



**GENERAL AVIATION
MANUFACTURERS ASSOCIATION**

Before the

**NEW YORK SOCIETY OF
SECURITY ANALYSTS**

New York City
January 18, 1980

By
Edward W. Stimpson
President
GAMA

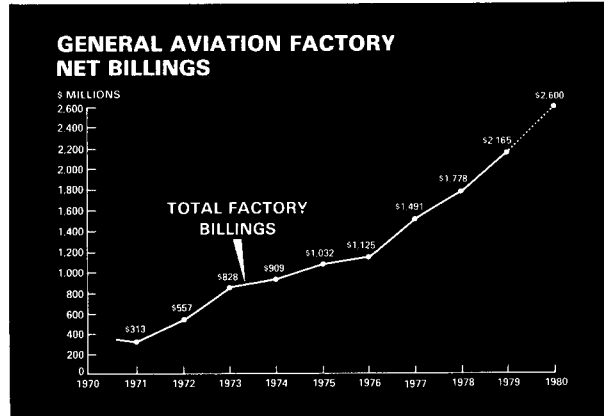
J. Lynn Helms
Chairman of the Board
GAMA and
Chairman
Piper Aircraft Corporation



**General Aviation
Manufacturers Association**

**REMARKS OF
EDWARD W. STIMPSON,
President, General Aviation
Manufacturers Association**

We appreciate the opportunity to be here again at the New York Society of Security Analysts. This has become the annual occasion for us to present the industry's year end results, and the forecasts for the forthcoming year. Mr. Lynn Helms, Chairman of Piper Aircraft and Chairman of GAMA for 1980, will also discuss the reasons behind industry growth, and general aviation's increasing role in the national transportation system.

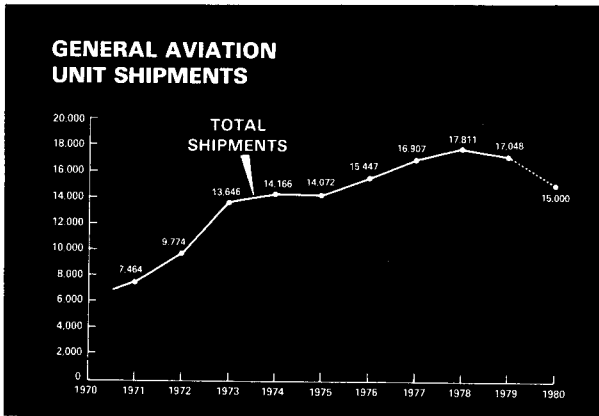


The year 1979 marked the 7th consecutive year in which general aviation posted record aircraft billings. This was the industry's first \$2 billion year. The year ended with billings of \$2.165 billion, which are up 21.7% over 1978, when billings were \$1.78 billion. This exceeded our forecast by \$65 million.

In December of 1979, we also had a record month with deliveries of \$245.9 million, an all time industry high. This high dollar value was the result of the delivery of 38 jets, 72 turboprops, and 194 multi-engine piston aircraft.

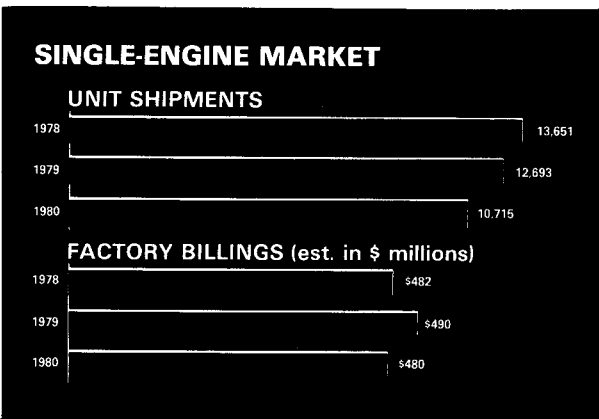
In 1979, a shift continued to occur from the light single engine aircraft to the higher performance aircraft that are used for business purposes. This accounts for the fact the dollar billings are up by 22.3% for the year while total unit deliveries dropped by 4.3%. In 1979, unit deliveries totaled 17,048, down from 17,811 in 1978. This decline was entirely in the light single engine and agricultural aircraft markets. The multi-

gine piston, turboprop, and turbojet markets all experienced growth in the number of units delivered, as well as dollar volume. In our future statements, we will continue to emphasize dollar growth, rather than units delivered, because dollars more adequately reflect the productive output of the industry and its real growth.



