

The number of new-entrant niche carriers and their long-term prospects in the transformed industry will depend largely on the new entrants' ability to gain high-volume, low-cost access to secondary airports near large metropolitan areas. In addition, the introduction of high-frequency, low-fare service in the northeastern United States will also depend on prospective carriers' abilities to obtain sufficient landing slots at underutilized secondary airports. Physical expansion of existing hub airports will probably have little impact on increasing competition because the surviving carriers will be adding frequency as rapidly as the existing hub airports can be expanded.

Although the panel foresaw no change in the recent pattern of flat growth in domestic enplanements, they agreed that enormous pressure will be placed on government to continue to expand the domestic infrastructure. Congestion and delay will decrease at the hub airports of failed carriers but will worsen at the hub airports of the surviving carriers. Moreover, there is likely to be pressure to improve and expand the facilities at secondary airports to provide opportunities for new-entrant niche carriers. Therefore, there will be continuing need to obtain funding for major capacity enhancements. However, the proposed passenger facility

charges, which are expected to provide a significant new source of funding for airport development, could be a problem for carriers who provide short-haul, low-fare service. The PFC represents a much larger percentage of the ticket price for low-fare carriers, and in some markets the PFC can be enough to make the price of air service uncompetitive with other transportation modes.

### Impact on Labor

The transformation of the airline industry will result in significantly greater economic and political clout for organized labor. For example, the Strike Replacement Bill could enhance the economic leverage of labor. With little threat of nonunion, new-entrant competition, the surviving carriers are less likely to adopt hard-line bargaining positions with their unions. Moreover, with fewer carriers providing the Nation's airlift capabilities, a work stoppage at any one of the survivors would cripple a very significant share of the nation's air transportation network. This could lead the Federal Government to invoke the provisions of the Railway Labor Act or possibly to enact new legislation specifically tailored to the airline industry.

## REGIONAL AIRLINES

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## REGIONAL AVIATION PANEL

### INTRODUCTION

The regional aviation panel was comprised of a wide range of industry experts that included domestic regional

airlines, representatives from aircraft and equipment manufacturers, and consultants specializing in regional aviation. The panel spent time primarily on issues that will affect the regional aviation segment of air transportation over the coming decade and beyond. Issues of concern in the short term were only addressed with regard to their long-term effect on the industry.

In general, it was determined that regional airlines are consistently poorly understood by all segments of the air transport industry (including, but not limited to, larger airlines, legislative and regulatory bodies, manufacturers, financing agencies, the general public, the press, and the consumer). Unfortunately, this disadvantage is magnified in a time of uncertainty -- and the aviation business has rarely experienced certain times.

The panel addressed factors that currently affect, or have the potential to affect, regional aviation, specifically:

- Major partners
- Economics
- Regulation
- Demographics
- Capacity
- Competition
- General industry structure
- Available aircraft
- Political and public attention
- Industry consolidation
- New technology

## LONG-TERM IMPACTS ON REGIONAL AVIATION

### Major Airlines

The issue of major partners is significant. For this reason, the regional aviation group met initially with the panel on domestic major airlines. Together, the two panels addressed the long-term potential of each of the major U.S. airlines and, from the regional perspective, how this would flow down to the regional aviation environment. Because of the existing relationships between major and regional airlines, issues that affect major airlines equally affect regional aviation. In brief, the panels agreed that, in a relatively short time, American, United, and Delta would be the only major airlines in the United States. There is an outside possibility that Northwest and/or USAir will continue, but not in their current form. As for national airlines, all of the carriers in this group are almost certain to be absorbed. The only exception could be Southwest Airlines, which has proven its long-term survivability and competitiveness. This airline, in fact, could potentially triple in size within five to ten years. The continuing consolidation of major airlines will significantly affect regional aviation and is likely to result in further consolidation of regional airlines with the majors by means of partnerships and mergers -- a process that is perhaps only 50 percent complete at this time.

### Demographics

Demographics are of special interest to aviation, particularly regional aviation. For example, maturation of the U.S. air travel market could be offset by increasing global ties to other nations, producing greater demand for international air transportation. Domestically, changes in how people travel, particularly the market share captured by various forms of ground transportation which compete with short-haul air transportation, is of special concern. Of note are the proposed high-speed rail projects in Florida, Texas, and Canada.

Changes in the geographical distribution of the U.S. population will be important for regional aviation. Changes in population distribution from East to South and West have benefited the airlines with primary operations in the West. The growing importance of edge cities, those communities that develop on the fringes of larger metropolitan areas, can be directly related to the success of satellite airports such as Oakland, Ontario, and Orange County in California or Stewart and White Plains in New York.

### Regional/Major Airline Partnerships

Having a regional partner has become a valuable -- perhaps necessary -- marketing attribute for a major carrier. Just as frequent flyer programs and revenue management have spread throughout the industry, partnerships between regionals and majors will continue to evolve.

