



OFFICE OF THE ASSISTANT SECRETARY FOR
AVIATION AND INTERNATIONAL AFFAIRS

**PROFILE:
REGIONAL JETS AND
THEIR EMERGING ROLES
IN THE U.S. AVIATION
MARKET**

June 1998

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*Airline and City/Airport Codes
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<u>Code</u>	<u>Airline</u>	<u>Code</u>	<u>City (Airport)</u>
AA	American Airlines	BOS	Boston
AS	Alaska Airlines	CLE	Cleveland
CO	Continental Airlines	CMH	Columbus, Ohio
DL	Delta Airlines	CVG	Cincinnati
JI	Midway Airlines	DFW	Dallas/Fort Worth International
NW	Northwest Airlines	DLH	Duluth, Minnesota
TW	Trans World Airlines	DSM	Des Moines, Iowa
UA	United Airlines	EWR	Newark, New Jersey
US	US Airways	FYV	Fayetteville, Arkansas
YX	Midwest Express Airlines	IAH	Houston
		IND	Indianapolis
		JFK	New York (John F. Kennedy International)
		LAX	Los Angeles
		LGA	New York (La Guardia)
		MGM	Montgomery, Alabama
		MIA	Miami
		MKE	Milwaukee
		ORD	Chicago (O'Hare International)
		SHV	Shreveport, Louisiana
		SJU	San Juan, Puerto Rico

PROFILE: REGIONAL JETS AND THEIR EMERGING ROLES IN THE U.S. AVIATION MARKET

EXECUTIVE SUMMARY

The domestic commuter airline industry has undergone a revolution in the past few years with the advent of the modern regional jet (RJ). After a slow-paced introduction by a lone U.S. carrier in 1993, the regional jet frenzy has literally taken off. Today in the United States, 11 airlines operate, or have orders for, a variety of RJs, with over 100 already delivered and an additional 220 firm orders outstanding. In addition, these carriers hold 392 options.

Production of regional jets, which has expanded greatly in the past year, is expected to increase further from approximately 120 to 180 jets per year. As the U.S. aviation industry has rebounded from its unprofitable period earlier this decade to new levels of operational efficiency and record passenger-load factors, it is not surprising that U.S. carriers are leading the worldwide growth in regional jet orders and total deliveries of regional aircraft, as the accompanying exhibits illustrate. According to Boeing, market demand for regional jets in the 100-seat range, such as Boeing's new 717 model, is expected to reach 2,500 over the next 20 years.

Exhibit 1: Regional Jet Orders by U.S. & Rest of World

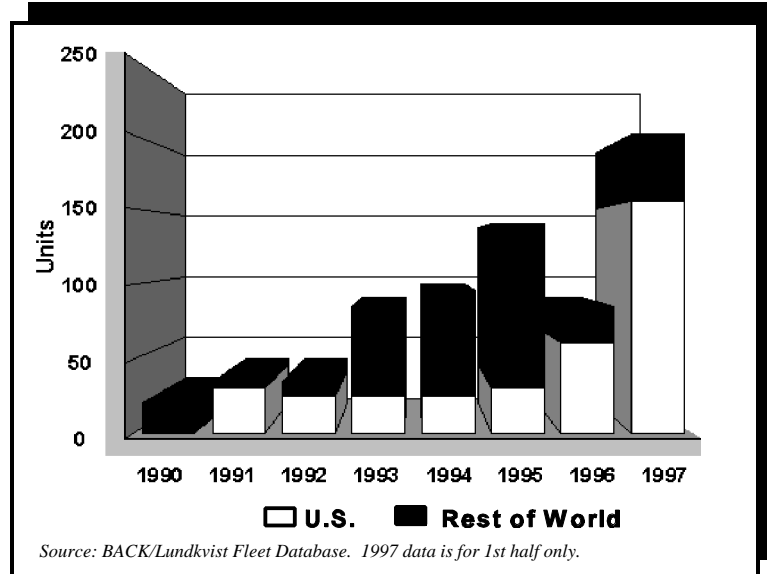
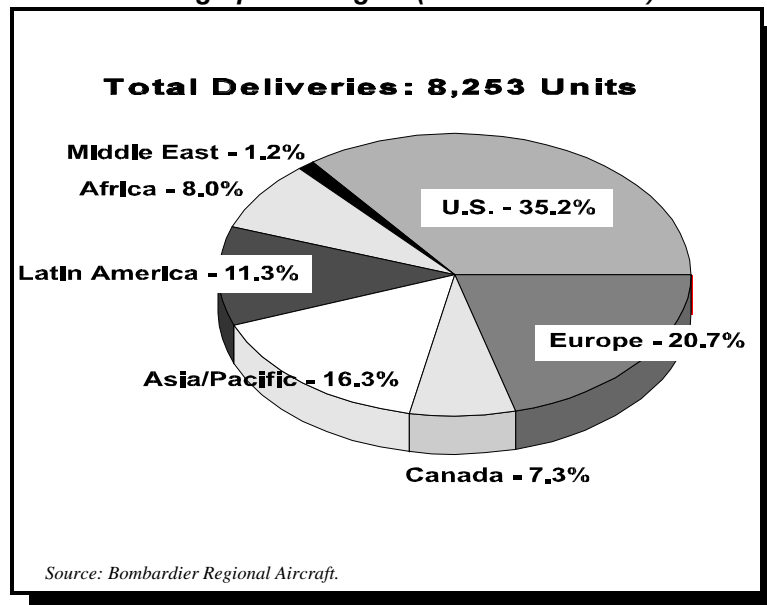


