# REGIONAL AND COMMUTER AVIATION 

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## Introduction

The panel included representatives from two major regional airlines, a major manufacturer of engines for regional aircraft, the Regional Airline Association, the Federal Aviation Administration, Industry Canada and industry consultants.

The regional airline industry has continued to grow at a faster rate than the larger jet carriers and the panel discussed the factors that will be required to sustain this high rate of growth. New technology RJs are being introduced into the fleets and the panel examined the impact on the characteristics of the regional airline industry.

The primary questions before the panel were the definition of the industry, the outlook for growth, and the anticipated structure of the regional airline industry over the next decade. The panel structured their discussion into four areas:

- Industry definition
- Impact of the regional jet
- Market structure
- Outlook for growth


## Industry Definition

Regional airlines are loosely defined as air carriers that provide regularly scheduled passenger service and have a fleet of aircraft with fewer than 100 seats each. FAA defines the regional airline industry as operators of less than 60-seat aircraft, plus larger turboprops such as the ATR72.

The regional industry was originally known as the commuter airline industry. In the 1960 s commuter
airlines operated aircraft with less than 30 seats and provided primarily point-to-point service. In the 1970s the larger jet airlines began to use commuter airlines as replacement service to smaller communities. The 1978 Airline Deregulation Act officially recognized the role of the commuter airline industry in providing small community air service and allowed the commuter air carriers to increased the size of the aircraft they operated to 60 seats.

From 1978 to 1984, the government developed the small community air service program known as the Essential Air Service (EAS) program and provided incentives to commuter airlines. These incentives included direct subsidy, loan guarantees, and a mandated cross-subsidy from the longer routes operated by the jet carriers to support the shorter routes operated by the commuter airlines. All of these incentives, except the direct subsidy, expired in 1985 with the sunset of the Civil Aeronautics Board.

During the 1980 s, the major carriers were building the current hub network. These carriers used the commuter airlines to expand the hub networks. Extensive marketing agreements emerged between the major carriers and commuters, and the use of the major air carriers two-letter code by the commuter carrier known as code sharing began to expand. Code sharing between major carriers and commuters allowed the commuter airlines to publish flights under the airline designator of the major carrier and to appear in the computer reservations systems as part of the major carrier.

The 1980s were a period of explosive growth for the commuter airline industry and the industry became known as the regional airline industry. Since the early 1980s, the regional airline industry has been in a period of transition. The number of code share agreements increased dramatically, and by 1985 the major carriers began to purchase equity interest in the regional airline partners. In some cases, the major airline fully acquired the regional partners.

As the regional carriers became more a part of the total system of the major jet partner, the major carriers accelerated the transfer of short-haul routes to the regional affiliates. This transferring of jet routes has sustained the regional industry's historic high rate of growth over the past decade.

The fundamental character of the regional airline industry has changed considerably in the 1990s. Regional airlines are now sophisticated companies that operate as extensions of the major carries' route networks. The regional airlines are becoming fully integrated into the overall market strategy of the major carriers. Regional airlines now operate fleets of both turboprop and jet aircraft and the regional jet has developed as a significant competitive tool of the regional industry, although turboprops remain the primary aircraft serving the more traditional markets.

Thus, while the line between a regional airline and a major/national airline is becoming blurred, there are definite characteristics that define a U.S. regional airline. These include:

- Fleet of aircraft each with less than 100 seats and
- Primary mission is to support a larger carrier.


## Impact of the Regional Jet

The 50 seat regional jet has had a significant impact on the regional airline industry. As of this conference, over 700 RJs are on order or option. Regional jets allow regional airlines to expand into longer markets. Traditionally, turboprop aircraft restricted regional airline operations to fewer than 400 -mile routes. The regional jets are expanding market opportunities to include up to 1,600 -mile routes. Regional jets are used: (1) to replace or supplement the larger jets of the major airlines; (2) to open new markets; and (3) to upgrade traditional regional airline routes currently served by turboprops.

The newest development is the 30 -seat jet. Two smaller 30 -seat RJs have been launched over the past six months. The Embraer 135 joined the Fairchild Dornier 328Jet in the smaller regional jet market. If these new aircraft prove to be economical to operate, they may create a new market, much as the 50 -seat regional jet did in 1995-1996.

All the major U.S. carriers have developed regional jet programs for their affiliated carriers. RJs allow regional airline partners to provide a more desirable pattern of service in specific city pairs. Combining regional jet service with existing major airlines service produces a more competitive service pattern, which fills in the daily flight schedule banks with appropriate aircraft sized to match market demand. The result is increased frequency and feed at lower costs for the major airlines.

Major airlines no longer consider the major and regional services to be divided by segments. Now a combination of different sizes of aircraft operated by each entity can be used to provide the appropriate level and mix of capacity on specific segments throughout the network. The RJs are both larger in overall capacity and fly longer distances. Thus, RJs generate substantially more available seat miles and revenue passenger miles than the turboprops.