I would now like to review the individual market segments as to what our industry accomplished in 1979 and the forecasts for 1980.

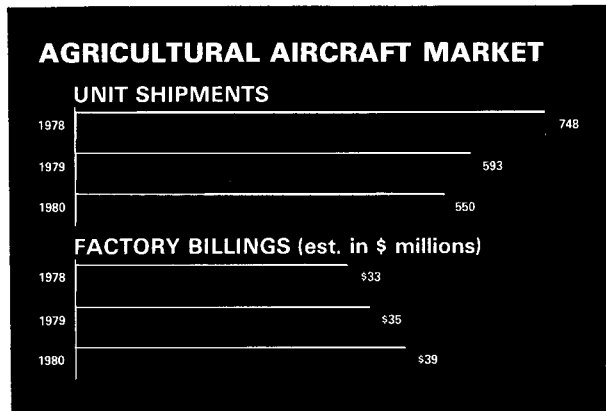
Single Engine: During 1979, net sales of single engine aircraft were approximately \$490 million, about that of the previous year. Unit deliveries totaled 12,693, down 7% from the 1978 total of 13,651. High interest rates, tight money supply, inflation, increased energy costs, declining personal discretionary income,



uncertain economic conditions, were factors which affected this segment of the market. The light single engine aircraft are, of course, most often used for personal and flight training markets. We believe that the results of this segment of the market reflect the current business cycle and will recover.

On the more positive side, the current delivery of high performance single engine aircraft used primarily for business purposes continues to be strong. In 1979 high performance single engine aircraft delivered were up almost 10% from 1978. About 20% of this high performance fleet is now turbocharged, which allows these aircraft to fly at higher altitudes with greater cruise and fuel efficiencies. The trend towards pressurization and all weather performance continues.

The flight training market maintained itself in 1979, despite prevailing conditions impacting the lower end of the line. The industry's three year program to encourage flight training ended on December 31, 1979. We found that the student pilot today is more serious and is apt to be learning to fly for business purposes. Consequently, the person is also a better prospect for future aircraft purchases.



Agricultural Aircraft: In 1979, the year ended below forecast with sales approximating \$35 million on 593 units delivered. This is down from 748 units delivered in 1978, and 890 in 1977.

The agricultural market includes aircraft for spraying, fertilizing, seeding, and utility operations. In 1980, we are forecasting sales of \$39 million on the delivery of 550 aircraft. The long term potential of this market is encouraging, both domestically and worldwide, particularly as operators upgrade and expand their fleets for larger and newer aircraft.

MULTI-ENGINE MARKET

UNIT SHIPMENTS



FACTORY BILLINGS (est. in \$ millions)

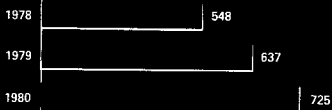


Multi-Engine Piston: The 1979 forecast for deliveries of multi-engine piston aircraft was substantially exceeded. The segment accounted for net billings of \$557 million (up 13%) on the delivery of 2,843 aircraft, 343 more than the original forecast. Again, the increased sales is attributable to expanded sales to businesses, as well as a heavy demand by the air taxi and commuter airlines for both passenger and cargo capacity.