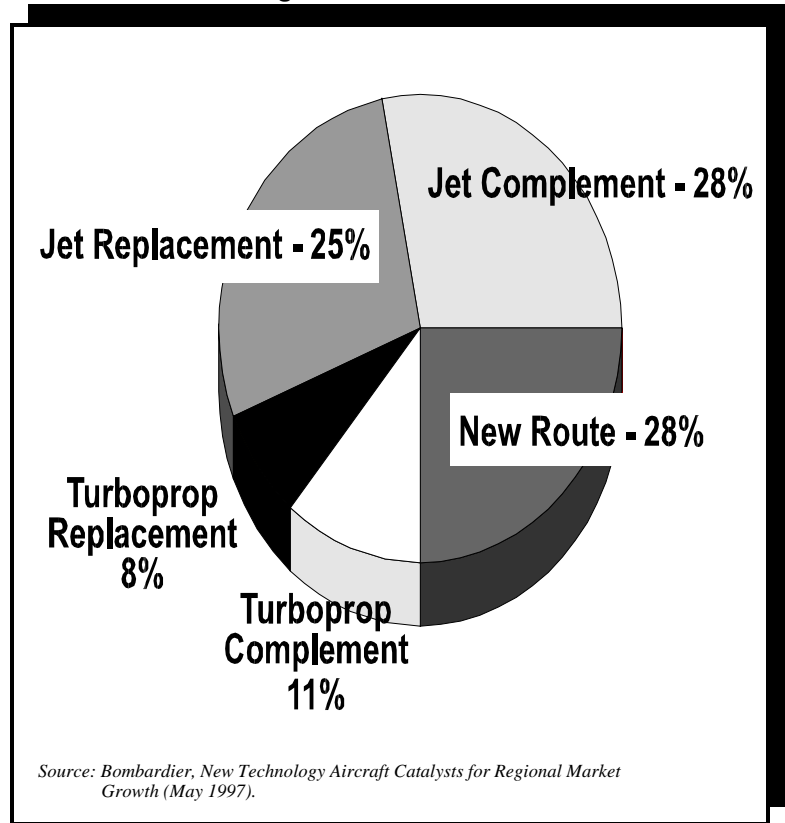
Exhibit 2: Regional Aircraft Delivery Forecast by Geographical Region (15-90 Seat Market)



As 1997 ended, seven U.S. carriers were operating 99 regional jets between 126 city-pairs, with 4,221 weekly departures. They served 103 markets from 10 hub cities with an average stage length of approximately 400 statute miles. RJ capacity comprised nearly 11% of regional airlines' total capacity at the end of 1997, up from 8.6% in 1996. Comair, which operates the largest RJ fleet in the world, served 70 city-pairs, whereas the next highest city-pair operator, Skywest, served only 19. The highest average RJ stage length was 697 statute miles by America West Express, with Atlantic Southeast Airlines having the lowest at 311. Comair's fleet of jets served the highest number of airports with 62 while America West Express served the fewest with 4.

The domestic RJ fleet is expected to more than double in 1998 to over 200 aircraft in service by January 1999. Thus far, only one U.S. carrier, Midway, utilizes RJs as part of its mainline fleet, just as Air Canada does extensively. As shown in Exhibit 3, domestic and international RJ operators have used their jets to complement or replace existing aircraft and to service new routes.

Exhibit 3: Uses of Regional Jets



The term "regional jets" has evolved greatly over the past few years and is no longer readily defined. Exhibit 4 on the next page lists the aircraft currently in service, or about to come on line, that can be found within the broad definition of regional jets.

Exhibit 4: A Wide Array of "Regional Jets"

<u>Producer</u>	<u>Aircraft</u>	<u>Capacity (class)</u>	<u>Mfg. Year</u>	<u>Airline</u>
McDonnell	DC-9-10	60/78 seats (½ cl)	1965-67	NW/TW/YX
Douglas	DC-9-30	84/100 seats (½ cl)	1967-82	NW/TW/YX/US/CO
	DC-9-40	112 seats (2 cl)	1967-79	NW/TW
	DC-9-50	122 seats (2 cl)	1975-81	NW/TW
British Aerospace / Aero International (Regional)	BAe 146-100 (Avro RJ70)	86 seats (1 cl)	1982-	UA
	BAe 146-200 (Avro RJ85)	86/89 seats (½ cl)	1983-	UA/NW
	BAe 146-300 (Avro RJ100)	100 seats (1 cl)	1988-	UA
Boeing	717	106 seats (2 cl)	1999	n/a
Bombardier	CRJ-200	50 seats	1992-	DL
	CRJ-700	70 seats	1998-	n/a
Embraer	EMB-145	50 seats	1996-	CO/AA
	EMB-135	37 seats	1998-	n/a
Fairchild Aerospace	328 Jet	32-34 seats	1999	n/a
	728 Jet	70 seats	2001	n/a
	428 Jet	44 seats	2000	n/a
Fokker Aircraft	F28-4000	25/68 seats (1/2 cl)	1976-87	US/AS
	F-100	96/107 seats (1/2 cl)	1986-96	AA/JI
	70	78 seats (1 cl)	1994-96	Mesa

* * * * *

This profile, which reflects industry developments through Spring 1998, is divided into three sections: the domestic market, manufacturers, and operators. A review of manufacturers reveals that regional jets, and certainly jets with the capacity of regional jets, are not a new phenomenon in the United States. Aircraft such as the McDonnell Douglas DC-9, the Fokker F-28 and the British Aerospace BAC 1-11 all played a large role in transforming the short-to-medium-haul U.S. aviation marketplace, just as the RJ is impacting today's regional market. As for the operators of RJs, the dominance of the modern domestic hub-and-spoke system lends itself to a review of regional airlines grouped by their primary mainline partner.

THE DOMESTIC MARKET

Before deregulation, the U.S. regional aviation industry was characterized by regional point-to-point service. This service was typical for very small operations, including those of once-thriving carriers such as Mohawk, Empire and Allegheny. Since the deregulation of the U.S. airline industry in 1978, the regional airline industry has experienced tremendous growth, as illustrated below, while undergoing consolidation through mergers, alliances and bankruptcies.

Exhibit 5: U.S. Regional Airline Growth, 1978 - 1996

	<u>1978</u>	<u>1996</u>	<u>Average Annual Growth Rate</u>
Passengers Enplaned (millions)	11.3	61.9	9.9%
Revenue Passenger Miles (billions)	1.28	14.22	14.3%
Aircraft in Service	1,047	2,127	4.0%
Average Seating Capacity	11.9	25.1	4.2%
Average Trip Length (seat miles)	117	230	3.8%
Operating Airlines	228	109	- 4.0%

