January 1992

The Monthly Journal for Aviation Professionals



Sam Skinner Chief of Staff The White House



Frank Shrontz President & CEO Boeing



Managing Director Airbus Industrie



Ronald Allen Chairman, President & CEO **Delta Air Lines**





Fred Smith

Chairman & CEO

Federal Express

Bryan Moss President Canadair Challenger



Alan McArtor President FEDEX Aeronautics



President Page Avjet

By the year 2017 a mature FBO industry will require tremendous capital investment and specialized operating expertise. Then as today, only companies who can operate on a financial basis reflecting major economies of scale and efficient, highquality professional management will survive and prosper.

The year 2017 will bring with it a vast array of technological improvements. These will range from supersonic business aircraft travel to hydrogen-based fuels that will no longer be delivered to business aircraft via the conventional equipment and technology in use today.

Regardless of the improvements in communications, and until the time that intermolecular transportation becomes possible, business aviation will remain a primary force in the development of world commerce.

Linda K Kropp President **AVCard**

I see an accelerated growth in the need for information (not data) presented in ways that need less management time to absorb and act on. This will be particularly true as international trade barriers continue to lift in Europe and other countries. As the global business climate expands, aviators unhampered by economic borders will look to and seek out service-oriented corporations as a source of this information and sophistication. The ability of these corporations to quickly respond to



We may expect to see continued growth in trade in North America between the US, Canada and Mexico.

Linda Kropp

these needs, on a regular basis regardless of time zone or country, will be an important factor in their success

In addition to a business aviation surge throughout the European market, we may expect to see continued growth in trade in North America between the US, Canada and Mexico. Our own backyard may provide an additional fertile arena for American business aviation expansion.

John Girotto President **Collins Commercial Avionics**

This year marks the 10th anniversary of our introduction of Electronic Flight Instrument Systems (EFIS). In the next 25 years aircraft position will be fixed in space with more precision than ever before. This position will



Aircraft position will be fixed in space with more precision than ever before.

John Girotto

be communicated from anywhere in the world to traffic control and operations centers with minimum pilot involvement. Low-approach capability will be extended to more types of aircraft and more airports in the increasingly interdependent air transportation system. Aircraft not equipped for the new environment will find themselves shut out of the system.

Navigation precision will be tightened with new techniques such as GPS, and advanced flight management systems that select and blend the optimum set of navigation sensors. Derived position on intercontinental legs will be relayed automatically via data link over satellite radio systems.

Today's turbulence detecting abilities of radar will be extended to windshear prediction through new sensor techniques, enabling a more comfortable ride and increased safety margins in approach situations, as well as en route.

Continued advances in miniaturization, displays and architecture will make Cat 3 landing capability available to an increasing number of aircraft. There are promising developments in the area of enhanced vision that could open up non-Cat 3-equipped airports to lower minimums, or give low-approach capability to non-Cat 3-equipped aircraft.

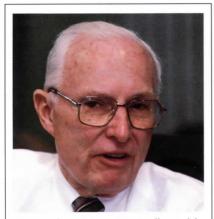
The key to making all of this happen without overloading the pilot is system integration. The system will determine the "how," selecting and controlling the appropriate equipment. Communication of routine position and operational data will be handled automatically over digital links. All of this leaves the pilot free to efficiently manage the operation of his aircraft.

Sound a little farfetched? If the last 10 years are any indication, I've erred grossly on the low side.

James B Taylor President James B Taylor Associates

Unless business aviation's three most critical issues are resolved, the industry won't progress any faster in the next 25 years, if at all, than it has in the last 25, despite the anticipated advances in technology and the inevitable strengthening of world economies. The issues are image, product development and airport and airway systems.

A negative image of business flying continues to plague us. Our chief critics are misinformed or misguided news people and politicians. It's ironic, because as a group they are among the biggest users of private air travel. They use it for the same reasons business does - to save time, increase efficiency and achieve greater productivity. Corporations should not be intimidated by their elected officials or an adversarial press. Business aircraft use and ownership need no more justification than any other piece of factory or office equipment that helps get the job done quicker and better. Chief executives should quit being ashamed of something that preserves our most sparse and precious asset time. They should put their firm's corporate logo back on their airplanes



Several new, economically viable single engine business jets will enter the as yet untapped but promising market for piston replacements.

