Industry outlook for the coming year reflects a leveling off of production at a healthy plateau, but swelling numbers of lightplane pilots show no signs of abating

by ROBERT L. PARRISH / AOPA 259647

■■ Although the past year failed to achieve the record-breaking production and delivery of general aviation aircraft that was experienced in 1966, there were few unhappy faces in the lightplane industry, as far as general market growth was concerned. But the outlook for 1968 is one that may best be described as cautious optimism.

The picture, from the aspect of production and sales of new aircraft and accessories, is more than favorable in the opinion of manufacturers and jobbers. Mounting pressures against general aviation, however-increasing threats of excessive operational restrictions, the Vietnam situation, an election year, tax uncertainties, and possibly exorbitant "user charges"—temper what otherwise might be an unblemished outlook.

Despite those uncertainties, major aircraft manufacturers hope that 1968 will be another banner year for general aviation, one which will bring greater stability and predictability to the market than has been achieved over the past three years of explosive growth.

Some skeptics regard the plateaued production rate of 1967 as an ominous sign that 1966 may have represented a false boom such as occurred in 1947. Actually, according to Joseph T. Geuting of the Aerospace Industries Association's Utility Airplane Councilwhich reports on 10 of the leading private aircraft manufacturers—the leveling off was a healthy indication. It reflects, in his opinion, a desire on the part of manufacturers to put more effort into improving their products; and not to outstrip the capabilities of distributors, dealers, sales forces and available aviation facilities which already reflect the strain of heavy traffic.

When compared with every year since 1947 except 1966, the past year deserves no apologies. In both units delivered during fiscal year 1967 (13,567 sold by 17 companies, according to Aviation Daily) and dollar volume (estimated conservatively at \$450,000,000), business returns were second only to 1966. In numerous other significant areasnew aviation student starts, industry promotional activities, aviation education programs—1967 has no equal.

Of the unit sales reported, the "Big Five"—Aero Commander, Beech, Cessna, Mooney and Piper-accounted for 12,776 units worth an estimated retail value of \$431,822,931. Cessna continued as the industry leader for the 12th straight year, with 6,184 deliveries during fiscal year 1967, worth about \$137,989,348 on the market. Following in order of number of units were Piper (4,273 deliveries valued at \$100, 548,750), Beech (1,313 aircraft worth \$129,898,333), Mooney (676 units that retailed for \$19,062,500), and Aero Commander (330 deliveries worth about \$44,334,000).

Statistics developed by the U.S. Department of Commerce on general aviation exports reflect an oversea market that is more significant than the unforecasts, the latter year reflected an overall market downturn of about 13.8% in this country. Manufacturers attribute as the primary cause for that the fact that distributors and dealers had healthy inventories on hand at the close of 1966, but very few overstocked inventories were evident at the beginning of 1968.

An AOPA interview with the leading lightplane manufacturers brought these observations of the past and outlooks

for the future:

George T. Humphrey, head of the Aircraft Division of North American-Rockwell Corporation (Aero Commander), disclosed that the letdown in sales for his company coincided with Federal removal of the investment tax credit in 1966. "This had a marked effect on sales of higher priced aircraft," he said. "We had hoped that with return of the investment credit we'd see our big aircraft take off in a flourish of sales again, but our merger difficulties came along and dampened the sales of our

The company sold 15 Jet Commanders during 1967, barely half the number sold the previous year. But sales in all other models did not decrease, Humphrey claimed. "From the standpoint of total units, 1966 was below our expectations, so we struck out in 1967 to increase production in all areas except the jet. We are continuing on that basis and delivering Turbo II's faster this year than ever.'

# GENERAL -

initiated might assume it to be. U.S. concerns sent a total of 3,040 business, personal and utility aircraft worth about \$78,710,000 wholesale to foreign markets during the Federal fiscal year 1967. Those exports were projected to increase to 3,150 units valued at about \$81,900,000 during the current year.

At the same time, 61 foreign-made business and personal aircraft worth about \$11,620,000 were imported to the United States. The forecast for this year is 55 units that will earn their makers \$10,450,000, Commerce Department officials said.

Aircraft parts and accessories slated for the foreign market provide a real surprise. During 1967 oversea sales of aircraft engines and parts, propellers and parts, landing gear, and miscellaneous parts and accessories amounted to a thundering \$575,820,000. Sales of those items this year are projected to be about \$646,000,000. Those figures, however, reflect no breakout of private from commercial aircraft markets.

A comparison of sales records of 1966 and 1967 shows that, despite rosy

Humphrey expects 1968 to be Aero Commander's most successful year to date because, "I think the market is continuing to grow with respect to the number of people who actually start pilot training and with respect to corporations that look at aircraft as a business tool, whereas they may not

have in the past."

