

# GENERAL AVIATION 1965

*Last year was one of promise fulfilled as all segments of general aviation enjoyed record-setting business. Expansion upward and outward, however, has only begun, industry leaders predict*

**G**eneral aviation, marked from infancy as an industry that has an overabundance of confidence, can look back on a year that fully justifies that trait. Optimism expressed last January came to fruition as 1964 closed on a record-shattering note for aircraft sales and lightplane activities in general.

Financially, general aviation has never fared better than it did last year, but the industry is looking expectantly toward even greater gains in the year ahead.

In spite of what were regarded as abnormally high sales during 1963, calendar year 1964 opened on a happy note. Last January marked the 11th consecutive month in which aircraft sales exceeded those of the same month in the preceding year. Since then that record has been repeated 11 times, making a 22-month steady upturn in the general aviation market. Last October, the beginning of fiscal year 1965 for most airplane manufacturers, set an all-time single month high for lightplane sales, with 1,102 being delivered to new owners. That same month saw calendar 1964 total sales rise to 7,692, to surpass by 123 the total sold during the entire calendar year 1963.

By the close of last month more than 9,000 general aviation planes had been retailed for an estimated \$250,000,000, setting a 17-year record high in units sold and an unequalled dollar volume. The new year has begun with no apparent abatement to that heartening upward spiral.

An AOPA mail survey sent to major segments of the general aviation industry late last year brought responses ranging from matter-of-fact satisfaction with the situation to unfettered enthusiasm over the expected shape of the market this year and in the decade ahead.

In its annual report to stockholders issued in mid-November, Beech Aircraft Corporation announced that fiscal 1964 sales were the greatest in 10 years. Reflecting an overall increase of 45% over 1963, the uptrend exceeded even the most optimistic forecasts of Beech officials.

Beech commercial and business product sales totaled \$54,270,333, an all-time high dollar volume that was 19% above the same income in 1963 and

160% above that of 10 years ago. Oversea sales topped \$15,500,000, an impressive 44% increase over the preceding year.

A sales breakdown on the nine-model Beech line showed that the twin-engine, \$60,000-plus *Baron* was the company's top money maker. Through October, 230 *Barons* were sold for more than \$14,500,000. The *Queen Air* series added another \$10,200,000 to company coffers, and the sale of 372 *Bonanzas* brought in \$9,900,000.

Mrs. O. A. Beech, company president, said the future for increased production and sale of general aviation planes is quite encouraging. "Our established models will fulfill a continuing high volume of orders on hand, and customer deposits on the new Beechcraft *King Air* represent future deliveries of \$40,000,000." That pressurized, twin-turboprop model is now on production line status and will be strongly emphasized this year.

Cessna, the industry leader for the past nine years, regards 1964 as the greatest growth period in its history. Its fiscal year closed Sept. 30 with total commercial aircraft sales of 3,985 planes valued at \$71,700,000. This was a gain of 25% in dollar value and almost 19% in unit sales over 1963. Cessna's manufacturing and marketing staff was increased by 200 during the year to bring the total number of employees to over 4,800.

The moderately priced four-place Cessna 172 and its deluxe version *Skyhawk* continued as the company's most popular product. Some 1,200 units were sold last year, and it is expected to continue as the consumer favorite during 1965.

Boasting a business aircraft line of 14 models, Cessna plans to push hard on the sale of its two newest this year—the new centerline-thrust twin, retractable-gear *Super Skymaster*, and the six- to eight-place executive Cessna 411. These two twins, along with the Cessna 310 and *Skyknight*, will spearhead the company's bid to become the industry leader in multi-engine sales.

Cessna officials predict that, during the coming decade, general aviation unit sales and dollar volume will continue to climb steadily. They foresee an annual rate of growth of about 10% for their own company. "With strong

## General Aviation Aircraft Dollar Volume Sales

Calendar Year:	
1960	\$203,000,000
1961	170,000,000
1962	182,000,000
1963	205,000,000
1964*	244,000,000

\* Year end estimate based on sale of 9,000 units

evidence of increasing acceptance of business and pleasure aircraft within the existing large market," said Dwane L. Wallace, chairman of the board, "we feel that private flying literally has no place to go but up."

Mooney Aircraft, Inc., with sales of 624 planes valued at \$9,120,000 in 1964, is perhaps the most optimistic manufacturer in the industry. And well it might be. Last year unit sales increased 20% and dollar volume rose 26%, leading to further ambitious plans for broadbased expansion. A minimum growth of 28% has been forecast for this year, when it will add the pressurized Mark 22 *Mustang* and the twin-turboprop MU-2 to its current three-plane line.

Mooney increased its personnel by about one-third last year, bringing the total number of employees to 661. This is seen by company leaders as only a beginning. They predict that their cumulative market over the next 10 years will gross the firm about \$500,000,000 and are gearing their work force toward that.

