### **BUSINESS AVIATION**

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### Introduction

There are a number of factors now at play in the business aviation sector and their effects suggest business aviation activity will continue to grow over the forecast period 1997-2002. These factors include (1) the impact of new product introductions, (2) the trends in domestic and world economic growth, (3) the creation of new institutions which expand the business aircraft market and promote business aircraft use, and (4) the likelihood of only moderate increases in the cost of operating or using business aviation aircraft. These positive factors are complemented by emerging trends in the light general and personal aviation sector—trends that may increase the likelihood of continued growth of business aviation in the long term.

In particular, the business aviation industry must recognize the efforts to increase piston aviation activity through the reintroduction of single-engine piston aircraft and programs being implemented to increase the private pilot population. (These initiatives are detailed in the next section of this report—*Light General and Personal Aviation*.) Light general aviation activity is an important part of the general aviation hierarchy defined by piston, turboprop, and turbojet aircraft. Some refer to this hierarchy as the aviation food chain since operators tend to migrate from piston aircraft toward turbojet aircraft. The relationship between the general aviation segments may transmit very positive impact to the business aviation sector during the out-years of the forecast period and beyond, as piston activity recovers and the private pilot pool expands.

The aging of the turbine fleet will put downward pressure on fleet utilization, but fleet growth will more then compensate for this, causing total hours flown to increase over the forecast period.

#### **New Products**

Business aviation growth has always been influenced by the research and development undertaken by airframe manufacturers to develop better products to meet the transportation needs of the business community. New products boost sales, revenues, profits, employment, and shareholder returns. Over the forecast period, new products are likely to have an above average positive effect on business aviation activity because of the breadth of new product introductions.

New light jet offerings will expand the small end of the business aviation market, providing trade-up opportunities for firms already involved with business aviation. At the same time, these light turbojet business aircraft provide profitable small firms the chance to take their first step into business aviation aircraft for the purpose of expanding into new geographic markets and increasing productivity and efficiencies while serving existing markets.

At the other extreme, the business aviation industry will feel the full impact of the introduction of very long range business aircraft over the forecast period. While these very long range business aircraft will provide enhanced capabilities and performance to those organizations already utilizing business aircraft to meet their international business travel needs, they also hold the potential for drawing new buyers (operators) into business aviation. This possibility exists because of (1) the increasing demands for very long range executive aircraft, (2) continuing concerns about personal safety, (3) the need for comfort and privacy when involved with business travel, and (4) increasing demands for convenience and time savings when undertaking international business travel.

In between these product end-points, enhancements are being made to the mid-sized, mid-range aircraft that are increasing capabilities and performance. These enhancements are blurring the lines between the traditional light, medium and heavy business jet market segments, but in so doing, providing increased value to business aircraft operators. Additionally, business aviation activity may very well benefit over the forecast period from product innovations that are currently underway.

The business aviation sector may see the introduction of one or more single-engine business turbojet aircraft and an enhanced single-engine turboprop airplane designed for business use. The former has the potential for significantly expanding the business aviation sector by offering a moderately priced, comfortable, reasonably performing, easy to fly business jet to the successful entrepreneur with growing travel demands.

At the same time, a single-engine business turboprop can provide a contemporary product with good performance and comfort features to those individuals and businesses currently flying older multiengine piston aircraft or existing, but aging, turboprop aircraft.

# Domestic and World Economic Growth

Unarguably, business aviation has benefited from the modest-on an annual basis-but long and persistent, expansion of the U.S. economy and the relatively good, and improving, health of the world economy. The latter being associated with the expansion of market based economies worldwide. Statistical analyses consistently report a high correlation between corporate profitability and business aviation activity. Additionally, business investment increases when uncertainty is reduced, especially when uncertainty about the economic future is lessened. Moderation and persistence are important ingredients in reducing uncertainty-these create confidence in the future course of economic events and reduce apprehension about economic surprises.

Consensus forecast numbers suggest that moderate real growth with modest inflation will continue for the U.S. economy, at least through 1999-2000. It also appears that the world economy will continue to advance, albeit perhaps unevenly, as European consolidation continues, Asian economies rationalize their financial markets, and Latin America continues to control inflation and increase its reliance on market forces and freer trade policies. The Middle East, an especially important market for longer range business aircraft and a key player in world energy markets, continues to be a wild card in the economic game. Recognizing this, the probability remains high that the U.S. domestic economy and the general condition of the world economy will be a positive influence on business aviation into 2000 and possibly beyond.

# New Institutions

Though it is a simplification of the first order, it is not misleading to say that ten years ago shared ownership was known only to individuals wishing to have access to a condominium in a high-cost resort area. In this case, shared ownership defined a specific time allocation which could be applied only toward a specific housing unit on a first-come, first-served basis.

Today the concept of shared ownership in business

aviation—recreated as *fractional* ownership—is providing guaranteed access to a specific type of business aircraft for operators with relatively low travel demands or those wishing to round out the performance capabilities of an existing fleet. By providing guaranteed access at fractional cost, this new business aviation institution has the potential for significantly expanding the business aviation market and, therefore, business aviation activity.

