

■ General aviation year-end reports have had a sadly similar tone the last two or three years. There has been the inevitable recounting of the past year's financial woes suffered by the industry plus the detailed descriptions of an increasingly heavier yoke of operating restrictions and equipment requirements being carried by aircraft owners and pilots. Unhappily, the report on the year just past—1971—is much of the same. A few rays of sunshine, however, did slip through.

FAA finally moved off dead center, it appeared, on its Flight Service Station (FSS) modernization program [Dec. 1971 *PILOT*, page 27] and the agency took strides to establish a civilian version of the military's pilot-to-forecaster communications link [Oct. 1971 *PILOT*, page 27]. Both programs have been on general aviation's "need list" for some time.

Congress also supplied a bit of good news by slapping the Administration's hands for its partial success in raiding the Aviation Trust Fund for routine FAA and Department of Transportation (DOT) operations [Nov. 1971 *PILOT*, page 66; Dec. 1971 *PILOT*, page 8]. The intent of the Airport and Airways Development Act and its Aviation Trust Fund that is funded by user charges, was further clarified during the first session of the 92nd Congress as lawmakers banned spending, under any circumstances, trust fund money for non-trust-fund purposes.

The antiraiding bill, actively supported by AOPA in concert with 18 other aviation organizations, breezed through both chambers of Congress despite a good deal of bureaucratic gnashing of teeth and reported threats of a White House veto. President Nixon signed the bill into law Nov. 26, 1971, without comment. A public announcement of the signing was delayed until Nov. 29.

During calendar 1971, general aviation's stature within FAA and its parent, DOT, also increased somewhat. This was partly due to a general aviation safety study that was ordered by Transportation Secretary John A. Volpe and carried out by DOT's Office of Safety and Consumer Affairs [Nov. 1971 *PILOT*, page 56].

In brief, the DOT report contained 10 recommendations calling for: (1) a biennial flight check; (2) an improved general aviation accident prevention program; (3) a general increase in flight instructor skill, knowledge, and experience; (4) an upgrading of FAA's regulations covering pilot, flight school, and instructor certification; (5) modernization of the FSS network; (6) implementation of a real-time weather network (pilot-to-forecaster); (7) improvement of general aviation's status in FAA's headquarters organization; (8) a reorganization of Part 91 of the Federal Aviation Regulations that cover operating rules; (9) a revision of the present format of the FARs; (10) adoption of standard traffic patterns.

After a good deal of conversation, the climb and descent corridor concept

AN AOPA PILOT STAFF REPORT

General Aviation 1972

Student starts, aircraft shipments down again last year, but year-end trends indicate the industry is pulling out of its 2½-year slump. Discussions and actions on new aircraft and pilot restrictions, however, cloud picture for the new year and beyond

jointly developed by AOPA and the Air Line Pilots Association (ALPA) allegedly received its "day in court" in 1971. FAA conducted a "dynamic" demonstration of the concept at Boston's Logan International Airport [Aug. 1971 *PILOT*, page 8]. AOPA and ALPA, in polite terms, said the rules laid down for the test were stacked against the corridor concept. Though the test was conducted in July 1971, FAA's promised

evaluation of the test had still not been made public at year's end.

Despite the Boston corridor trial, and the missing evaluation report, FAA continued to establish new Terminal Control Areas (TCA) in 1971, citing the need for positive control over traffic in high density terminal areas. TCAs were established in 1971 at New York City; Washington, D.C.; Chicago; and Los Angeles. The four new TCAs, along with one set up earlier at Atlanta, brought to five the number of TCAs in existence at the close of the year.

Additional traces of creeping positive control were also seen in the en route segments last year. On Oct. 14, 1971, the floor of positive control airspace (PCA) was lowered from 24,000 feet msl to 18,000 feet msl over the entire "lower 48" states [Oct. 1971 *PILOT*, page 88]. Positive control airspace is reserved for those aircraft that file IFR and are transponder-equipped.

Some observers see still more storm clouds gathering on the aviation horizon, foreshadowing continued rough sailing for the general aviation operator in days to come. FAA, as late as December, was still mulling over comments on the possible need for upping VFR weather minimums and increasing cloud separation, plus it was also studying a notice of proposed rule making (NPRM) that would restrict use of special VFR (SVFR) after dark to instrument-rated pilots [Oct. 1971 *PILOT*, page 8].

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Student Starts By Month
1968-1971

Month	1968	1969	1970	1971
January	10,082	8,677	6,856	8,131
February	10,055	8,094	7,706	7,458
March	10,883	9,405	9,871	10,341
April	13,979	11,766	10,298	9,406
May	11,841	10,990	9,341	10,490
June	11,549	12,811	11,799	11,451
July	15,957	14,512	13,966	13,146
August	16,064	13,965	14,290	13,785
September	13,339	11,751	12,114	12,314
October	15,962	14,620	13,095	12,338
November	10,466	8,363	9,297	8,601*
December	9,267	7,972	8,238	7,302*
Totals	149,444	132,926	126,871	124,763*

Source: FAA

* November and December starts based on AOPA estimate based on average November-December increase in 10-month total.