Mooney believes that development of its larger single-engine, pressurized Mark 22 *Mustang* will initiate a significant trend and that other manufacturers will adopt a form of the Mooney PC stability augmentation system.

Piper Aircraft Corporation, with a 1964 output of nearly 3,000 planes that



### FAA Pilot Certificate Holders

As of Jan. 1:	Student	Private	Commercial	ATR	Total
1959	103,456	140,573	93,126	15,840	352,995
1960	107,815	139,804	93,815	16,950	358,384
1961	99,182	138,869	89,904	18,279	346,234
1962	93,973	144,312	92,976	19,115	350,416
1963	95,870	149,405	96,047	20,032	359,354
1964	105,298	152,209	96,341	20,269	374,117
1965 *	114,082	156,500	98,000	20,500	389,082

\* Unofficial estimates based on past growth rates

### Active Fixed Wing U.S. General Aviation Fleet

As of Jan. 1:	Single Engine 1-3 place	Single Engine 4-place & over	Multi-Engine Piston	Other	Total
1961	32,980	38,030	8,230	160	79,400
1962	32,337	41,119	8,978	213	82,647
1963	32,341	41,120	9,186	507	83,154
1964 *	34,000	45,000	10,300	650	91,100
1965 *	34,965	49,500	10,800	735	96,000

\* Unofficial estimates

### General Aviation Hours Flown (By type of flying)

Calendar Year:	Business	Commercial	Instruction	Pleasure	Total
1960	5,699,000	2,365,000	1,828,000	3,172,000	13,121,000
1961	5,699,000	2,634,000	1,796,000	3,398,000	13,602,000
1962	5,431,000	3,049,000	2,385,000	3,345,000	14,461,000
1963 *	5,750,000	3,250,000	2,500,000	3,570,000	15,070,000
1964 *	6,000,000	3,500,000	2,700,000	3,700,000	15,900,000

\* Unofficial estimates

### Annual Aircraft Shipments (As reported to Aerospace Industries Association)

Calendar Year:	Total	Aero Commander	Beech	Cessna	Champion	Mooney	Piper	Other
1960	7588	155	962	3721	248	172	2313	17
1961	6778	139	818	2756	112	286	2646	31
1962	6697	121	830	3124	91	387	2139	5
1963	7569	114	1061	3456	99	502	2321	16
1964 *	7692	93	915	3443	38	533	2644	26

\* 1964 figures reflect total reported as of Nov. 1, 1964. Total calendar year sales are estimated in excess of 9,000

netted upwards of \$55,000,000, looks toward greater utility, power and range in business aircraft as the key to continued company growth. With a 43% dollar volume increase over 1963, last year is regarded by Piper officials as the most significant period in the firm's history, but even brighter days are seen ahead.

The success of the *Twin Comanche*, which had posted 466 sales by Dec. 1, gave Piper cause to predict a \$65,000,000 market in 1965. This should spiral to an annual dollar volume of \$100,000,000 five years from now, company spokesmen predict.

Although Piper foresees immediate acceptance of the new *Comanche 400* and the soon to be introduced twin-engine, six-place *Cherokee*, the smaller *Cherokee* series is expected to continue as the firm's "bread and butter" product. Aggregate sales of that series during 1964 amounted to more than 1,200 planes.

Only one of the eight general aviation manufacturers reporting to the Aerospace Industries Association registered a marked turndown in sales during the 1964 boom year. Champion Aircraft Corporation, which sold 100 planes during 1963, closed out fiscal 1964 with 38 sales that netted \$225,000. But the firm reportedly is ready to invade the market with its new, low cost (under \$5,000) sports plane, the aerobatic *Citabria*. It predicts a decided upturn during 1965 and has doubled its production force in anticipation of building more planes this year than it has in the past three years.

The overall rosy hue of the general aviation market seems to have attracted more newcomers in 1964 than in any comparable period since the post-World War II false boom. Once-defunct Belanca was back in limited operation, but with high hopes for capturing a healthy share of the 1965 market. The newly certificated Alon, Inc., A-2 *Aircoupe* was slated to begin production almost immediately. And Bede Aircraft's \$2,500 BD-1 is reportedly just around the corner from production, with hundreds of orders and cash deposits on hand.

Several families of small business-size STOL's attracted the industry's attention during 1964. The Wren 460, the Volaire 1035 and 1050, and Belford D. Maule's *Jetasen* and *Rocket* began turning up at general aviation airports with regularity. Maule, which reported sales of 100 of its 145 and 210 h.p. four-place, conventional gear planes during 1964, indicated that it is developing a multi-purpose, top loading ag plane and a model designed specifically for hauling cargo. The firm expects to sell 125 planes during 1965 and believes that within two or three years a production rate of a plane a day should be realized.