Jim Taylor

and show the world that modern commerce moves on wings. Obviously, business aviation must do much more educating.

If US business aircraft makers want to stay competitive with foreign manufacturers, they must invest a greater share of their marketing input at the time a new product is conceived, or success may elude them. The Cessna Citation and Canadair Challenger were the first all-new business aircraft to be designed, certified and built with the end-user directly involved from their conception. Both were products of engineering and marketing, not just engineering as has been the case with most airframe developments.

America has the best airport and airway system in the world but it's nearly gridlocked. If commercial and business flying components of our national transportation system are to grow in the future as projected, then we must have more regional and satellite airports. Equally important, the regulation and control of the national aviation system, including airports, must be vested in one authority - the federal government (FAA). Operating restrictions imposed by 50 states and scores of local jurisdictions will do more to inhibit civil aviation's expansion than anything else. We must also force the release of trust fund money for its intended purpose and do more to promote the economic value of the community airport, large and small.

In the next quarter century we'll see evolutionary innovations in air navigation and automated flight control, all aimed at making the art of flying easier and safer. We'll also see a wider use of exotic new materials in airframe and engine fabrication. These new materials will be lighter, stronger and much more versatile than any material known today.

Within the next few years several new, economically viable single engine business jets will enter the as yet untapped but promising market for piston replacements, and within 25 vears a supersonic business jet will become a reality; it will create its own limited market regardless of cost.

The new single engine business jets, configured in various shapes and sizes, will be powered by new generation turbofans, smaller than existing turbofans but featuring high thrust, low fuel consumption and low noise levels. They will be certified in the utility class and will be more productive and far more reliable than the single and twin-piston types they are designed to replace. The sales volume for these new jets should do much to broaden the market base.

The new faster-than-sound business aircraft will meet management demands for high-speed access to global operations and markets as world trade and economies grow. Some companies will pay almost any price to get there first and beat the competition.

Robert G Lambert **Executive Senior VP** Aviall

We congratulate Professional Pilot on reaching its 25th anniversary and salute your efforts to promote professionalism among all pilots. This is a service whose purpose is to enhance the quality of the most important group in our industry.

Aviall also celebrates a major milestone in 1992 - our 60th anniversary. Our company provides services - quality engine and parts distribution services designed to meet or exceed our customers' expectations. And our mission is to be the premier provider of those quality services in the aviation industry.

Surely the future of every company in aviation will depend on how well they meet their customers' needs. As we enter 1992 we thank all our past friends and customers and rededicate ourselves to supporting them with quality services in the future.

Martin Caidin **Aviation Author**

Aviation stands on the edge of a coming quarter century marked by a dichotomy in government control, liability insanity and dying production on one side, and great potential for aerodynamic and performance advances on the other. Aviation knew its greatest leaps forward in this nation from unfettered freedom and spirit of experimentation, competition and all-out fierce battling between manufacturers.

Now we have an FAA that is overwhelmingly huge, bulky and bound by its own structuring that has one employee for every 5.76 aircraft in this country - and that includes everything from the airline heavies down to fabric singles that spend most of their time on the ground.

We have come to ignore dreams, exhilaration and dedication as essential to our aviation future as digital design and the best that science has to offer. If our attitude does not change from its downward slide, and we in aviation do not carry the battle cry to the public and to Congress, then we will yield aviation leadership to foreign lands. If we recognize the multiplicity of problems and attack them vigorously, then leadership will be ours

Every single morning is the first day of the challenge to be met and won. Perhaps we need to remind ourselves that while aviation was first born and briefly nourished in this country, World War 1 was fought without a single American-manufactured aircraft entering the battle. That can happen again.

Dick Van Gemert Executive VP KC Aviation

The future challenge will be how we, as an industry, provide the costeffective, highly valued solutions to the end customer's transportation and communication problems. We have to find a way to make more effective use of corporate capital and provide added customer delight to the private transportation experience.

New and innovative delivery systems to provide stimuli for growth will be our challenge for this now stagnant industry. These actions may require a clean paper approach. There is clearly a place for business process innovation as we head toward the end of the century.