Organizations offering fractional ownership represent a relatively large portion of new business aircraft buyers in terms of units purchased. These fleetmanagement firms are players in nearly the full spectrum of turbine business aircraft as they acquiring a mix of aircraft ranging from turboprops and the smallest jets to the largest business jets now available.

Furthermore, recent data suggests that 70-75 percent of those participating in fractional ownership plans are new to business aviation—the majority of fractional owners have never owned a business aircraft! Annual growth in fractional ownership since 1990 has exceeded 40 percent. Since the institution of fractional ownership has existed less then a decade in the business aviation sector, there is no reason to believe that the opportunities for expanding business aviation activity through this new aviation institution have been exhausted.

Many believe that fractional ownership will be less sensitive to economic cycles—an effect that could moderate the swings historically seen in business aviation activity. With these kinds of impacts, it is likely that fractional ownership will continue to have a positive influence on unit sales and utilization in the business aircraft segment of general aviation (Appendix B addresses fractional ownership in considerable detail).

# **Operating Costs**

Business aviation, like any activity, is adversely affected by rising costs. For business aviation it is convenient to divide costs between direct operating costs (e.g., fuel prices and taxes) and regulatory costs (e.g., landing fees or constraints on access). As noted above, the economic outlook provides a rather benign picture for inflation over the forecast period. As such, jet fuel prices should remain relatively constant over the forecast period.

Similarly, since the United States appears to be growing out of its deficit, the pressure to find new taxes or increase existing tax rates (or expand tax bases) is much diminished. As such, fuel costs (the combination of prices and taxes) are not expected to increase dramatically over the near term. As a result, any increases in direct operating costs should be modest—at or below the general rate of inflation.

Future regulatory costs are harder to forecast since they depend, in large part, on political forces rather then economic forces. Nonetheless, it appears that recent budget action at the federal level will put to rest (for the short term) discussions about increasing landing fees or implementing new operating fees to partially privatize the nation's aviation infrastructure.

There is concern, however, about continuing efforts to reduce or constrain business aviation's access to major U.S. airports. It is important to understand that business aviation is not the source of congestion in the U.S. air traffic control system nor the reason for commercial aircraft delays. Business aviation provides transportation services important to the health and continued growth of corporate America. These services include both access to our major industrial and commercial centers, as well as access to locations not well served by commercial aviation or other transportation modes.

# Summary

While variation will always occur around trends, the outlook for business aviation between 1997-2002 is relatively bright. Trends reflect three fundamental forces in business aviation (1) new product introductions, (2) corporate profitability, and (3) direct operating and regulatory costs. For this review exercise, the positives in these three factors outweigh any negatives that the panel could speculate about in terms of timing and magnitude of their effect on business aviation.

In business aviation, there is a fourth factor that can not be ignored, although its full impact can not be precisely measured. This factor is the emergence of fractional ownership as an institution in business aviation. Fractional ownership will likely expand the business aviation market by bringing new buyers and operators into business aviation.

Taking these four factors into consideration, it is likely that new aircraft sales, fleet growth, and fleet utilization will at least match, if not exceed, the expected real rate of growth in the U.S. economy. The extent to which growth in business aviation exceeds the real rate of economic growth in the United States will be determined, in large part, by the growth in the world economy and the influence of age on fleet utilization.

This is especially so in the turboprop sector. In comparing the turbojet and turboprop sectors of business aviation, it is expected that the turboprop sector will display the least robust growth. New product development is limited in the turboprop sector and the use of the turboprop fleet will be more severely affected by aging aircraft. Nonetheless, there is a viable market for existing turboprop products and new products have the potential for reenergizing certain sectors of the turboprop segment of business aviation.

#### LIGHT AND PERSONAL GENERAL AVIATION

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<i>Panelists:</i>	Molly M. Pearce
Dan Barks	The New Piper
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#### Introduction

The panel discussed the state of the light and personal general aviation market and the factors that will influence the market. The industry has been in a steady and unrelenting decline for well over a decade, but the panel felt that it is now in the early stages of a recovery spurred by the General Aviation Revitalization Act of 1994 and a healthy economy. There are industry marketing and product initiatives that will provide the impetus for continued growth. The most critical downside risk is the economy, but regulatory intervention could impact the business if significant changes are made.

Association

#### Assumptions

The U.S. economy will continue to grow at a moderate rate and inflation and interest rates will not increase significantly in the next few years. There will be price stability in the general economy and specifically in the area of aviation fuels, and no drastic regulatory or tax changes that would adversely impact the recovery of the industry. Any significant shocks to the industry-causing operating cost increases, reduction in the utility of aircraft or added administrative burden for the use of aircraft-could reverse the improvements made to date. It was also assumed that GA Team 2000, or a similar, major promotional learn-to-fly program will continue throughout the forecast period.