In the larger corporate aircraft category, two firms in particular are eyeing a potentially lucrative market. On the belief that only one out of 10 corporations that require them are actually using business aircraft, *Aero Command-*



er and Lear Jet have set their sights on that portion of the market.

With some 35,000 corporations using aircraft today, a potential of 350,000 is claimed. Rockwell Standard's *Aero Commander* Division reported 1964 sales of \$19,000,000, up \$4,500,00 from 1963. Board Chairman W. F. Rockwell prophesied that sales would increase to \$50,000,000 in 1965 and would reach more than \$100,000,000 annually by 1970. The firm's \$595,000 *Jet Commander* will go into production this year, he said, and 60 already are on order.

Lear Jet delivered its first production model to the Chemical and Industrial Corporation on Oct. 13, 1964, and has sold three of the \$575,000 twin-jets so far. Five are ready for delivery as distributor demonstrators. Although stock issues limit speculation as to the potential market, Lear officials are confident that the trend of business to require faster, more flexible transportation will increase even more the present interest in business jets.

That interest was strongly reflected at the annual convention of the National Business Aircraft Association in Miami Beach last fall. A dominating feature of that affair reportedly was the strong interest in jetcraft and the energetic sales efforts by representatives of several jet plane manufacturers.

In the area of aircraft electronics, too, an unprecedented business increase was experienced last year, but 1965 is generally viewed as the threshold to magnified fortunes. Aircraft radio and equipment makers unexplainedly seemed reluctant to respond to AOPA's brief questionnaire. Of those who did respond, however, most indicated that the past two years have been most kind to them and that a steady market growth of 10% to 15% annually is expected over the next few years.

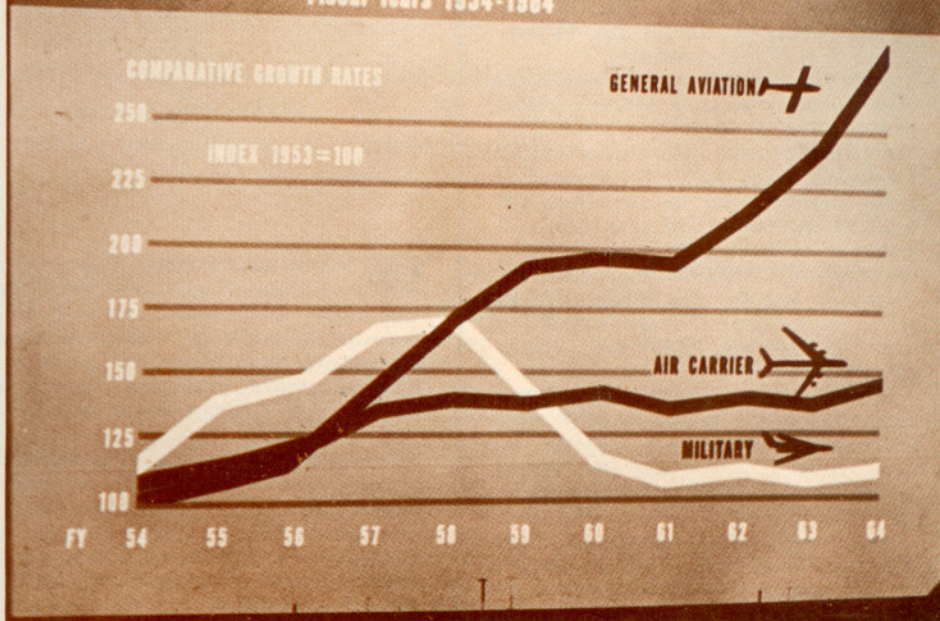
Bayside Electronics provided an exception to that conservative outlook. With 1964 sales of \$330,820 representing a 100% increase over 1963, this firm has tripled its work force and sees a potential gross market of \$20,000,000 in 10 years, barring any upsetting factors.

The extent to which the lightplane electronic equipment industry has flourished in recent years was reflected by FAA's 1962 survey of aircraft owners. That study found that 67.2% of active private aircraft were equipped with two-way radio, a gain of more than 7% over 1957. About 79% of all private planes had some type of radio equipment. With aircraft manufacturers offering radio as standard equipment in more models over the past two years, it is likely that those percentages have increased sharply.

Cessna's subsidiary Aircraft Radio Corporation also expressed confidence that the future will bring it a greatly expanded market—perhaps as much as \$50,000,000 a year in another decade. The firm is especially optimistic about acceptance for three new products it is offering this year—a greatly refined



## TOTAL AIRCRAFT OPERATIONS AT AIRPORTS HAVING FAA TRAFFIC CONTROL SERVICE Fiscal Years 1954-1964



General aviation's 10-year growth record has soared in comparison to other segments of flying. Index devised by FAA this year indicates that private flying activities have grown at nearly 2½ times the rate of air carrier operations. This is a photo of an FAA color slide

solid state navcom unit, a new light-plane transponder, and a distance measuring equipment unit. The last two will be completely new items in the company line.

