.

Mrs. O. A. Beech, president of Beech, expects 1961 sales to reveal a new pace-setting, based on past performance and the expansion of Beech's selection to a complement of seven different planes. Beech delivered 962 airplanes in 1960, with a total retail value of \$57,415,000. The Bonanza held first place as the biggest seller, with 345 units delivered. Beech delivered 379 twin-engine planes. Shipments of the new Baron, which had not begun until November, totaled up to 23 units by Dec. 31.

At Lock Haven, Pa., W. T. Piper, speaking as chairman of the board of Piper Aircraft, said: "There is a demand for more speed in travel as business operations decentralize and move to new and more remote locations. The personal plane is the answer to many of the travel problems and we are endeavoring to offer as many types of planes as possible to meet the wide range of demands." Piper is doing just that. Sales and earnings for 1960 were the best in the company's history; they delivered 2,313 units which had a retail value of \$46,802,000 during the calendar year. Piper sales were up 17% over 1959 and sales are expected to increase at about the same rate during the coming year, but earnings will be a bit lower because of heavy production start-up costs at Piper's new Vero Beach, Fla. plant and an overall expansion of engineering and sales departments, according

■Government sources predict general aviation aircraft will be flying more than 25,000,000 hours in 1975—two and one-half times that of the military and air carrier airplanes combined.

to Piper treasurer Charles W. Pool. Piper enters the 1961 market with two additional planes, the Colt and Cherokee. A 50% step-up in production was also to have been achieved by March 1. The Tri-Pacer was Piper's biggest seller for 1960; 446 of them were delivered. Piper also sold 431 Anaches and Aztecs.

During 1960, Cessna led the industry for the fifth consecutive year, with airplane sales totaling 3,721 units at a total retail value of \$75,552,000. In 1959, Cessna officials predicted that they would double their airplane sales volume by 1965 at the rate of 20% per year. The past year's 23% overall increase in sales volume over the year previous showed that they were on their way to accomplishment of this goal. Cessna's 172 accounted for 1,015 units delivered in 1960 and Cessna shipped 290 twin-engine 310's.

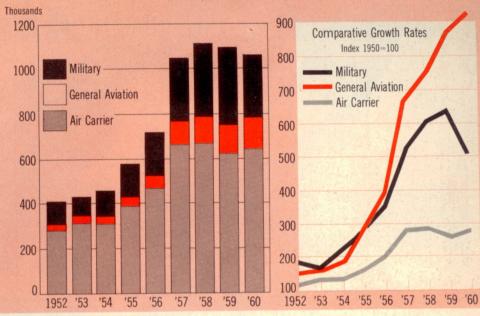
Ten years ago, business flying accounted for 35%, or 2,950,000 hours flown out of a total of 8,500,000 hours for general aviation. During 1960, business usage accounted for 47% of the year's total with 6,100,000 hours flown. Ten years ago, planes for business use comprised approximately 40% of the total number of general aviation active aircraft; today, these planes still make up about 40% of the 76,000 presently active general aviation aircraft. But businessmen are flying more and with general aviation flying divided into business, commercial, instructional and pleasure usage categories, industry leaders expect business flying to show the most rapid rate of expansion. Increasing numbers of businessmen are endeavoring to realize a greater usefulness of their craft by preparing themselves to continue flight in weather conditions which they might have heretofore chosen to consider prohibitive.

Several years ago, studies made by the Government and the aviation industry suggested that while the number of hours flown by general aviation planes may increase to 20,000,000 or 25,000,000 annually by 1970-75, the demand upon IFR facilities would increase, disproportionately, six to eight times. The FAA estimates that by 1975, the total number of instrument rated pilots in general aviation will have risen 140% from the present total of 54,000, while the total number of all pilots will reflect only a 60% increase for the same period.

The growth, importance and acceptance of general aviation is just cause for enthusiasm on the part of industry observers. Yet, a need for more widespread and general public acceptance causes anxiety, too. Scheduled air

## INSTRUMENT APPROACHES REPORTED BY FAA ARTC CENTERS

(Fiscal Years 1952-1960)



carriers can only economically serve less than 600 stops throughout the nation, and service is infrequent at most of these places. That leaves over 16,000 cities and towns in outlying regions which must rely on general aviation if they are ever to gear themselves to the air age, according to AOPA observations. An AOPA study, based on a number of sampling survevs, showed that in 1958, 103,790,868 people emplaned for flights in civil aviation. General aviation accounted for 57% of this total; airline passengers made up the remaining 43%. General aviation, then, becomes more than just a supplement to air carrier operations. It is a key to an important segment of essential air travel. Private commercial carriage of passengers for compensation or hire now accounts for about 2,300,000 hours flown annually, about one-fifth of the general aviation total, according to the Aerospace Industries Association. AOPA contends that airport development, therefore, deserves important

consideration as a major public works project during the sixties.

The number of airports fell from a total of 6,500 ten years ago, to about 5,300 by 1958. Since that time, the total has again risen to a little over 6,400. W. T. Piper calls attention to the need for small, inexpensive airstrips which could be financed, generally, by the smallest towns. America needs a minimum of from 15,000 to 20,000 public landing places, he adds.

Leaders in the general aviation industry see the decade ahead as a period presenting a progress potential which is almost unlimited. They are fully alert to prevailing conditions for continued growth and expansion. Despite their successes, they indicate that they are still thinking in terms of laying foundations for future industry growth and for a greatly increased number of general aviation contributions to the productivity of the nation and the economic well-being of every community.

## ANNUAL SHIPMENTS OF GENERAL AVIATION AIRCRAFT (Companies reporting to the Utility Aircraft Council, AIA)

Year	Unit Total	Aero Design	Beech	Cessna	Champion	Mooney	Piper	Others	Total Retail Value
1955	4,434	72	680	1,746		32	1,870	34	\$191,800,000
1956	6,738	154	724	3,235	162	79	2,329	55	138,388,000
1957	6,118	139	788	2,489	217	107	2,300	78	132,868,000
1958	6,414	97	694	2,926	296	160	2,160	79	135,916,000
1959	7,689	148	893	3,588	274	182	2,530	74	173,168,000
1960	7,588	155	962	3,721	248	172	2,313	17	201,626,000