Source: RAA Annual Report, AvStat Associates

Exhibit 6: Passenger Traffic, 1970-1996

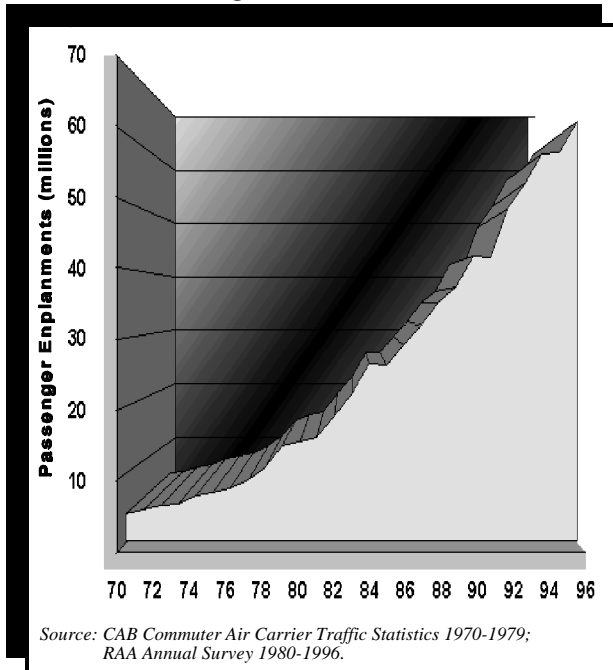
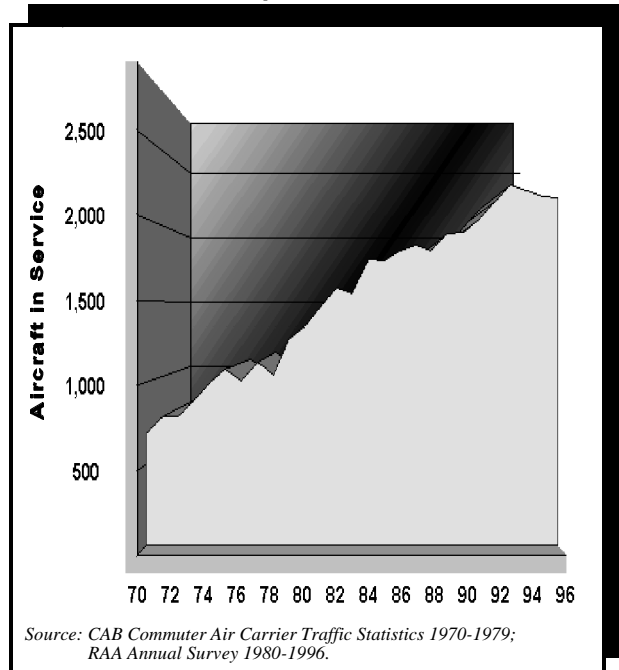


Exhibit 7: Aircraft Operated, 1970-1996

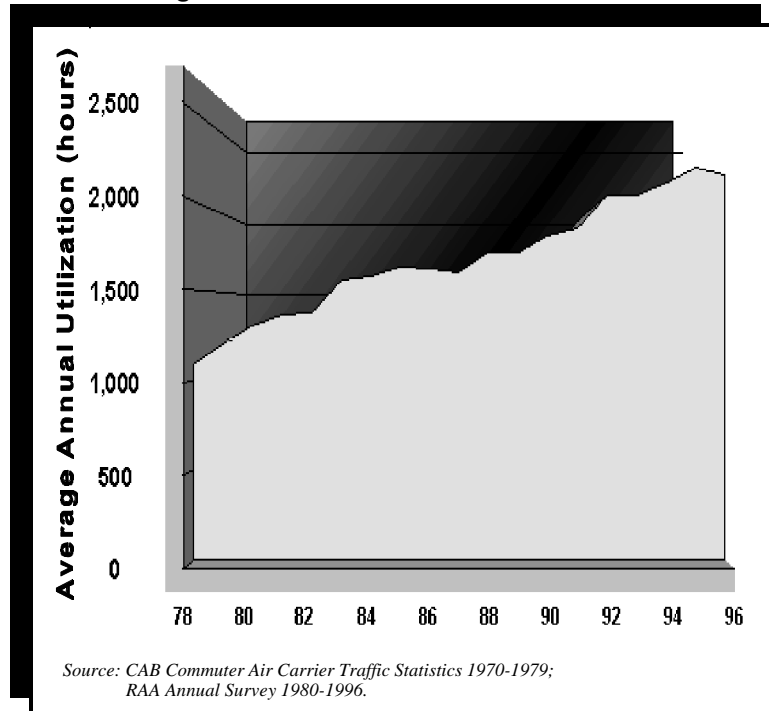


Today, the FAA defines the regional airline industry as operators of aircraft with fewer than 60 seats, plus larger turboprops such as the ATR-72. In reality, today’s regional airline industry is defined less by aircraft size than by the real mission the carrier serves: that is, supporting larger, hub-based airlines. Since the introduction of the modern regional jet, commuter carriers have strengthened their ability to support their larger, hub-based partners by feeding more traffic into the mainline carrier’s hub.

Since Comair, a Delta partner, introduced the RJ into the domestic commercial aviation market in 1993, passengers have demonstrated a clear preference for jets, rather than turboprops, in short to medium-haul markets. This preference grew especially strong in late 1994 and early 1995 as a consequence of the public scare caused by several high-profile turboprop accidents. Regional carriers, aware of passenger preferences as well as an expanding body of proven financial data pointing to the positive economics of regional jets, have quickly joined Comair on the RJ bandwagon. The *Wall Street Journal* reported that one commuter carrier, based on its research prior to signing a contract to purchase regional jets, calculated that a turboprop avoidance factor would increase traffic on some routes by as much as 20% simply by replacing a turboprop aircraft with a regional jet.

RJs have proven to be especially profitable on long thin markets to and from hubs where commuter airlines face minimal competition from mainline jets. For example, a Comair regional jet requires only 21 passengers to break even, or a 42% load factor, whereas a mainline 737-300 (capacity 128) jet on its partner Delta requires 81 passengers to break even. To date, Comair’s RJ fleet has enjoyed load factors averaging greater than 60%, quite high in the regional airline industry.

Exhibit 8: Regional Jet Utilization



The modern fleet of new generation regional jets began as 50-seat aircraft. Due to their success, new manufacturers with new and redesigned jets have expanded the capacity spectrum of RJs from as few as 32 seats to more than 100 seats. In 1986, the average regional aircraft in use in the United States held 18 passengers. By 1996, this had increased to 25 seats. Similarly, as shown in Exhibit 8, RJ utilization has steadily risen. With the proliferation of regional jets, and the retirement of many smaller 19-seat turboprop commuter aircraft, capacity and utilization should continue to grow.