Tight money and high interest rates may be retarding factors, as may be a national lack of confidence engendered by Vietnam and continuing pressure on the dollar; "the things that people look to Washington for leadership on," Humphrey said. But he still foresees a net dollar volume business of \$55,000,000 to \$60,000,000 (about \$75,000,000 retail) for Aero Commander during 1968.

A significant portion of that probably is expected to be derived from the Sabreliner, the company's top of the line jet since the Rockwell Standard-North American merger. In addition, in announcing plans last month to build a new plant at Homestead, Fla., company officials indicated a strong possi-

#### This Is General Aviation 1968

Aircraft	110,000
Single-engine, 1-3 place	36,097
Single-engine, 4-place or more	56,922
Multi-engine	14,300
Other	2,681
Airmen	615,729
Student	185,269
Private	249,217
Commercial	148,281
ATR	26,596
Other	6,366
General Aviation Hours Flown, 1967	_24,000,000
Business	,,
Instruction	7,440,000
Personal	7,920,000

This quick statistical look at general aviation in the United States today represents an attempt to give currrency to the most recent official FAA information available, modified by information obtained from aircraft manufacturers, the AOPA Profiles of Flying and Buying, and other sources.

Commercial \_\_\_\_\_\_ 2,880,000

# AVIATION

bility of adding two to four new aircraft to the present 10-model line.

"We have some definite plans right now," Humphrey disclosed, "but it would be premature to talk about the aircraft

specifically."

He sees no more problems ahead for general aviation than have existed in the past, but acknowledged that they are of a different nature. "Some are more politically oriented." A primary solution is "diligence to the task of making our situations well known. I don't mean publicizing our problems, but publicizing our existence and the need for that existence."

Mooney officials also noted the tight money market as a cause for whatever reversal took place in sales last year. "But I believe the slight decline was beneficial," said E. E. Karman, company PR. "It impressed upon us the necessity for the manufacturer to take more initiative in helping to expand and improve dealer sales and service forces."

Mooney experienced about an 11% downturn in 1967, but looks for an increase to about 860 units worth some

## General Aviation Aircraft Fleet Growth

1963-1967

Year	Production In Units	Estimated Retail Value	Total Active Fleet
1963	7,569	\$200,000,000	85,088
1964	9,652	244,000,000	88,472
1965	12,331	422,000,000	95,442
1966	15,724	512,000,000	104,706
1967	13,567	450,000,000	110,000



### Air Traffic Activity Recorded By FAA Control Towers

Fiscal Years 1963-1967

Year		Total Operations		Air Carrier	Mil.
1963	274	29,190,087	65%_	23%	.12%
1964	277	_32,857,745	69%_	21%	.10%
1965	284	_35,557,868	70%_	21%	9%
1966	299	_41,209,592_	72%_	20%	8%
1967	309	_47,877,066	75%.	18%	7%

### **Landing Facilities**

1963-1967\*

As Of Dec. 31:	Total		Private Use	Lighted	Paved
1963	8,814	_5,582_	3,232	2,672	_2,451
1964	9,490	_6,287	3,203	2,773	2,620
1965	9,566	_6,483_	3,083	2,878	2,747
1966	9,673	6,640	3,033	2,905	2,872
1967 1	10,015	6,846	3,169	3,102	3,003

\* From FAA reports. Includes heliports, seaplane bases and military joint-use facilities in the 50 states and U.S. possessions.

<sup>1</sup> As of Aug. 1, 1967.

\$25,000,000 in 1968. That doesn't include projected sales of 36 MU-2 twin

turboprop models.

"Among the aspects that might cloud the outlook are the continuation of the Vietnam war, the uncertainty over proposed tax increases, the unfavorable publicity that general aviation attracts each time there is an accident," Karman said. "There is also the threat of overregulation by FAA, as well as the coming election. All of these things will make themselves felt on the general aviation market."

Two major areas exist in which Mooney officials believe advancements must be made to insure the continued orderly growth of general aviation. One is the development of better pilot training programs to alleviate to the greatest possible extent the pilot error factor in mishaps. A corollary to that would be concentrated educational programs to enlighten the public and news media about general aviation. From the manufacturer's standpoint, greater effort must be made in precisely defining markets for which various aircraft models should be developed, Karman said.

Cessna's president, Del Roskam, regarded 1967 production as a predictable result of manufacturers' desires to reduce field inventories of new aircraft to more workable levels. "We have accomplished this goal and expect 1968 to reflect a higher level of deliveries than 1967," he said.