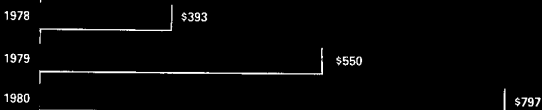
In 1980, dollar billings of \$513 million with shipments of 2,700 aircraft is forecast. This reflects a possible softening in the light twin category, but with heavy twin engine aircraft deliveries — those used by business and commuter markets — remaining strong. During this year, new aircraft will be introduced and will add a stimulus to multi-engine piston deliveries.

TURBOPROP MARKET

UNIT SHIPMENTS



FACTORY BILLINGS (est. in \$ millions)



Turboprop: In 1979, the turboprop market continued to experience strong growth. Sales accounted

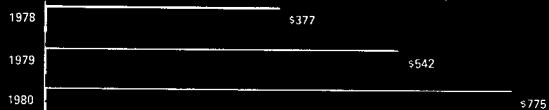
for approximately \$550 million (up 40%) in factory net billings on the delivery of 637 aircraft. The airline deregulation act has stimulated strength in turboprop and jet markets for both businesses and commuters. In 1980, we expect market demand to remain strong. Industry capacity may inhibit full response to this demand. In 1980 we are forecasting sales of \$797 million and the delivery of 725 aircraft.

JET MARKET

UNIT SHIPMENTS



FACTORY BILLINGS (est. in \$ millions)



Jet: In the jet market, we again exceeded our 1979 forecast. Industry sales approximated \$542 million (up 44%), on the delivery of 282 new jets, up from 231 in 1978. For 1980, we are predicting the delivery of 310 jets with a dollar value of \$775 million.

Currently, the industry has orders backlogged in excess of \$2.5 billion. Backlogs for existing production on some models extend out more than two years. Obviously, the demand for jet aircraft, both in the domestic and international market, continues to be strong. The present general aviation jet fleet of 2,600 aircraft is already larger than the domestic air carrier jet fleet of 2,300 aircraft. By the end of the decade, on the present trend line, the general aviation jet fleet should be in excess of 6,000 aircraft, or about double the air carrier fleet of 3,100 jet aircraft.

Total Industry Forecast for 1980: The total forecast for 1980 totals \$2.6 billion dollars, up 19.8% from 1979. We anticipate unit deliveries to approximate 15,000 new aircraft.

TOTAL FORECAST

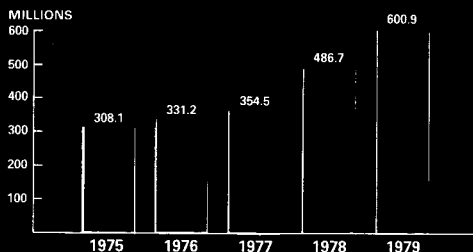
- 15,000 UNITS
- \$2.6 BILLION IN FACTORY BILLINGS

(EXPORTS 3,700 UNITS — \$700 MILLION)

Export Market: Export deliveries reached \$600.9 million, up 23.5% from 1978. Unit deliveries totaled 3,995, up 10.6% from the the previous year. For the year, exports accounted for 27.6% of the industry dollar sales and 23.4% of the units delivered.

The international marketplace continues to offer excellent opportunities. During the past year, sales increased in a number of areas throughout the world, particularly in the Middle East, Asia and Canada. In the Middle East, sales were up over 114%.

GENERAL AVIATION EXPORT DOLLARS



Our industry fully participated in the formulation of the Aircraft Agreement as part of the Multilateral Trade Negotiations. Under this agreement, on January 1, tariffs were reduced to zero by participating nations and nontariff barriers are to be eliminated. Unfortu-

nately, not all nations have signed this agreement, which limits the effectiveness. However, it is an important step towards creating a free trade environment for the sale of aviation products and as an industry we will work diligently towards implementation and enforcement.

1980 EXPORT FORECAST

DOLLARS — 700 MILLION
UNITS — 3,700

For 1980, we are forecasting that the export market will reach \$700 million on the delivery of 3,700 units. We are also seeing some of the same shifts to the larger business aircraft from the lighter single engine aircraft as are occurring in the domestic market.