A majority of RJs now on order will be placed into service in the U.S. in 1998 and 1999, fueling the continued economic growth of regional carriers. U.S. regional airlines are leading the world with RJ acquisitions and this trend is expected to continue. Aiding the growth of regional carriers will be an increase in market out-sourcing at domestic hubs, or the transfer of unprofitable routes from a major, high-cost carrier to its relatively low-cost commuter carrier.

With a full two-thirds of the 481 commercial service airports in the continental U.S. receiving their only aviation link via commuter airlines, those carriers currently operating regional jets are at a distinct competitive advantage. Once regional jet aircraft are commonplace in these markets, passenger preferences will no longer be based solely on the attractiveness of equipment, and it is likely that these markets will be driven by service frequencies, available connections, and price competition.

PRINCIPAL MANUFACTURERS

The modern regional jet expansion is being fueled by an expanding selection of high-quality jet aircraft. There are four primary manufactures of regional jets, each with a growing variety of models, and two additional entrants into the manufacturing base are expected in the near future.

1. Aero International (Regional): AI(R)

Aerospatiale, Alenia and British Aerospace are one-third partners in AI(R), or Aero International (Regional), the partnership which now makes the BAe-146 line of 3 regional jets, under the name Avro RJs. The partnership, formed in 1996, recently announced it was dissolving its aircraft consortium with the Avro jet program reverting to BA Regional Aircraft Ltd. and the ATR turboprop program becoming Aerospatiale-ATR.

The Avro line of 4-engine regional jets is the successor to the former BAe-146 line of jets. The RJ-70 is the modern equivalent of the BAe146-100 series, the RJ-85 replaces the BAe146-200 and the RJ-100 replaces the larger BAe146-300. Each of the new Avro jets has advanced modern avionics and more efficient, quieter engines than their 146 predecessors, some of which were 15 years old in late 1992 when the Avro line was introduced. Unlike most new regional jets with 3 or 4-abreast seating, the Avro line has 5 or 6 abreast seating and is generally seen as a replacement for small, older mainline jets such as early model DC-9s. The RJ-85 cost is approximately \$25.9 million and the RJ-100's, \$28.4 million. Avro's 1997 regional jet orders were up 52%, including 25 Avro RJ-85s and 7 Avro RJ-100s. The Avro regional jet family captured more than 30% of the world's 70-120 seat jet market. Worth noting, for British Aerospace, the BAe-146 line was not the company's first regional jet to operate in the U.S. That distinction belonged to the popular BAC 1-11, a twin engine jet, initially with 56 to 69 seats, which was launched in the U.S. by Mohawk Airlines in 1965 and later operated by other carriers such as Allegheny and American Airlines.

In July 1997, Northwest Airlines converted 24 RJ-85 options to firm orders, which will increase its RJ fleet to 36 and make it the largest U.S. operator of 70-seat regional jets and AI(R)'s leading

regional jet customer. Northwest's unique 69-seat, two-class configuration meets the terms of its pilot's scope clause. Northwest is scheduled receive 23 additional Avro RJs in 1998.

The mid-size RJ-85, operated by Northwest, has a range of 1500 nautical miles (nm). It can take off on a "short" runway of 3,920 feet and land on a strip 4,260 feet long. The RJ-85's high-performance characteristics allow operations into airports with steep approaches as well as those at higher altitudes such as Aspen. The larger RJ-100, which can hold up to 112 passengers, has a range of 1,400 nm.

AI(R) had planned to launch a line of smaller regional jets to compete in the 50-70 seat market, but in December 1997 decided to forgo the \$1 billion development costs associated with the program and avoid direct competition with Bombardier and Embraer, established manufacturers in this segment of the RJ market. The project was set to offer a 70-seat jet, followed by a 58-seat version and finally a stretch version. It was hoped the first delivery would be in 2001.

2. Bombardier: Canadair Regional Jet

Officially launched in March 1989, and with more than 100 airlines contributing to its design, the Canadair RJ-200 (CRJ) was the world's first 50 seat regional jet airliner. Roll out occurred in May 1991. Lufthansa CityLine was the launch customer, placing the CRJ-200 into service in November 1992. The jet was introduced into American service in May 1993, by Comair of Cincinnati, flying as a Delta express carrier. The CRJ-200 was initially priced at US\$18 million and is now selling for approximately \$20 million.

Bombardier Regional Aircraft was created in 1992 with responsibility for the Canadair Regional Jet and the de Havilland Dash 8 turboprop family. Bombardier purchased Canadair from the Canadian government in 1986. At the time, Canadair produced the Dash 8 turboprop line of aircraft, Learjets and the Challenger corporate jet. The Challenger jet, which the Canadian government had spent CAN\$1.2 billion to develop and manufacture, was redesigned by Bombardier for a relatively low CAN\$250 million to create the modern CRJ. From 1986 to 1996, Canadair's revenue grew from CAN\$500 million per year to CAN\$4 billion per year. As a result of the success of its turboprops and RJs, Bombardier Aerospace is now the world's third largest manufacturer of civil aircraft, after Boeing and Airbus.

On September 1, 1997, the CRJ firm order book stood at 286 aircraft. By November 21, 1997, firm orders had risen to 307, including purchases by 6 U.S. carriers. Bombardier's production rate is currently 58 CRJs per year, but it is expected to rise to 67 by 1999.

The CRJ-200 has a cruise speed of Mach .81 and a range of 1,650 nm. It has more than 6 feet of standing headroom, a lavatory, overhead bins and a hot meal galley making it the smallest commercial jetliner with a full cabin interior for passenger comfort. The 50-seat CRJ is being delivered in 2 basic models, the CRJ-200 and the CRJ-200LR. The 200LR has an extended range of just over 2,000 nm. The CRJ-200's estimated direct operating costs are just over 11 cents per available seat mile (ASM) for a 225 statute-mile flight, versus just over 6 cents per ASM for an 1,150 statute-mile flight.

In January 1997, Bombardier launched the RJ-700 program to produce a 70-seat version of the CRJ. Its first flight is scheduled for the first quarter of 1999 and it is scheduled to enter service with launch customer American Eagle in the 3rd quarter of 2000. As of February 1998, the RJ-700 program had received 67 firm orders, and other options, from 7 airlines, of which American Eagle has the first 25 firm orders. The RJ-700 will initially roll out as the "A" model, with 70 seats, followed by the "B" model which will accommodate 72-78 passengers. The A model will have a 1,700 nm range with an extended range version having a 2,000 nm range.