Plans and/or moves were also in progress as 1972 rolled around to have a mandatory requirement for automatic altitude reporting transponders to operate in many terminal areas and to lower the PCA to 6,000 feet on certain heavily traveled routes. But one of the most bone-chilling prospects for both the air carrier and general aviation fleets, according to many observers, was FAA's launching a low-keyed program to make 25 kHz communications channel spacing mandatory.

FAA Frequency Management Division Chief William B. Hawthorne stated several times during the latter months of 1971 that the agency would start implementing 25 kHz spacing in high altitude en route sectors in the mid-1970's. If FAA is successful in pushing the new channel splits through the rulemaking process, it would basically require a total retrofit of the airborne equipment because there is currently no way to modify existing airborne equipment for 25 kHz channel spacing, according to many avionics engineers.

As one industry observer said, "This year [1971] hasn't been too bad, but the future has me more than a little scared."

The market depression for new aircraft and avionics in the early months of 1971 took its toll, not only of the marginal fixed-base operators, but also some manufacturers. Britten-Norman, Butler Aviation (Aerostar-Mooney), and Swearingen Aircraft were all hit hard in 1971. They either filed bankruptcy, sold out, or were in the process of doing one or the other.

Britten-Norman, Ltd., Isle of Wight, England, was forced into receivership in late October after it reportedly was unable to meet a call of approximately \$6.7 million in loans. The receivers, however, were making an effort at press time to keep the company's assembly line in operation.

A Texas bank filed a foreclosure notice in late November on a substantial part of Butler Aviation's single-engine Aerostar (Mooney) operation in Kerrville, Tex. Butler obtained an 11th hour extension of the loan though and said the way was cleared for the sale of Butler's Aerostar assets to Bellanca Aircraft Corporation, Alexandria, Minn. [see page 9, this issue, and Dec. 1971 PILOT, page 9].

Fairchild Industries, Inc., Germantown, Md., acquired 90% of the assets of troubled Swearingen Aircraft, San Antonio, Tex., late last year to keep that company's head above water. Fairchild said it would continue Swearingen's manufacturing operations, at least for a while, at the Texas site.

Despite the industry's gloomy start in 1971, the year closed on a fairly profitable note for at least two of general aviation's "Big Three." Beech Aircraft Corporation said it closed its fiscal year (Sept. 30, 1971) with an audited \$4.7 million in earnings, compared to a net loss of \$7.7 million for fiscal 1970. Cessna Aircraft Company reported after-tax earnings of \$7.1 million for fiscal 1971 which was below 1970's

Runway Lengths Of Landing Facilities*

Up To:	Publicly Owned				Privately Owned			
	Air-ports	Heli-ports	Seaplane Bases	Total	Air-ports	Heli-ports	Seaplane Bases	Total
2,999 feet	1,199	155	38	1,392	4,783	635	18	5,436
3,999 feet	1,213	0	14	1,227	927	0	9	936
4,999 feet	547	0	13	560	245	0	11	256
5,999 feet	486	0	27	513	105	0	49	154
6,999 feet	216	0	7	223	23	0	23	46
7,999 feet	108	0	5	113	7	0	11	18
8,999 feet	67	0	3	70	5	0	15	20
9,999 feet	49	0	1	50	0	0	1	1
10,000-plus feet	57	0	55	112	3	0	131	134
Grand Totals	3,942	155	163	4,260	6,098	635	268	7,001

Source: FAA
* As of Jan. 1, 1971.

Air Traffic Recorded By FAA Control Towers 1960-1971*

	Number of Towers	Total Aircraft Operations	(Percentage)		
			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	328	56,231,821	19%	75%	6%
1970	331	56,181,465	19%	75%	6%
1971	343	54,249,954	19%	75%	6%

Source: FAA
* All figures, except those for 1970 and 1971, are as of December 31. Figures for 1970 and 1971 are based on the fiscal year, which ended June 30. General aviation operations at FAA-tower airports over the past decade generally have consisted of about 55% itinerant and 45% local movements.

U.S. Landing Facilities* 1960-1971

	Total U.S. Facilities	By Ownership		Paved Airports		Unpaved Airports	
		Public	Private	Lighted	Un-lighted	Lighted	Un-lighted
1971**	11,538	4,284	7,254	2,717	1,169	882	6,770
1970	11,195	4,244	6,951	2,618	1,112	881	6,523
1969	11,050	4,155	6,895	2,548	1,102	882	6,518
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 June 1, 1971, and as of December 31 for prior years.
** As of June 1, 1971, FAA reported 7,091 of the 11,538 landing facilities were "open to the public without restrictions."