1980 GAMA SHIPMENT FORECAST

TURBOPROP	725
JET	310
MULTI-ENGINE PISTON	2,700
SINGLE-ENGINE PISTON	10,715
AGRICULTURAL	550
TOTAL	15,000

Industry Programs: In 1980, we will have a number of industry programs to help create a better climate for the growth of the industry. "Safe Pilot '80" is a new broad based government/industry program to increase

general aviation safety through pilot education. In conjunction with the FAA, an increased number of pilot seminars and clinics will be held this year. A major promotional effort will support this program. Preliminary figures show that 1979 was the safest year for general aviation in several years, and the downward trend of the accident rate continued. We hope to make 1980 even safer.

We also have programs in the Energy area. GAMA has a booklet that demonstrates what is being accomplished in design improvements, and fuel conservation measures such as use of simulators and improved operating procedures. As you will note, general aviation is a relatively small user of petroleum and consumes only 0.7% of the fuel used in transportation and 7.5% of the aviation fuel. In addition, GAMA member companies have set a voluntary goal of 25% improvement in plant useage of energy by measures of output. Most of our companies will meet or exceed this goal in 1980. The industry is also continuing its government and public relations program to gain a better understanding about the transportation and communication role of general aviation.

1980 GAMA SALES FORECAST	
TURBOPROP	\$797 Million
JET	\$775 Million
MULTI-ENGINE PISTON	\$513 Million
SINGLE-ENGINE PISTON	\$480 Million
AGRICULTURAL	\$ 39 Million
TOTAL	\$ 2.6 Billion

Summary: We are confident that our industry will continue to grow this year, as we did during the difficult economic times of 1974-1975. In the last 20 years, we have come a long way. In 1960, total dollar billings were \$151 million. The first billion dollar year was in 1975, the industry passed \$2 billion annually in 1979 and should hit \$3 billion in 1981. To discuss the factors behind this growth, I would like to call upon Mr. Lynn Helms, Chairman of the Board of Piper Aircraft and Chairman of GAMA for 1980.

**REMARKS OF
J. LYNN HELMS,
Chairman, General Aviation
Manufacturers Association**

The summary of 1979 given to you by Ed probably contained no surprises, and only documented in greater detail our projection of last January and the periodic statements GAMA has made during the year concerning the outlook for 1979. It was a good year.

Today, you are undoubtedly just as interested in how we see 1980. You have just heard that we are again projecting record billings for 1980. The decrease in units, caused by reductions in numbers of training and small aircraft, is more than offset by the increase in larger aircraft which are more profitable.

Obviously, as Chairman of GAMA, I agree with the projections for 1980; and it looks like another good year.

Were I in your position, I think I would be pondering these questions— Are they right? Why are they right? Do these reasons have impact after 1980? I believe these are more important to you than an elaboration by me on the problems encountered but overcome by our industry in 1979. This is particularly so when we view a commonly accepted anticipation of a reduced economy in portions of 1980.

Few citizens of this country realize that in June, 1978, a new content of this nation came into being. Statistically then, for the first time in the nation's history, more people lived south of the Mason-Dixon line than north of it. As of that moment, even if you were to combine all the industrial centers of the North— Boston, Chicago, Cleveland, New York, Milwaukee, Pittsburgh—all of them and all the people in between . . . you would find that the population majority has still shifted to the South and Southwest. That fact will become more noticeable after the next census, with Congressional representation—and voting strength— reflecting it clearly.

The combination of data terminals located thousands of miles from the "Home Office," and a national air transportation system, offered a level of communication to provide the impetus for a massive and continuing relocation of the nation's industrial base, at a rapid pace. This relocation was an integral of the population shift.