3. Embraer

Embraer was created as a government entity in 1969 in Sao Jose dos Campos, Brazil. In 1994 the company was transferred to the private sector.

Embraer's EMB-145 is a 50 seat pressurized twin jet with low operating costs. Its maximum range with a full load of passengers is 1,330 nm. As of February 1998, firm orders stood at 180 and options at 246, with 40 EMB-145s having been delivered to date. The cost of the EMB-145 is estimated at US\$15 to \$16 million, 20 to 30 percent less than Bombardier's competitive jet. In 1998, Embraer will deliver 65 EMB-145s, with 132 EMB 135/145s scheduled for delivery in 1999. In June 1997 Embraer announced the development of a long range version of the EMB-145. The range will grow to 1,600 nm from 1,300 nm, allowing for longer distances with added fuel and luggage capacity. First flight is expected in April 1998.

In September 1996, Embraer and Continental Express, a wholly owned subsidiary of Continental Airlines, announced their \$375 million agreement for 25 EMB-145s and options for 175 more jets over the next 10 years, making Continental Express the North American launch customer for the EMB-145. Deliveries totaled 16 at the end of 1997. The first two of 25 EMB-145s ordered by Continental Express were delivered on December 18, 1996, and on April 6, 1997, Continental Express became the first carrier in the world to fly the EMB-145 in revenue operation. In June 1997, Continental Express exercised options for an additional 25 EMB-145s (long range), bringing the firm orders to date to 50. Continental Express still has 150 purchase options remaining and expects to be operating 34 jets by the end of 1998. Recently, Continental Express ordered 25 EMB-135s, the 37-seat derivative of the EMB-145.

Following an intense competition between Bombardier and Embraer, which included a "fly-off" in Dallas for potential customer AMR, American Eagle and Embraer, in June 1997, announced an agreement for 42 firm orders and 25 options for the EMB-145. The American Eagle deal also includes the advanced long-range version of the EMB-145. The deal is valued at \$1 billion. First deliveries occurred in March 1998 and revenue service began in May 1998.

In September 1997, Embraer launched its 37-passenger jet, the EMB-135. This aircraft is based on the EMB-145 design, with 90% commonality. The EMB-135 will have a range of 1,500 nm. Its development costs are expected to be approximately \$100 million. Roll-out of the EMB-135 occurred in May 1998 with the maiden flight set for July 1998 and the first delivery scheduled for the second

half of 1999. Firm orders stand at 63, with 122 options, including 30 firm orders and 40 options for Business Express, a Delta commuter affiliate. In January 1998, Wexford Management of Greenwich, Connecticut, announced an agreement to purchase the new 37-seat EMB-135 jet. This order is in addition to its order for 40 EMB-145s, the 50-seat model. Both sets of aircraft could end up as commuter aircraft for US Airways in the Northeast.

In February 1998, Trans States Airlines increased its order for the EMB-145 regional jet to nine firm and 18 options. The first two jets were due for delivery in the Spring of 1998 and will operate as United Express from O'Hare.

Embraer is also planning to offer a 70-seat version of the EMB-145, the EMB-170. The company believes that during the next 10 years, 70% of all aircraft deliveries in the 60-seat or less category will be regional jets.

4. Fairchild/Dornier

Fairchild Aerospace Corporation, a U.S.-German partnership, through its subsidiary Fairchild Dornier, is a leading manufacturer of jet and turboprop aircraft for regional markets. In February 1997, it launched a program to build the third-generation 328 aircraft, the 328Jet, a two engine, 32-34 passenger regional jet, adapted from Dornier's popular 328 turboprop. The 328Jet will be able to operate from short runways (4,000 feet), enabling small communities with low traffic to receive scheduled jet service for the first time. With a price of approximately \$11 million, Fairchild is anticipating that its 328Jet will be an ideal replacement for first generation 30-seat turboprops such as the Saab 340 and Embraer's Brasilia.

On January 20, 1998, the 328Jet made its first flight and it is expected to enter service by March 1999, as the world's smallest regional jet. To date, 27 firm orders and 15 options have been placed for the 328Jet. It has a cruising speed of 460 miles per hour and a range of 900 nm, although an extended range version capable of 1,200 nm is being designed. The U.S. launch customer is Dallas based Aspen Mountain Air, an American code-share partner at DFW, which has firm orders for four and options for four. Mountain Air Express, United's new partner at Denver, which currently operates Dornier 328 turboprops, is also said to be an acquisition of the 328Jet for its fleet expansion. According to the manufacturer, the 328Jet's direct operating costs per seat mile are 12.64 cents on a 200-nm segment versus 12.46 cents for the 328 turboprop. As the segment length increases, the economic benefits of the jet do as well.

Fairchild recently announced the launch of its 728 regional jet program, with deliveries of the first six aircraft scheduled for 2001. The 728, with 70 seats, will feature a new low-wing design, with 2-wing mounted engines and 5-abreast seating. Development is expected to cost \$500 million. The 728 Jet will be followed by 55 and 90-seat derivatives.

Fairchild/Dornier has also launched its 428 Jet program to produce a stretched version of the 328 Jet, with 44 seats. The estimated price of the 428 Jet, which is expected to enter into service in 2000, would begin at \$12.5 million.

OTHER MANUFACTURERS

1. Boeing

Boeing, the world's leading manufacturer of commercial aircraft, is marketing its 717-200, formerly the McDonnell Douglas's MD-95, as a 100-seat regional jet, although the first model will seat 106 passengers in a two-class configuration. The 717 will have a maximum range of 1900 nm, but will be economical to operate on trips as short as 350 nm. Unlike the smaller regional jets, the 717 will require a 6,200-foot runway for takeoff, limiting its ability to compete in some smaller regional markets. A direct descendent of the DC-9, the 717 is Boeing's first new rear-engine aircraft since the 727 was introduced more than 30 years ago. Initially set in the \$30-million range, Boeing reportedly has lowered the price of the 717 into the \$20 to \$25-million range to stay competitive in the RJ market. To date, only one carrier, AirTran (formerly ValuJet), has publicly committed as a customer, although Boeing has stated it has firm orders from other carriers.