Despite the success of the RJs , turboprop aircraft are expected to continue to provide the core services of
the regional airline industry. There are currently over 2,000 aircraft in the U.S. regional airline fleet. Less than 10 percent of the fleet are the new technology regional jets. The manufacturers of regional jets have production limitations and can only produce 120 to 180 units per year over the next decade. Sixty percent of the regional airline fleet is still expected to be turboprop powered by the year 2008.

## Market Structure

The basic role of the regional airline industry, which has not changed since its inception, is to provide feeder service for the large commercial jet air carriers. It is the scope of the services that have changed dramatically.

As a result of an intensifying relationship with the major carriers, the regional airline industry has had clear winners and losers. The industry has become more concentrated and the number of regional airlines has declined by more than half 1981 -from 250 in 1981 to only 109 in 1997. The top 50 regionals accounted for 99 percent of all the passengers carried by the regional airline industry in 1996. The top 25 regional airlines account for 90 percent and the top 10 regional airlines account for 55 percent of the total.

There are approximately 60 code-sharing agreements between major carriers and regional affiliates. These code-sharing regionals carried 95 percent of the passengers. Of these code-sharing regionals, 18 are owned totally or in part by seven of the larger commercial air carriers and 5 are owned by three larger regionals.

Regional airlines transported 11 percent of all commercial airline passengers in the United States-up from 6 percent in the 1980s. This increase in the share of the total passenger market is a result of the transfer of routes from the major airlines' systems to the regional airline industry.

The transfer of routes from the major airlines to the regional airline industry surged in the 1990s. Major airlines have reduced overall system costs by transferring less profitable routes to the regional affiliates. The major airline is typically serving the market with aircraft of over 100 seats, when the market can be profitably served with a smaller aircraft. There are currently 224 routes operated by major airlines that are under 1,200 miles and average less than a 55 percent load factor. These routes are eligible for transfer to the regional affiliates.

TABLE 1 MAJOR AIRLINE SHORT HAUL LOW-LOAD FACTOR ROUTES

| Carrier | Number of Markets | Average Passengers Per <br> Flight |
| :--- | :--- | :--- |
| American | 7 | 60 |
| Alaska | 6 | 64 |
| Continental | 21 | 52 |
| Delta | 64 | 63 |
| America West | 16 | 69 |
| Northwest | 36 | 50 |
| TWA | 15 | 52 |
| United | 21 | 60 |
| US Airways | 38 | 57 |
| Total | 224 |  |

## Outlook for Growth

The panel agreed that the outlook is for continued growth in the U.S. regional airline industry. The transfer of routes from major carriers will continue to be a factor driving the growth in the regional airline industry.

The U.S. regional airline fleet has leveled off at approximately 2,000 units. The fleet grew rapidly during the 1980 s as the new generation 30 -seat turboprop aircraft were introduced into the market. The fleet size is now leveling off as the older 19 -seat and 30 -seat turboprop aircraft retire. The average size of the aircraft operated by the regional airline industry has been steadily increasing. In 1986 the average regional aircraft carried 19 passengers. Today, the average regional aircraft carries 25 passengers. As the 50 seat jets enter the fleet and the smaller 19 seat turboprops are retired, the average seat size will continue to increase over the next decade.

Nineteen-seat aircraft have steadily lost market share relative to mid-size turboprops. The role of the 19seat aircraft is threatened in the United States by the cost impact of the new single safety standard introduced in 1995, and the pressure from the major airlines for
cabin service, i.e., stand-up head room.
For these reasons, mid-size (20-39 seat) turboprops are being purchased to replace 19 -seat aircraft. Fundamentally, the 19 -seat aircraft is becoming economically noncompetitive in scheduled service and will transition to alternative uses. Mid-size turboprop aircraft are expected to continue to serve as the mainstay of the regional airline fleet.

The role of the large turboprops (40-plus seats) is less certain. The larger turboprops face competition from the smaller turboprops and the RJs. The larger turboprop aircraft have had greatest success in Western Europe, where the cost of European airport and air navigation user fees limit the economic viability of aircraft with less than 50 -seats.

The most significant growth is expected to be in the regional jet sector of the industry.

The panel agreed that the average load factors for regional airlines will continue to increase and are expected to achieve 60 percent by 2001.

In conclusion, the structure of the regional airline industry is continually evolving and becoming increasingly integrated into the systems of the major carriers. The industry is expected to continue to grow at a faster rate than the major/national carriers.


FIGURE 1 Commuter traffic growth: Share of domestic traffic.


FIGURE 2 Forecasts of enplanements.


FIGURE 3 Forecasts of RPMs.


FIGURE 4 Forecasts of average trip length.


FIGURE 5 Forecasts of utilization.


FIGURE 6 Forecasts of seats/aircraft.



FIGURE 7 Analysis of stage length growth.


FIGURE 8 Regionals/commuters RPM growth.


FIGURE 9 Analysis of enplanement growth.


FIGURE 10 Forecasts of Load Factors.