The process began in the early 1980s (or the late 1960s if one credits USAir with the creation of the concept), with what can be called the *affiliation* phase. This phase involved the creation of partnerships between major and regional airlines for the purpose of expanding the presence of the major into smaller markets, providing feed to connecting hubs in many cases. This phase generally led to the loss of the regional airline's identity in favor of some new designation suggesting close association with the major. The second phase, *consolidation*, really represented two occurrences: consolidation of regional airlines and acquisition of regional airlines by major airlines. This phase tended to occur as a result of financial problems in the regional partners (sometimes as a result of the partnership) or because the major airline wanted to have greater control over this business segment. The third phase, *integration*, is relatively recent. Only two major airlines (Continental and American) have moved to this phase. It involves the basic disappearance of the owned entity as a separate operational airline. In both cases the regional airlines --

from a planning, management, training, purchasing, and administrative standpoint -- have become part of the major airline itself. Despite this trend, neither Continental or American are satisfied with the performance of their owned partners and are evaluating options to improve these operations. The underlying goal is that value clearly must be added in order for the partnership to be worthwhile. But what is value?

### Transborder Opportunities

The panel saw opportunities for regional aviation if there were a relaxation of air service agreements with Canada and Mexico. Canada especially has a great deal of traffic potential, primarily due to the current lack of North-South access routes across the border and the recent free-trade agreement which should increase traffic growth rates between Canada and the United States. Mexico, holds much longer-term potential. The panel agreed that the level of per capita income in Mexico remains much too low to support a rapid increase in air service. However, near the end of the decade when business ties between the countries have expanded, demand for regional transborder air services will grow.

### Financing Capital Expenditures

One of the most troublesome issues discussed by the panel was the ability of regional airlines to finance capital expenditures. While this is not exclusively a regional airline problem, it is compounded in this segment of the industry by the lack of banks that focus on or target regional airlines, let alone understand them. The short-term market for airline credit is poor. This is likely to change only if the performance of the airlines improves. Compounding the problem is the requirement for greater numbers of larger, faster, more expensive aircraft, and the tightening of credit as a result of the recession.

Healthy major airlines are rare. Those that can finance regional aircraft for their partner are only likely to do so at the expense of the manufacturer's profitability by buying in large volume at extremely low prices. Regional aircraft purchases without the support of partners will have to rely on the support of the aircraft manufacturer until the capital market again becomes accessible to regional aviation on a large scale. The effect of this on the manufacturing industry could be significant. At least 10 companies offer products in the regional aircraft segment, compared to only three in the large aircraft segment. This has led to an unprofitable environment of oversupply and uneconomical pricing --

a situation that is likely to place some regional aircraft manufacturers in extremely precarious positions. Already Embraer, DeHavilland, and recently British Aerospace, have either experienced problems or are reevaluating their business strategies in the regional aircraft arena.

Clearly, this situation affects growth potential of the regional aviation industry. The lack of capital equipment at economical prices may affect the demand for capital equipment and impact the industry's future.

### Small Transport Aircraft Economics

The economics of small transport aircraft continue to be difficult. As major airlines are squeezed into larger aircraft, regional airlines are beginning to feel pressures that may result in a large-scale reduction of the 19-seat aircraft category by mainline regional carriers. Several factors are at play: a general growth trend, increasing operating costs, additional regulatory requirements, and marginal traffic volume in certain markets.

Increasing regulatory pressure is significant for the future of regional aviation. Recent regulations designed to increase passenger safety may present difficulties for the regional aviation industry. While all segments of regional aviation are dedicated to providing the safest passenger transportation available, the economic effect of such requirements must be understood by the industry, the regulators, and the legislators. Some of the regulations that are making the economics of small transport aircraft increasingly difficult are:

- Safety equipment (cockpit voice and flight data recorders, TCAS, ground proximity warning, etc.)
- Changes in passenger weight allowance
- Aging aircraft
- Security (positive passenger/bag checks)
- Handicapped access
- Exit row seating
- Passenger facility charges
- Peak-hour pricing
- Pro-competition legislation
- High-density slots

In conjunction with this regulatory pressure, regional airlines are under increasing pressure from their major airline partners to improve service through new, more efficient aircraft that provide better passenger comfort, performance, and baggage capacity.

While these goals are individually desirable, the combination may be economically unreasonable for an industry that operates on a very thin profit margin.

### **Service to Small Communities**

Because of the cost of providing service to small and scattered markets, many regional airlines have pulled out of the Essential Air Service (EAS) program in order to use their assets in markets which hold greater potential. New, very small regional carriers have emerged to take their place, and these are beginning to form a nationwide network of EAS services. Continuing pressure on costs and movement to larger aircraft will lead to continuation in this service shift.

### **Congestion and Capacity**

The issue of capacity will continue to affect regional aviation. Managers of system capacity are moving toward economic pricing of airway and airspace. These actions have two purposes: to earn better revenue by pricing assets according to their economic use and to decrease demand by revising the pricing structure. In many cases, capacity pricing measures have a more severe effect on regional aviation than on other segments of air transportation. Passenger Facility Charges (PFCs), peak hour pricing, and slot controls threaten the economics of service with small transport aircraft. The panel raised the question of whether the policy goal should be to provide service or to limit it.