Boeing has three 717 aircraft under construction at its Long Beach facility, all of which will be used in the 717's flight-test program set to begin later this year. Roll-out is scheduled for early June 1998. AirTran's deliveries are set to begin in mid-1999, although this may be delayed by production problems. If the program proves successful, Boeing plans an 80 and 120-seat derivative of the 717 model. The production schedule forecasts as many as 10 planes per month eventually being manufactured. Boeing is not planning to enter the 50 or fewer-seat regional jet market.

2. Airbus

Airbus is the farthest behind in the regional jet market. It has not yet decided whether to proceed with its AE31X program, which would produce a new family of jets to be known as the A316, 317 and 318. This line would be based on the A319, A320 and A321 models, but have no more than 106 seats.

3. Fokker

Fokker Aircraft, formerly a Deutsche Aerospace division of Daimler-Benz Aerospace, declared bankruptcy in March 1996. The trustees are currently liquidating the company and no new Fokker jet aircraft are being manufactured. Prior to the bankruptcy, the Fokker Aircraft company had three modern aircraft which were considered at the high capacity end of the regional jet spectrum, one of which, in its initial model, was one of the world's first successful jets used by U.S. regional carriers.

Fokker developed the 65 passenger Fellowship F-28 small jet aircraft in the mid 1960s, and continued production until 1986. It was a successor to the F-27 propeller aircraft. The jet received FAA certification in March 1969. Like today's regional jets, it was designed with the short-haul regional

passenger in mind, able to operate on 4,000-foot runways and cruise at 530 mph with a range of 1,150 miles. It was low to the ground, with a built-in staircase, and waist-high cargo hatches, allowing for quick loading and unloading of passengers and cargo. By 1979 more than 150 F-28s had been sold worldwide, but none to U.S. airlines. With the new opportunities created by deregulation in 1978, two U.S. carriers, Altair and Empire, placed orders for advanced models of the F-28 with U.S. service beginning in 1980. After Altair's bankruptcy, Empire acquired its Fokkers and in 1986, after Empire and Piedmont merged, Piedmont became the world's largest operator of F-28s with 45. These were all incorporated into the US Air fleet in 1989.

The F-100, with a range of 1,300 nm, was launched in 1983 and entered service in the mid 1980s, as the successor to the original F-28 Fellowship. It offers 5-abreast seating for up to 109 passengers in an all coach configuration, or 93-98 seats in a two class configuration. Both American Airlines and US Airways fly the F-100 as a mainline jet in a 2-cabin format. American, the largest domestic Fokker operator ordered its 75 F-100s in 1989 while US Airways currently operates fewer than 40. The only other U.S. carrier to fly the F-100 is Midway Airlines, which operates 12. While US Airways is seeking to replace its Fokker fleet, especially its older F-28s, as part of an equipment rationalization program, American has no plans to dispose of its F-100s. In the northwest, Horizon Airlines, primarily on behalf of Alaska Airlines, also operates Fokker jets, but the older F-28 version (acquired from US Airways) in a one-class configuration.

The latest and smallest Fokker jet in the regional market is the F-70, introduced into service in late 1994. A derivative of the F-100, also with five abreast seating, it holds up to 79 passengers in a one class configuration and it has a range of just under 1,100 nm. In the U.S., America West Express used to operate three of these jets, but since eliminating them from their system the only F-70 in domestic operation today is one owned by the Ford Motor Company.

U.S. CARRIERS

1. American Eagle

Since 1992, four carriers -- Simmons, Flagship, Executive and Wings West Airlines -- have operated as American Airline's wholly owned commuter carriers. In January 1998, American, the parent company, began to merge these four carriers into one known as American Eagle Airlines, which will be the world's largest regional airline with more than 1,200 daily flights to 125 cities. As of March 1998, the Eagle fleet consists of 199 turboprop aircraft and 1 regional jet, not yet in service. In 1997 the Eagle carriers contributed \$1.1 billion in revenue to American. American Eagle operates primarily from American's hub cities, as listed below.

<i>Exhibit 9: AA and Eagle Flights at AA Hubs</i>			
<u>Hub Airport</u>	<u>No. of AA Flights</u>	<u>No. of Eagle Flights</u>	<u>Eagle as % of AA</u>
DFW	526	246	47
ORD	341	140	41
MIA	172	76	44
LAX	71	61	86
JFK	52	72	138*
SJU	41	46	112*

** At JFK and SJU, Eagle feeds many international partners' mainline flights in addition to AA flights.*

To date, American Eagle has placed 25 firm orders for the CRJ-700, as the launch customer, with 25 options, and 42 orders for the Embraer RJ-145 with 25 options. Deliveries of the CRJ-700 are set to begin in late 2000. American Eagle took delivery of its first EMB-145 in March 1998, and in May 1998 began commercial service between ORD and CLE and between CVG and MKE. In the CLE and CVG markets, where it will compete against RJ operators Comair and Continental Express, Eagle will be replacing turboprops -- 6 to CLE and 4 to CVG -- plus 1 new daily nonstop to CVG. In the MKE-ORD market, Eagle will offer one RJ flight to supplement its 9 daily turboprop flights. In June 1998, Eagle will replace turboprops in the ORD-CMH and DSM-IND markets.

The Eagle EMB-145s will be configured with 3-abreast, all-leather seating. These initial markets range from 67 to 316 miles, demonstrating the versatility of the regional jet. Deliveries of the EMB-145 are expected at a rate of two per month through mid-1999, with 20 EMB-145s expected by the end of this year.

American's goal is to create an all-jet hub at O'Hare, and then introduce regional jets at its DFW hub in 1999 as replacements for turboprops in markets now jointly served with mainline jets. However, the American Airline pilots' scope agreement limits the use of regional jets within the AA system. The entire system is limited to 67 commuter jets, with a maximum passenger capacity of 70 seats and no fewer than 45 seats. Flights cannot exceed 550 nm. The average seat size of the entire Eagle fleet cannot exceed 50 seats, and no RJ flying can occur between two of American's hub cities shown in Exhibit 9. Further, if the mainline fleet drops below a floor level of 628 aircraft, then Eagle cannot operate more than 9% of the total Eagle/AA combined fleet and must drop one RJ for every two AA aircraft below 628. However, if the fleet grows, the Eagle RJ fleet can expand at the same growth ratio.