As a result, the United States has created a national air transportation system that is the envy of the world. While providing hundreds of thousands of jobs by both production and operations, it is highly contributory to

a beneficial gold flow, and dominance in the world's air routes; one of the few industries in such a position that this nation still enjoys.

The combination of public demand for lower fares, and Federal Government support for deregulation, has initiated a program that is already resulting in drastic changes to the popular concept viewed as "the airlines," or, the major scheduled "trunk carriers." However, here too, there is no such thing as a free lunch. To get lower fares, the traveler will get less flights! Literally to survive, by 1983 those trunk carriers will have dropped off more and more of the marginal or unprofitable stops, with less such options by the travelers. Many of the traditional routes and schedules of the airlines are being eliminated or reduced. The situation unfolding mandates a major expansion of the regional and commuter air carriers (with the commuter airlines operating general aviation aircraft) to both fill the void and expand the service demanded by a mobile and growing population. Simply put, the major segments of air transportation — trunk carriers, regional carriers, commuter carriers, and general aviation—are coming together in closer purpose, and consistently greater cooperation, as the only way they can move their common and respective customer, the traveling public.

The major segments of the national air transportation system have no choice: they will become more interdependent. As the trunk and regional airlines reduce flights, general aviation — consisting of commuter carriers and private business aircraft — must expand. The moderate or long distance traveling public will have little choice; the greater efficiency of passenger mile per pound of fuel consumed will dictate that they travel by air, or they may possibly not travel at all.

While power plants, trains, buses, homes, factories, even automobiles may possibly convert to use various alternate forms of energy, air transportation for the next quarter century will survive only with liquid petroleum.

This year will be the year that fact becomes more recognizable. For the major carriers, fuel has gone from eleven percent of overall expenses in 1972 to twenty-seven percent in 1979. And we have just been exposed to increases from OPEC for 1980. In just one year, from 1978 to 1979, the fuel bill per U.S. scheduled airline has gone from \$4.1 billion — yes, I said billion — to an estimated \$6.5 billion. The problems five to eight years from now for air travellers will not be airplanes; those can be made available. Rather,

the major problem may be insufficient petroleum. This can be assured only by government action that properly recognizes at an early date the air transportation system inflexibility as regards fuel alternatives. In this regard, I have written to the presidents of all major U.S. airlines. Their responses and spirit of cooperation have been most gratifying.

But while the free marketplace and choice of industrial decisions have allowed both industry and the American populace to accommodate the changes created by technological advance, government has not. The overworked word "synergism," so often brought forth to convince consumers of economic benefits from business decisions, really is more applicable, and offers more potential, in government than any other segment of man's environment.

Our national air transportation system, like all other systems of our national culture, is both dependent on — and responsive to — the influencing characteristics of that culture. We have little leadership which publicly educates that we as a nation must accommodate a different energy content than has historically existed in the United States. Notice I did not say *reduced*! I find little mental support for those who believe we have reached an energy limitation or even plateau. The belt-tightening we must undertake will be merely to "pay as we go" for the quarter century effort to realign the available energy in an organized and productive fashion.

It is the kind of adjustment we must learn to accommodate in each of the "subsystems" that make up our living culture, and I emphasize *adjustment*, not *elimination*. In fact, there will be even more travel options, but in different forms than we have had in the past.

Viewed as a single subject description, the foregoing could be interpreted as a depressing or foreboding projection of the future. But such is neither intended nor accurate. With moderate, but active, conservation by pleasure seekers, improvement of travel vehicle fleet mileage efficiency, appropriate priorities and decisions to shift stationary power plants to solid or nuclear fuels, expansion of solar and other alternate sources of research, and some adjustment, *not* termination, of historical American living habits . . . our nation can absorb the new energy situation and still retain both its industrial growth and international leadership, while providing future generations the same valuable hopes and aspirations held by their forebears.

The question is not "will the trend to a national air transportation system be completed?", but rather

"will the pace quicken or slow down in the accomplishment?" Events and decisions of the past have already set it in motion, and it is inexorably now underway.