From the standpoint of the allied general aviation trades—fixed-base operations, air taxi, flight training, fuel, supplies, maintenance and repair—an optimistic outlook toward the future is tempered by a healthy sense of caution. According to the National Aviation Trades Association, fixed-base operators enjoyed a comparatively good year in 1964 but will be hampered at most locations until more operating capital is available and more general aviation products are sold. Aviation businessmen will have to generate greater interest in their industry if theirs is to become a dynamic and profitable rather than a semistagnant business, NATA officials believe.

During the past year, NATA has noted a growing awareness among operators that better line service and customer conveniences are required. There has been a trend toward "one stop service," where general aviation customers can receive maximum service as well as ground transportation, lodging and food. General aviation businesses have steered away from the perennial practice of blaming the Government for their problems and have begun positive programs to improve the situation, NATA said.

Over the next 10 years NATA expects general aviation businesses to become financially more sound through better management practices. The asso-

ciation foresees the merging and consolidation of many small airport businesses, with the provision of better customer services and convenience as a result. But they predict that many present marginal operators will be unable to weather the competitive storm.

Because of the trend toward decentralization of large corporations, NATA expects air taxi operations—which registered a 21½% increase between 1957 and 1962—to prosper even more greatly.

The greatest ponderable and the most pervasive cloud on the general aviation horizon probably is the human factor—the single element upon which all else hinges. According to FAA statistics and projections, the number of certificated pilots has failed to keep pace with the overall industry growth over the past five years. The average annual increase of new pilot certificates issued over that period (student, private, commercial and ATR) has been 1.2%. Unless this average greatly increases, the entire industry can expect its growth rate to be limited to about the same rate. The past two years have seen a gradual increase, however (2.6% in 1962 and 4.1% in 1963), and a further rise of 4% was projected for 1964.

General aviation statistics concerning people, planes and hours flown have always been and continue to be something of a guessing game. Those based on Government estimates, in AOPA's opinion, tend to be on the conservative side. Official FAA figures reflect that there were 83,154 active general aviation aircraft in 1963 (excluding gliders



and rotorcraft) and 374,117 licensed pilots in 1964. By the close of 1964 they had flown an estimated 15,900,000 hours. Of that, 37.8% was flown in the conduct of business, 22% in commercial endeavor, 10.7% for instruction and 29.5% for pleasure.

Although aircraft manufacturers are aiming hard at reaching larger portions of the potential business market—they claim that there are more than 350,000 business firms in the United States that could benefit by the use of private aircraft in the conduct of their affairs—statistics indicate that pleasure flying has registered a marked increase in the past six years. In 1958, business flying accounted for 45% of total hours flown, and only 19% was attributed to flying for pleasure.

Export sales of U.S.-made light-planes enjoyed a banner year in 1964, but the outlook for 1965 may be less rosy. Britain, one of the most choice oversea markets, recently established a 15% import tax on all aircraft under a gross weight of 12,500 pounds. For firms like Beech, which registered 1964 export sales of \$15,500,000, this could be an unhappy turn of events.

One authority has pointed out a number of factors that the general aviation industry cannot afford to let the bright blush of optimism obscure. Kendall K. Hoyt, Washington editor of Airport Management Services, said in a special report that in this, the best year general aviation ever has had, there is work ahead to keep on the rise and get ready for any lean years that may follow.

Today's market can be compared to that of 1946-49, Hoyt believes. During that period, the industry depended heavily on flight instruction, which accounted for nearly two-thirds of all flying hours. At the expiration of the GI Bill, business went bust. Today's market may be similarly endangered by the imbalance and overdependence on business flying, Hoyt warns.

That segment of general aviation reportedly is growing at a rate of 2½% a year, compared to population increase of 1.9%, 3% for gross national product, and 5½% for general aviation as a whole. While flight hours are increasing by about 5½% annually, an identical growth rate is posted in number of airports, so the base of the business is comparatively unchanged. Unless the training volume of new pilots is increased and aviation leaders do something to prepare for a possible interruption of the present profitable trend, the industry may again falter as it has many times in the past, Hoyt implies.

While the points brought out by Hoyt should be recognized, they should present no obstacle to confidence in the continued growth of general aviation. In a few brief years, industry leaders have engineered a new public concept of the lightplane as a safe and efficient vehicle for both pleasure and practical transportation. The optimism that brought that about can carry general aviation to even greater heights of utility and acceptance. ●