

Business Aviation – Safety, Security and Efficiency

a report by

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Donald Spruston is Director General of the International Business Aviation Council (IBAC), a council of national and regional associations representing the interests of the worldwide business aviation community. Before joining IBAC, he was Managing Partner of Canadian Aviation Safety Associates Ltd, a company specialising in a broad range of aviation assessments, particularly related to aviation safety analysis and study. Prior to this, Mr Spruston was an executive with Transport Canada, where, for the last six years of his career, he was Canada's Director General Civil Aviation. In this position, Mr Spruston completely revised the Canadian aviation safety rule structure. He also initiated the Canadian Aviation Regulation Advisory Council (CARAC). Mr Spruston has written many articles and papers on the subject of aviation safety and the need for improved global aviation safety standards. He has won awards such as the Canadian Owners and Pilots Association President's Award, the Canadian Aviation Safety Award and the Canadian Aeronautics and Space Institution C D Howe Award. Mr Spruston is a pilot with many years of experience in transport operations and systems evaluation roles. He has a BSc from the Royal Military College of Canada.

Links in the Chain for Success

Problems experienced by commercial air transport through economic downturn and the security crisis have not had a comparable impact on the other principal option for business travel: business aviation. Whereas airline passenger travel has declined, business aviation has increased. Although airlines, out of necessity, have reduced routes, business aviation has stepped in to fill the void.

Business aviation has grown rapidly over the last 10 years, but the past two to three years have been pivotal in solidifying its position as a serious air transport option.

This article addresses why business aviation has come of age and what the industry is doing to solidify its position. Issues discussed relate to three links in the chain that control success: safety, security and efficiency.

The Viability of Business Aviation

Early predictions of new communications technology replacing traditional business travel have proven unfounded. It is now recognised that face-to-face communication is necessary for business success, and continuing demand for business travel is the result.

The car, bus and train satisfy short-range travel demand, but only the aircraft fulfils medium and long-range transportation needs, particularly if time is a factor. Long-distance travel is increasing, along with growth in globalisation of multinational corporations. This increasing demand is leading to more innovative and increasingly flexible transport options.

Airline travel is the principle option for business travel. In fact, the annual expenditure on airline travel of corporations using business aircraft amounts to approximately US\$14 billion. However, business aircraft is increasingly recognised for its safety, security and efficiency value. Whereas airlines have been experiencing considerable downturn over the past couple of years, business aviation has seen continued healthy growth.

Business aviation itself comes in many forms. The most dominant is the non-commercial corporate flight department – the professionally managed unit with trained pilots dedicated to flying the company aircraft. Also prevalent is the owner-operated aircraft – generally a smaller aircraft flown by the business person himself/herself. Commercial charters are popular for companies that use less than 100 hours of specialised air transport annually. Also growing rapidly in popularity is a new concept involving sharing aircraft costs: fractional ownership.

Even within the categories of business aviation, the options are expanding. Aircraft sizes vary from small micro-jets to large aircraft serving as an office in the sky. Long-range aircraft are capable of flying well over 6,000 miles non-stop. Increasingly, corporations are using their own aircraft for regular shuttles. Aircraft such as the Boeing Business Jet or Airbus Corporate Jet fly daily transatlantic shuttles, while the smaller Raytheon King Air or Cessna Citation aircraft shuttle frequently between domestic plants, often carrying engineering staff or a key part needed to keep an assembly line moving.

Business aviation has clearly found a niche in the air transport spectrum.

Sustaining Business Aviation's Rapid Growth

Although business aviation has existed since the 1930s, the last 10 years have produced the most dramatic growth. The rapid expansion has paralleled the significant increase in options for aircraft types. Today, there are over 21,000 turbine business aircraft and over 14,000 companies worldwide operating their own aircraft.

Although the business aircraft manufacturing industry is experiencing a slow-down in 2002–2003, this has long been predicted because of the global economic downturn. However, unlike the airlines, there has been no slump in business aircraft travel. In fact, in the US, where the security crisis has hit airlines hard, corporate flight departments are flying more now than ever before. Another key indicator

is the use of commercial charters – up approximately 30% since 11 September 2001.

All signals point to continued healthy growth from 2004 onwards. Forecasts call for over 7,600 new jet aircraft to be sold over the next 10 years. More optimistic forecasts go as high as 8,500 aircraft.

Drivers of Sustained Growth in Business Aviation

Businesses have traditionally justified the purchase and use of company-owned aircraft for their productivity value. The key links in the productivity chain are safety, security and efficiency. Sustained growth will depend on both actual and perceived safety, security and efficiency – they go hand in hand and all must be equally strong to guarantee growth. Weakness in one link will cause a failure in the chain.

Business travel must be on a schedule that fits work flow demands. It must be reliable. It must transport employees efficiently without disruption and unproductive waiting. There must be options for productivity en route. The costs must not exceed the benefits.

Addressing Issues Impacting the Safety, Security and Efficiency of Business Aviation

The business aviation community is ‘horizontal’. Compared with the airline industry, the business aviation industry has many more operators and more manufacturers. The airline industry is consolidated into large airlines and large manufacturers, whereas there are over 14,000 business aircraft operators and six significant manufacturers (Bombardier, Cessna, Raytheon, Dassault, Gulfstream and Embraer).