Higher fuel costs mean higher seat break-even factors, and that means less flights to many communities. It becomes apparent then that the combination of commuter and private business flying which makes up general aviation is becoming an ever increasing participant in the national air transportation system. A study by the National Business Aircraft Association shows one-third of all their flights to airports with scheduled air carriers are to make passenger connections. Neither of us has a choice in the matter . . . the trunk carriers and general aviation will become more integrated. But one major difficulty facing air travellers will be lack of enough gates to load or unload at major hubs where the segments come together.

It is wasteful to require a 747, which may consume ten to twenty thousand pounds of fuel per hour, to be held in the airport landing pattern. Similarly, a small airplane which may burn as little as sixty to one hundred pounds per hour doesn't need the long runways. Kennedy International Airport is a perfect example — with long parallel runways for constant flow of two large aircraft simultaneously, plus a small third runway for small aircraft—of what can be done in this area.

The evolving system mandates reliever or satellite facilities to take off some of the general activity from the major hub airports. Congress recognized the need for reliever airports and reliever runways by creating the Aviation Trust Fund, or 'ADAP.'" While the administration has refused to release adequate money in it for the purposes intended, we are gratified that in recent weeks steps are being taken to increase the funding in these areas. Remember, the aviation community and air traveler paid for that fund completely! Not one dollar of general taxpayer revenues is being taken from the public to provide "that fund for the airplane people."

In summary, 1980 will be a good year because a new and different national air transportation system is rapidly developing. The general aviation industry is not only an integral part, it is—and will continue to be for some years to come — the fastest growing part.

Now let me summarize. Once you leave here today, it is logical that you will be discussing our remarks with your associates. One of you will believe that I said *this* . . . and the other will say I said *that*. While you are certainly entitled to your view of what you think I've said, just for the record let me tell you what *I* think I've said.

1. 1980 and beyond will be good for general aviation. It will grow at a faster pace than other portions of air travel.

2. A national air transportation system — much more integrated — is evolving as a result of the 1978 Airline Deregulation Act. Our industry was prepared for it, and today transports approximately one-third of all air travelers in the United States.

3. Lack of government action in formalizing recognition of the needs of the national air transportation system only penalizes the public. Our industry will continue to strive for the benefits in safety, efficiency, and productivity that would result from the release and proper use of the 3.4 billion dollar surplus in the Airport and Airways Trust Fund.

U.S. GENERAL AVIATION PRODUCTION

Year	UNITS			DOLLARS (Millions)		
	Total	Exports	Percent	Total	Exports	Percent
1949	3,405	488	14.3%	\$ 17.1	\$ 2.2	12.4%
1950	3,386	415	12.3%	19.1	2.3	12.0%
1951	2,302	433	18.8%	16.8	3.1	18.5%
1952	3,058	354	11.6%	26.8	3.0	11.2%
1953	3,788	579	15.3%	34.4	4.6	13.4%
1954	3,071	496	16.2%	43.4	7.1	16.4%
1955	4,434	640	14.4%	68.2	7.5	11.0%
1956	6,738	965	14.3%	103.7	12.5	12.1%
1957	6,118	1,131	18.5%	99.6	17.4	17.5%
1958	6,414	865	13.5%	101.9	12.0	11.8%
1959	7,689	962	12.5%	129.8	14.6	11.2%
1960	7,588	1,481	19.5%	151.2	27.3	18.1%
1961	6,778	1,583	23.4%	124.3	29.8	24.0%
1962	6,697	1,458	21.8%	136.8	30.9	22.6%
1963	7,569	1,579	20.9%	153.4	35.1	22.9%
1964	9,336	1,775	19.0%	198.8	44.1	22.2%
1965	11,852	2,325	19.6%	318.2	61.2	19.2%
1966	15,768	2,903	18.4%	444.9	75.4	16.9%
1967	13,577	3,035	22.4%	359.6	76.5	21.3%
1968	13,698	2,803	20.5%	425.6	91.5	21.5%
1969	12,591	2,623	20.8%	638.8	107.1	16.8%
1970	7,402	2,170	29.3%	364.1	98.9	27.2%
1971	7,464	1,854	24.8%	313.1	95.6	30.5%
1972	9,774	2,254	23.1%	557.1	137.9	24.7%
1973	13,646	3,530	25.9%	838.2	230.2	27.8%
1974	14,167	4,248	30.0%	909.4	287.5	31.6%
1975	14,057	3,512	25.0%	1,032.6	308.1	30.0%
1976	15,447	3,539	22.9%	1,228.8	331.3	27.0%
1977	16,907	3,611	21.4%	1,491.0	354.5	23.8%
1978	17,811	3,612	20.3%	1,777.8	486.4	27.4%
1979	17,048	3,995	23.4%	2,164.9	600.9	27.7%
*1980	15,000	3,700	24.7%	2,600.0	700.0	26.9%