### **Understanding Regional Aviation**

The public and political leaders often lack a balanced understanding of small transport operations. Despite a safety record matching that of major air carriers, regional aviation is often perceived as risky by politicians and the media. This compounds the concern of the general public about flying on smaller aircraft. 1990 was the safest year in the history of regional aviation. But this fact will quickly be forgotten because 1991 has already become the unsafest year in the history of regional aviation. The industry as a whole feels frustration over the lack of understanding of the industry by not only the public, but all segments of the air transportation industry.

### **New Aircraft Programs**

There is continuing debate on high-speed jet vs. turboprop regional aircraft. One of the difficulties encountered when evaluating new technology is the often myopic view of those who would be directly affected. In aviation, it is difficult to determine how technology will impact the industry. Aircraft attributes are a perfect

example of this. An example from outside the field of regional aviation can be used to illustrate the point. Tokyo has become a large trans-Pacific hub over the past 20 years. While this is strongly related to Tokyo's population and economic position, and specifically its geography, it is perhaps more significant that the range of the B-747, until recently, was basically limited, to the great-circle distance between the United States and Japan. The airlines adapted to the capabilities of the aircraft available. The same can be said about future regional aircraft development where the capabilities of new high-speed aircraft will influence the route structure of the airlines and allow them to offer improved service to the customer.

New high-speed regional aircraft, whether powered by jet or turboprop engines, do not fit neatly into the current mix of small, slow, turboprop and large, fast, jet aircraft. High-speed regional will not gain wide acceptance until experience proves that they can be blended into the fleet operationally and that their increased speed provides economic advantages that outweigh their higher cost in securing short- and medium-haul markets.

## **FUTURE STRUCTURE OF THE INDUSTRY**

### **Regional Airlines**

Since the panel represented both regional airlines and regional aviation manufacturers, it was appropriate to address the future structure of each.

The number of competitors, both domestically and internationally will continue to decline through the evolutionary process of affiliation, consolidation, and integration. Integration, however, may not be the final phase of the process. Two major airlines are reevaluating the advantages of integrating regional carriers into their operations. Neither has attained the benefits that were projected. The integration of regional airlines into their major partners appears to strip the regional carriers of the benefits of their size, replacing them with the disadvantages of the major airline: bureaucracy, politics, complex structure, and big airline mentality. As a result the integrated regional appears to implode under the weight of the major and has great difficulty providing the same benefits at the same cost levels. This could lead to a divestiture of integrated regional airlines if the major partner determines the continued investment is not worth the level of value added.

How this new phase in the evolution process would take place is hard to determine, particularly in the midst of a recession, which makes the situation look worse perhaps than it actually is. Compounding the problem is the level of investment that the major airlines have made in their integrated partners to rationalize their fleets. Divestiture has a high price. Who would buy these airlines at a price which would even come close to covering the investment of the major airline? The panel agreed that the model for regional airline partnerships is the Delta Air Lines/Delta Connection program. This program provides the regional with the identity of the major, and through 20-percent ownership by Delta, the stability of a relationship with a major airline. Delta enjoys all of the benefits of a regional partner, but at virtually no cost; and its ownership position ensures a limited level of control.

### Regional Aircraft Manufacturers

The situation worse for the regional aircraft manufacturing sector, where there is a significant amount of overcapacity. The economic environment is forcing the issue. Partnerships and consolidations now under consideration by several regional aircraft manufacturers could reshape the industry. The logical outcome will be fewer competitive manufacturers and higher prices which will result in lower potential volume.

There is a close relationship between the success of regional airlines and regional aircraft manufacturers. The owned regional airlines, supported by their major partners, have been negotiating aircraft purchases at unprofitable prices for the manufacturers due to the competitive environment. These low-priced assets have allowed the airlines to expand at a rate and cost that would not otherwise have been possible. A change in this scenario, one which raises unit price, may result in reduced demand for regional aircraft.

### The Outlook

Despite these problems and issues, the outlook is relatively bright. Regional airlines are, and will continue to be, an economical alternative to large carrier service. This has been shown in the past through the large number of passenger transfers between regional and major carriers. The volume of transfers is expected to increase as the major airlines retire small jets and shift service on routes formerly served by these aircraft to regional partners. The transfers may increase even more rapidly through the use of innovative regional aircraft designed to exploit new short-haul markets.

The major uncertainty remains the effect of consolidation, which could result in a more stable and perhaps profitable environment for regional and major airlines alike, as well as for aircraft manufacturers and equipment suppliers.

## INTERNATIONAL AVIATION

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## FUTURE AVIATION ACTIVITIES INTERNATIONAL AVIATION PANEL

### INTRODUCTION

The panel chose to accept Dr. Behraves's forecast of 5 to 8 percent average annual growth in international air travel. Rather than debate the accuracy of this generally

accepted growth rate, the panel focused attention on the ability of international airport and airspace systems to accommodate growth at this pace. If problems are already apparent in Europe and Asia, what must be done (or what issues must be resolved) to accept the doubling of traffic in the 10 years (more or less) implied by the forecast?