American Eagle had initially sought one large RJ order for all 67 of its jets in both the 50 and 70-seat category. After Bombardier refused to lower the price of its 50-seat jet, Eagle split its order and agreed to purchase 42 of Embraer's EMB-145s, which cost US\$3 to \$4 million less than the CRJ, and 25 of Bombardier's 70-seat CRJ-700s as the worldwide launch customer. The CRJ-700 is set to enter service with American Eagle in late 2000. Eagle is also looking at a small variant RJ, such as the Fairchild Dornier 328 Jet and the Embraer RJ 135. Speculation is that should Eagle enter this

smaller jet market, however, it would opt for the Embraer which has a great deal in common with its EMB-145 jets.

Eagle (d/b/a Simmons) was recently awarded slot exemptions at Chicago's O'Hare Airport by the Department of Transportation to operate regional jets to 4 markets (DLH, SHV, MGM, FYV). Presently, none of these cities is served nonstop from O'Hare.

2. Continental Express

Continental Express is a wholly owned subsidiary of Continental Airlines and the operator of nearly all of the parent's hub-feeder service. It serves more than 4 million passengers per year with 860 daily flights to 83 cities from Continental's three domestic hubs in Newark, Houston and Cleveland.

As the North American launch customer for the EMB-145, Continental Express has a firm order for 50 of the aircraft and options for an additional 175. By year-end 1998, it will have 34 regional jets in revenue service, with deliveries expected to continue at a rate of approximately 18 per year, eventually to include its newly ordered 37-seat RJ-135 aircraft. Continental is currently serving 18 markets with 22 RJs from its three domestic hubs at EWR, CLE and IAH, with one city, Hartford, receiving regional jet service from both the Newark and Cleveland hubs. An additional eight markets have been announced for upcoming service as more aircraft are brought on line. Continental pilots' scope agreement limits the regional jets capacity to 59 seats, but has no limit on the number of RJs that can be operated. Continental Express recently ordered the 37-seat EMB-135 regional jet to assist its plan to phase out most turboprops within the next five years.

Of the 26 total markets to be served, 8 are completely new markets for Continental; 7 are markets previously flown exclusively with turboprop aircraft; 10 are markets which were previously flown exclusively with jet aircraft; and one market was previously a mixed jet/turboprop market. In the 10 markets where mainline jets have been replaced by regional jets, frequencies have increased by an average of 50%. This increase has maintained a steady level of seats in the market while providing consumers with greater hub connectivity.

In a majority of markets (14 of 18) served by the regional jet, Continental Express utilizes all RJ service on its daily round trips, with the exception of two routes that have 3 of 4 and 2 of 3 regional jet frequencies.

In addition to the 8 new markets Continental is serving with regional jets, the mainline jets which have been released from these commuter routes have enabled the airline to initiate new service to more than a dozen cities in the U.S., Mexico and Canada during the past year. In the year ahead, as Continental plans to bring its new regional jet aircraft on line, 5 of the 8 markets under consideration would involve replacing jet or turboprop aircraft, and 3 RJs would be for new service. An added benefit for Continental exists at Newark, its primary east coast hub. The use of regional jets has begun to "clean up" the crowded airspace as the faster jets require less air traffic control spacing, thus allowing for a more efficient use of the landing and takeoff capacity during Newark's peak operating times.

3. Delta - Atlantic Southeast Airlines

Unlike American and Continental, Delta Airlines (DL) does not own its commuter services. Rather, these services are operated into hub cities by independent regional carriers which have extensive ties to DL. The Delta pilots' scope clause, like Continental's, has no limit on the number of RJs allowed in the fleet, but does limit the maximum seating to 70 per aircraft, with exemptions for up to 20 of the higher capacity Avro RJ-85 aircraft.

Atlantic Southeast Airlines (ASA) is the commuter carrier at Delta's largest hub in ATL, as well as at DFW. It operates a fleet of 80 aircraft serving 36 cities from Atlanta and 22 cities from Dallas. At Atlanta, where DL has the greatest concentration of passenger traffic by a single carrier at any airport in the world, more than 80% of ASA's passengers connect to Delta's nine daily flight banks.

In January 1997, ASA began its acquisition of 30 CRJ firm orders, with options for an additional 60 aircraft, of which 28 will be in operation by December 1999. The jets are being used primarily for both new market growth and, in strong markets, replacement of turboprops. Use of the jets has extended ASA's Atlanta radius from 350 to 1200 miles. ASA is not planning on using the jets for replacement of mainline Delta jets, yet they have been used to supplement Delta jet service, such as in the ATL-CLE and ATL-JFK markets. In only one market to date, ATL to Gainesville, ASA has replaced DL jet service with 7 daily RJ flights. Some analysts are forecasting further DL transfers of unprofitable routes to its commuter carriers. ASA announced recently it will replace DL jet service with RJ service from ATL to Newburgh, New York, in June 1998. This replacement will maintain frequency but decrease capacity from 142 to 50 seats per flight.

Prior to initiating operations with the RJs, ASA had experimented with larger regional jets, the 88 seat BAe-146. ASA had utilized five of these aircraft to service a few short, thick routes out of Atlanta that were abandoned by Delta. However, having experienced operating problems with the BAe's while seeing its sister Delta commuter carriers develop successful RJ programs, ASA returned its 5 BAe-146s to their leasing company and began its CRJ acquisition program.

All of the CRJs are currently being used to service ATL with plans to eventually offer limited service at DFW. The one exception to this service pattern is a triangular route that was acquired from Business Express, in the northeast, during its recent financial difficulties. This routing is between JFK and CLE and JFK and DTW and complements ASA's jet service from ATL to both CLE and JFK. Unlike the Atlanta hub, Delta is not seeking to grow the DFW hub and thus only a few high load-factor markets at DFW will see CRJs introduced into the otherwise all-Brasilia turboprop fleet which ASA launched in the U.S. Estimates are that ASA requires only 20 passengers per RJ flight (40% LF) to break even. To date, ASA has been averaging a 66% load factor on its RJs and 52% system wide.

4. DL - Business Express

Business Express (BEX) is the largest regional airline in the northeast, with nearly 350 daily departures. It currently operates a fleet of 40 Saab 340 turboprop aircraft to 20 cities in the U.S. and Canada from its three hubs at BOS, LGA and JFK airports. Although BEX code shares with American and Northwest, its primary business is as a feeder carrier for Delta, especially at LGA and JFK.