*Forecast as of 1/1/80



EDWARD W. STIMPSON

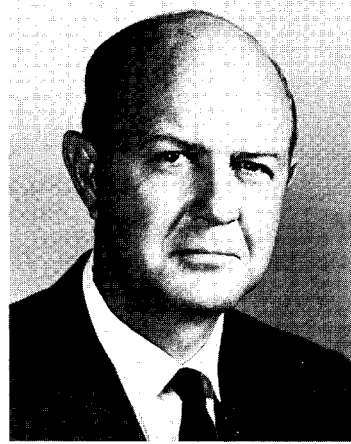
Edward W. Stimpson is president and a board member of the General Aviation Manufacturers Association (GAMA), headquartered in Washington, D.C. He joined the association when it was formed on January 1, 1970, and was elected president in November of that year.

Mr. Stimpson served with the Federal Aviation Administration in Washington from December of 1962 until he joined GAMA. He was named FAA's assistant administrator for congressional liaison in July, 1965.

In 1977, he was named "General Aviation Man of the Year." He also received the U.S. Department of Transportation Meritorious Achievement Award, FAA's Meritorious Service Award, and its Decoration for Exceptional Service in recognition of his performance.

Before his federal government service, Mr. Stimpson was acting director of the Pacific Science Center Foundation at Seattle, Washington, where he developed and administered a program to convert the U.S. Science Pavilion at the Seattle World's Fair into a permanent Science Center.

Mr. Stimpson was born on June 18, 1934 in Bellingham, Washington, and was graduated Cum Laude from Harvard College in 1956. He is a private pilot.



J. LYNN HELMS

J. Lynn Helms is the chairman of the board of the General Aviation Manufacturers Association (GAMA). He is also board chairman of Piper Aircraft Corporation, having been elected to that post in September 1978. He served as president of Piper from July 1974 through September 1978 and as chief executive officer from July 1974 through September 1979.

Born in DeQueen, Arkansas in 1925, Helms graduated in 1945 from the Oklahoma University with a bachelor of science degree in aeronautical engineering and subsequent graduate work in management. During World War II, Helms completed U.S. Navy Flight Training and entered the U.S. Marine Corps. He served as a U.S. Marine Officer until his resignation in 1956.

Helms then joined North American's Columbus (Ohio) Division as a design engineer. He left North American and joined Bendix Corporation where, in just seven years, he rose to group vice president. In 1970, Helms accepted the presidency of the Norden Division of United Aircraft. He remained in that position until joining Piper in 1974.

Helms has logged well over 10,000 hours of flight time and holds an active commercial certificate, single and multi-engine ratings and an instrument rating. He continues to log nearly 350 hours annually in pursuit of corporate duties.

**GENERAL AVIATION
MANUFACTURERS ASSOCIATION**

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**GENERAL AVIATION
MANUFACTURERS ASSOCIATION**

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