General Aviation Shipments

1960-1971

(Calendar Years)*

As Of Dec. 31	Production In Units	Estimated Retail Value**	Total Active U.S. Fleet
1971	7,219	\$422.7 million	135,000
1970	7,297	\$430.4 million	131,407
1969	12,581	\$632.2 million	130,806
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

* 1971 figures are based on actual shipments through October and an estimate of November and December shipments. In recent years, about 25% of the yearly shipments have been for export. This, along with the usual attrition, accounts for the difference in total estimated 1971 shipments and the estimated increase in the active fleet.

** Dollar values include all aircraft shipments by manufacturers reporting to the General Aviation Manufacturers Association (GAMA). Retail value for 1971 sales is estimated on the basis of the 1970 average unit cost plus a 2% inflationary increase for the 12-month period. The 1970 base was figured on a 33% markup and 5% negotiated discount, which has been described as a "typical" general aviation aircraft pricing formula by an accounting firm.

\$9.3 million earnings mark.

Piper Aircraft Corporation closed out its fiscal year with a \$1.23 million loss, according to a preliminary, unaudited report. Piper said, however, that its fourth-quarter sales (July through September) were "the highest since the first quarter of fiscal 1970 and highlighted the gradual improvement in sales experienced during the year."

Aircraft deliveries, according to General Aviation Manufacturers Association (GAMA) figures, took their first upswing in 32 months in July 1971, moving ahead of the production pace of the previous year. Despite what was a modest improvement, total projected production figures for calendar 1971 were still below 1970's. GAMA's shipment figures through October showed an average 8.33% increase over 1970 shipments for the July through October period. Based on these figures, production through Dec. 31, 1971, was expected to reach an estimated 7,219 units, compared with 7,292 for calendar 1970.

Though it appeared to be too early to draw any definite conclusions from the improvement in new aircraft sales during the final six months of 1971, the upward trend tended to support GAMA's midyear prediction of a market "regeneration" [April 1971 PILOT, page 50].

But FAA figures for new student starts, based on the issuance of combination medical certificates and student licenses, continued to slump for the fourth straight year. Last year's estimated 124,763 figure, however, reflected a smaller decline than was posted in calendar 1970.

Final figures for 1970 showed an actual drop of 6,055 student starts from the 1969 total, and 1971's total was expected to be 2,108 below the 1970 figures.

And, for the second straight year, the actual traffic count at FAA towers was down. FAA reported 54,249,954 tower operations through the end of fiscal 1971, which ended June 30. Operations were 1,931,511 below fiscal 1970, and 1,981,867 below the calendar 1969 peak of 56,231,821.

An examination of FAA's totals for instrument operations handled by both Air Route Traffic Control Centers (ARTCC) and towers indicated the increasing requirement for general aviation to use FAA's en route and terminal navigation systems. ARTCCs reported handling 3.7 million general aviation aircraft in fiscal 1971, and FAA's latest projections for fiscal 1972, based on first-quarter results, called for an anticipated 4.4 million general aviation aircraft IFR movements.

When looking at the raw figures for 1971, it might seem like just another dismal year for general aviation, but the third- and fourth-quarter upswing in new aircraft shipments, plus the apparent leveling off in the yearly decline in student starts, is being interpreted by many as a sign that a semblance of normalcy is about to emerge out of the confusion and depression of the past 2½ years. □

This Is U.S. General Aviation 1972*

	As Of Jan. 1, 1971	As Of Jan. 1, 1972
Aircraft:		
Total	131,407	135,000
Single-engine, 1-3-place, piston	44,957	46,095
Single-engine, 4-place or more, piston ..	64,356	66,005
Single-engine turbine (turbojets, turboprops)	106	110
Multi-engine, piston	15,875	16,200
Multi-engine turbine (turbojets, turboprops)	2,295	2,390
Rotorcraft	2,247	2,600
Gliders, balloons, etc.	1,551	1,600
Airmen:		
Total	732,729	747,000
Student	195,861	200,000
Private	305,826	311,000
Commercial	186,821	190,000
Airline transport	31,442	35,500
Helicopter (only)	6,677	7,000
Glider (only)	3,114	3,300
Other pilot	—	—
General Aviation Hours Flown:		
	(Calendar Year 1970)	(Calendar Year 1971)
Total	26,500,000	27,500,000
Business	5,591,500	5,802,500
Commercial	3,853,100	3,998,500
Instructional	7,173,550	7,444,250
Personal	8,085,150	8,390,250
Other	1,796,700	1,864,500

* FAA's official figures for categories of aircraft in calendar 1970 had not been compiled as of December 1971. Figures for aircraft as of Jan. 1, 1972, were taken from FAA projections and broken down into categories by size by using percentages based on official calendar 1969 figures. The same was done for 1970. Totals for airmen by types of certificates for calendar 1970 are actual figures. Those for 1971 are FAA projections based on third-quarter data. Breakdown of general aviation hours flown was computed by using 1969 percentages for both 1970's actual total hours flown, and FAA's 1971 projection. FAA's official breakdown for 1970's actual hours flown was not available at press time.