Three factors that will have a decided effect on Cessna's 1968 market, Roskam believes, are (1) continuing increases in student starts and the "learn to fly" program; (2) expansion of the product line in both single- and multi-engine models to appeal to a broader range of prospects; and (3) growth in Cessna's worldwide retail marketing organization, both in numbers and quality.

Since January 1965 about 400,000 people have obtained student pilot licenses, Roskam pointed out. Some of them now are generating untold millions of dollars of revenue for the general aviation industry and represent an unprecedented demand for twoplace and low-cost four-place airplanes. Anticipated new student starts this year and continuation of the "learn to fly" program will broaden the base of business even more, he added.

Introduction of two new singleengine models and expansion of multiengine models to eight has brought Cessna's 1968 product line to 31 models. Officials believe this broadened line will enable dealers to offer airplanes for virtually any prospect or purpose. And with its outlets now numbering more than 900 franchised dealers throughout the world, Cessna expects deep penetration into both new and existing markets.

'Even more significant," said Roskam, "is the work being done by both our wholesale and retail organizations to upgrade capabilities in both facilities and manpower to give better services to customers."

Cessna sees an industry-wide need

to accelerate growth by better acquainting the public with general aviation's limitless capability to transfer people and material safely, efficiently and economically.

Piper laid the blame for the 1967 "slump" on both tight money and the loss of investment credit for business purchasers. But it expects its 1968 production and sales to increase by a healthy proportion, primarily because of unusually strong market acceptance of the new Arrow and Cherokee D models, and the 1968 Aztec and Navajo. A change for the better in Department of Agriculture policies also has brightened the outlook for the Pawnee crop applicator plane.

With the Twin Comanche and the Aztec, Piper claims first and second places in light twin sales, and back orders into April on the Navajo offer

real encouragement.

Piper appears to be the only one among the "Big Five" that looks at 1967 as an unsatisfactory year. For 1968, officials expect to realize a production level of well over 5,000 units and a net billing in excess of \$100,000,000 (\$125,000,000 in retail

Problems that must be overcome to bring 1968 up to full expectations include those related to Congressional pressures being brought on FAA to create unwarranted regulations as a result of increasing consternation over

air safety, Piper believes.

The real solution to our problems is not one of positive control," said J. W. Miller, Piper director of marketing. "In fact, there is no such thing as 'positive control.' The real problem that must be solved is that of congestion in metropolitan areas caused by the gratifying growth of civil aviation. In the past five years, 23 metropolitan areas have been overwhelmed by that growth because they have not extended their overall planning rapidly enough to meet it. In the next 10 years this problem can extend to as many as 75 to 100 additional metropolitan areas unless 10- and 20-year plans are prepared soon to accommodate the vital air transportation aid to national and local economy."

Beech, although it did fall short of earlier projections, was the only major company to post significant domestic sales increases during 1967. Although the company marketed about 100 less units in 1967 than it did in 1966, dollar volume was up by nearly \$29,000,-000. Tax legislation was mentioned as a factor that may have kept the company from achieving its projected 40%

increase in sales.

For the coming year, Beech officials are forecasting about a 25% increase in both units and dollar volume, bringing their share of the market to about \$150,000,000. This is because they believe that more and more business concerns are coming to regard aircraft as "tools of efficiency." If there is a soft spot ahead, it is in a continuing tight money outlook, but this can be overcome by concerted efforts of both manufacturers and their sales forces to prove the airplane's capability to increase productivity, Beech believes.

The company plans to have 18 models on the market this year, but the emphasis appears to be placed on the top of the line Beech 99 Airliner and King Air models. One of the main problem areas from the builder's point of view is that manufacturers must better learn to reach and sell to those who need and can profit from the use of aircraft for business purposes, Beech officials claim.

New models and products on the market-expansion of Bellanca's line to five models; renewed interest in acrobatics and consequent accelerated sales of the Champion Citabria; the mergers of North American and Rockwell Standard, and Alon with Mooney; and certification of the American Aviation Yankee as a successor to the Bede BD-1-are among 1967 occurrences that will have a decided influence on the general aviation picture during the year ahead.

Based on the spirited sales of the past two years and manufacturers' analyses of the market for 1968, it is obvious that FAA forecasts concerning the size and activity of the general aviation fleet by 1975 will have to be revised drastically upward. The agency predicts that by then there will be 160,000 active private aircraft that will fly some 29,970,000 hours annually. But just last summer it had to adjust its own count of 1966 active aircraft upward from about 95,000 to 104,706. AOPA records indicate that as of the end of calendar year 1967, the count approximated at least 110,000, allowing for a more than liberal attrition rate.