Strategic planning in this vast horizontal business aviation structure is difficult. Communications and consolidation of ideas between a large community of small operators is a significant challenge. Nevertheless, business aviation has a hierarchy of representative bodies that serve as the eyes, ears and voice of the community. These bodies devote considerable energy to strategic planning for the community as a whole.

Most of the world’s nations with a business aviation industry have professional associations representing the community for rule, policy and procedure development. Internationally, the associations work together through a mutual council: the International



The safety, security and efficiency benefits of business aviation have been instrumental in the success of this growing industry.

The benefits of safe, secure and efficient business travel can be measured in many ways. The benefits to the company are inherent in the productivity of the employee, with customer satisfaction leading to sales growth and profit. Benefits to the employee range from comfort, time with the family, control and sense of wellbeing. National economies benefit with growth in gross domestic product through increased productivity and economic stimulation. Locally, community prosperity is often highly dependent on the safe, secure and efficient transportation that is needed to attract commercial enterprise.

The importance of mobility for businesses will almost certainly increase in the 21st century. Competitiveness, and the increasing costs of specialist expertise needed to be competitive, will continue to drive the demand for improved employee productivity.

Business Aviation Council (IBAC). As an official observer, IBAC represents the business aviation community at the International Civil Aviation Organization (ICAO).

Approximately every three years, IBAC meets in an extraordinarily strategic planning session. Issues facing business aviation are identified and consolidated. Considerable time is spent developing strategies and priorities to address problematic issues, all targeted at safety, security and efficiency of business aircraft travel.

Identifying the Safety Issues Facing Business Aviation

Safety data demonstrates that the safety record of corporate aviation is excellent, whereas the record for smaller owner-operated aircraft warrants improvement. Similarly, the record of commercial charter operations could be improved.

The business aviation community has been promoting continuous safety improvement actively through innovative concepts. Most importantly, the International Standard for Business Aircraft Operations (IS-BAO) introduces a performance-based standard developed by the industry, applying philosophies and concepts similar to the International Organization for Standardization (ISO) Standard 9000 series. The difference is that the IS-BAO code of best practices has been developed specifically for the business aviation industry, with safety as the sole objective.

The IS-BAO incorporates a safety management system (SMS) designed for small organisations such as a typical flight department, averaging between one and two aircraft. The SMS is flexible and can be applied to a small owner operation, a corporate flight department or a large commercial charter.

IBAC also plans to address the significant growth in small micro-jets. Over 2,000 of these new aircraft are expected to be introduced over the next 10 years. Although the airframes and engines of the new micro-jets will be robust, the increasing number of single pilot operations in the upper-level airspace structure will challenge training and airspace designers to seek solutions to the many inherent issues brought by the increased traffic.

IBAC recognises the need to fortify its operational standard to address the expected influx of less experienced pilots into the high-speed, high-level world of jet aircraft. Emphasis will be put on helping owner operators with SMS and enhancing the decision-making skills of pilots.

The Impact of 11 September 2001 on Business Aviation

Long queues at airports and a decline in travel efficiency have driven corporations to increase their use of both commercial charters and company-operated, non-commercial aircraft. Good security has always been a hallmark of corporate aviation so it is not surprising that companies are looking to this travel option for security value and to recover lost efficiency.

The business aviation community is helping security authorities through development of security standards for general aviation operations and facilities. New standards for corporate operators and service providers such as fixed base operators have been proposed to the ICAO Aviation Security Panel and to state authorities. Given the vast scope of general aviation operations, the new standards are designed to match the security provisions to the threat.

The proactive stance of business aviation is designed to protect the already good security record. It is clear that security provisions applied to large commercial operations would be both cost-prohibitive and largely ineffective in the general aviation world. The new proposals allow security authorities to direct resources towards more significant threats while assigning security responsibilities to private sector entities.

Protecting Efficiency Benefits of Business Aviation

There is a saying in business that 'time is money'. Productivity is recognised as a key to success, yet commercial air transport is consuming more and more valuable time with increased security screening requiring early check-in and unproductive waiting. Service reductions by airlines mean fewer travel options. Impacts are far-reaching as businesses lose time and money, and employees lose quality time at home.

More companies are turning to the company-owned and operated aircraft to minimise travel time, improve the quality of life for employees and improve companies' financial bottom line. At the same time, the business aviation industry continues to search for ways to enhance operational efficiency.

Access to airports and airspace will be critically important. Efficiency benefits of business aviation are dependent on access to airports located close to the place of business. Delays both on the ground and in the air mean inefficiency.

The business aviation industry is working with ICAO and state authorities to ensure fair and equitable access. Studies are being initiated to ensure that policies and rules are based on factual information. The industry is also providing meaningful information to communities so that there is an understanding of the value of an airport in achieving community prosperity.

Conclusion

The pursuit of liberalization of air transport is important to the interests of all consumers and, in particular, those of the business traveller. On the other hand, progress towards liberalization is unlikely to detract from the growth in demand for business aviation.

The safety, security and efficiency benefits of business aviation have been instrumental in the success of this growing industry. However, continued success is dependent on protecting each of the three critical links through effective strategic planning by the business aviation community. ■