From 1954 through 1964, manufacturers produced a total of 73,406 fixedwing private aircraft in this country. In the three-year span of 1965-67 alone, some 42,000 were turned out and production levels are forecast to remain high into the foreseeable future.

From the standpoint of general aviation operations too, FAA had to fall back and regroup in its statistical exercises. Until last summer, Government statisticians clung to the myth that general aviation flew some 17,400,000 hours during 1966, but finally recomputed that figure at 21,023,000 hours.

Even that figure seems to be on the conservative side. As Robert E. Monroe, AOPA assistant chief of policy and technical planning, pointed out to a Congressional committee last sum-

"Total operations for general aviation in 1966 at tower-controlled fields are reported as 33,445,000. Total general aviation flying time is reported as 21,-023,000 hours. If all flights had begun and ended at a tower-controlled field, this would mean only 16,722,000 flights averaging only one hour and 15 minutes each, and would allow for no flights whatsoever at the other 97% of the airports which do not have towers."

Obviously, with control towers at only 309 of the country's nearly 10,000 airports, there is a fallacy somewhere in these figures. On the basis of its own market survey, conducted in 1966 and extended to 1967, AOPA estimates that general aviation flew at least 24,000,000 hours last year.

Likewise, aircraft usage figures offered by FAA are subject to some question. The agency recently gave a breakdown of general aviation hours flown during 1966, indicating that business flying was the most active segment, accounting for 33% of total hours flown. This was followed by flight instruction with 27% of all hours flown, personal flying with 22%, and commercial (air taxi, charter, agricultural, etc.), 17%. Yet, the people who build them are introducing increasing numbers of new aircraft models designed for training and personal use; a trend that has resulted from a thoroughly analyzed market demand. And a recent comprehensive AOPA study disclosed that personal flying has spurted ahead.

In the realm of airman certification, FAA is on firmest ground. Statistics in that area show that, as of one year ago, there were 548,757 active pilot certificate holders. During fiscal 1967 there were 207,822 new pilot certificates of all types issued, weighted most heavily by 133,943 student certificate issuances. In the coming 12 months, FAA expects there will be in the neighborhood of 193,000 new student starts, and that the total number of active certificate holders will increase to nearly 700,000.

The general aviation employment picture, clouded last year by a lack of production line, sales and service workers, still has not turned overly bright, according to industry officials. Some manufacturers feel, however, that they have made significant strides forward in helping their distributor-dealer systems to strengthen their sales and service forces through factory-sponsored programs.

Mooney officials disclosed that they have scheduled at least half a dozen sales training sessions for early this year and will arrange more later as dealers request them. Similarly, most of the lightplane builders reportedly are attempting to persuade their distributors and dealers to upgrade both the quality and extent of maintenance and service.

According to AIA, calendar year 1967 ended with about 31,758 production workers employed by the 10 leading aircraft manufacturing companies. An estimated 5% employment increase across the broad board of the general aviation industry, including avionics and accessories producers, should bring total industry employment to an estimated 265,000 by the end of 1968.

One of the brightest spots of the past year that promises to continue through 1968 is that reflected by various educational programs within the general aviation industry. UAC's high school aviation assembly program, begun in three states during the 1966–67 school year, was expanded to 13 states to reach about 1,250,000 teenagers this year. The conduct of aviation education courses in high schools (stimulated in part by UAC's program) increased by more than 100% (from just over 200 to 433) in 1967 and is projected to show further growth this fall. Cessna and Piper \$5

introductory offers to "learn to fly" reportedly have generated unprecedented public involvement in general aviation and will be continued at an accelerated rate this year. Finally, press and public education programs, either already launched or planned by several segments of the industry, should do much during the coming year to alleviate public misunderstanding and fear about general aviation.

One dark spot on the horizon: An "Achilles' heel" is expected to continue to exist in the nation's airport system. The Executive Department has made it clear that it expects the aeronautical user to pay his own way for "special benefits" and even though Congress authorized \$66,000,000 for this vear's Federal Aid to Airports Program, it is questionable that much of it will be used for general aviation facilities. Some 778 requests were received for a total of \$339,300,000 in FAAP matching funds, but on the basis of previous experience and the Federal Administration's hardening attitude, it is improbable that more than 15% of the funds ultimately allocated will help general aviation's most serious immediate needs.

All points considered, the outlook for 1968 is regarded as brighter for general aviation than for many segments of the economy. As Aero Commander head George Humphrey declared, "The biggest threat we face is the 'GD' forces—the prophets of gloom and doom. The general aviation industry is maturing, and by cooperative efforts and a positive attitude we can look forward to constantly improved stature."