Recently, BEX announced a firm order for 20 Embraer EMB-135 regional jets and options for an additional 20. The 37-seat jet will enter service in October 1999 and deliveries will follow at a rate of one per month, making BEX the first of Delta's four commuter carriers to operate a 37-seat jet. This is not BEX's first foray into regional jets. In 1995 BEX was the launch customer for AI(R)'s Avro RJ-70, operating 5 BAe 146-200s on an interim basis before receiving its first 3 Avros. The initial 3 were intended to grow into a fleet of 20, but BEX's poor financial condition led to the retirement of the 146s and the return of the 3 new Avro RJ-70s.

5. DL - Comair

The largest of Delta's commuter carriers is Comair, based at Delta's second largest hub, Cincinnati, and to a lesser extent at Orlando. This 21-year old airline, of which Delta owns 21% of the common stock, was the first U.S. airline to operate regional jets, as the U.S. launch customer of the Canadair RJ in June 1993. Today, it operates 57 CRJs, the most of any carrier worldwide, and 34 Embraer Brasillia turboprops. By early 1999, it plans to operate 80 CRJs and 20 Brasillas, having reached its firm order limit on the CRJ, with 45 options remaining. Comair is studying the economics of becoming an all- RJ carrier by the year 2000. The CRJ has been one of the primary reasons Comair's earnings have grown at a compounded annual rate of 38% for the 4 fiscal years ended July 1997.

Today, Comair serves 80 cities with 660 daily flights, carrying more than 5 million passengers per year. At CVG alone, Comair has 260 daily departures to 65 cities, and every market it serves from CVG now has at least one daily regional jet flight. More than 75% of Comair's passengers connect to Delta or another Comair flight.

Comair initially intended to use the CRJ to enter into new markets and to assist Delta in growing the CVG hub. It then began to complement mainline Delta service with added frequencies to strong markets such as MSP, MCI, STL and DSM. As it acquired more CRJs, Comair began to replace routes flown by retired Brasillas with new CRJs. In Spring 1996, Comair initiated point-to-point operations with CRJs from EWR and LGA to Columbia, Charleston and Greenville/Spartanburg, South Carolina. The service, Comair's first to operate without a DL hub as a point, was discontinued in early 1997 due to low yields and an inadequate traffic base. Today, all Comair service is Delta feeder service into the CVG and MCO hubs, with the exception of a few Delta markets where Comair replaced mainline service with its own point-to-point service. These markets are LGA and BOS to both YUL and YYZ. Also, in June 1998, Comair will replace Delta's 2 daily jet flights between CVG and Newburgh, New York, with its own pair of RJ flights.

Comair has enjoyed strong success with its CRJs. Its average RJ load factor has increased to 61%, quite high by commuter standards and nearly 20 points higher than the year prior to its operation of jets. Analysts forecast its 1998 system-wide load factor to exceed 60%, the highest of any domestic regional airline. Its cost per seat mile has decreased from 17.3 cents in 1993 to 15.8 cents this year. While the number of seats needed to break even has increased from 12 to 20 per flight since 1993, with the added capacity of the RJs, this target is being far surpassed. The company has stated it will seek an all-jet fleet if the remaining markets economically permit. As of now, jet deployment is based solely on profit margins and not stage length. For example, Louisville, Kentucky, only 75 miles from CVG, has all regional jet service with high load factors, whereas thinner markets still have turboprop service and may never enjoy Comair all-jet service. While average stage lengths for Comair's CRJs is just over 300nm, on June 1, 1998, Comair will add weekend service from CVG to NAS, which will have a Comair record setting stage length of 1,052 miles. Growth for Comair is predicted to increase in long, thin Midwest markets. The company is currently studying the purchase of smaller regional jets, in the 30-35 seat range, which would be used to offer jet service to high-profit, thin markets now receiving turboprop service.

6. DL - Skywest

Skywest Airlines began operating in 1973 in St. George, Utah, and became one of Delta's four primary commuter carriers in 1986. Based at Delta's Salt Lake City and Los Angeles hubs, Skywest operates 300 daily flights for Delta. Skywest also operates commuter flights at Los Angeles for Continental. Since October 1997 it has been operating as United's primary California commuter affiliate at Los Angeles and, beginning in June 1998, at San Francisco. Once complete, the Skywest/United system will operate more than 600 daily flights.

For Delta, the only carrier for which it operates regional jets, Skywest operates 50 Embraer Brasillas (turboprops) and 10 CRJs out of the Salt Lake City hub where Skywest has 180 daily flights. Skywest acquired its first RJ in 1993 and began operating its 10 RJs in 1994. Since then, It has not increased the RJ fleet size. Initially, the RJs provided service to 5 DL replacement markets, 3 DL supplement markets, 1 former turboprop market and 1 new market. Today, Skywest's CRJs serve 19 city pairs and 20 markets with an average stage length of 445 miles. Skywest plans to increase its fleet size as required by the demands of its new United services, but these will be with additional turboprops. It recently ordered 20 additional Brasillas. The fleet at SLC is expected to remain stable for the immediate future.

7. Mesa Air

Mesa Air Group is the largest independent regional airline in the U.S. with more than \$500 million in revenue forecast for 1998. It operates 186 aircraft, serving 160 cities in North America which reach virtually the entire continental United States through code-sharing agreements with United, US Airways and America West. Until abandoning the service in February 1998, Mesa had also operated an independent fleet of 5 regional jets under its own name from Ft. Worth and Colorado Springs. Still, Mesa derives approximately 5% of its revenue from independent Mesa commuter operations at

Albuquerque. At the end of 1997, Mesa operated 11 Canadair regional jets throughout its system, with 9 additional jets scheduled for delivery during 1998 and 12 more scheduled for delivery by the end of 1999 for a total of 32 firm orders. Its regional jet operations are currently operated for America West and US Airways.

8. Mesa - America West

America West (HP), based in Phoenix, has had a long-term code-share contract with Mesa since 1992. In early 1999, HP accused Mesa of being in default and threatened to terminate the agreement effective April 1, 1998. The two carriers have entered into an interim agreement to continue their service arrangement while a new long-term code-share agreement is negotiated. Mesa operates a mostly turboprop fleet for America West serving 18 cities mainly in the southwest, from HP's Phoenix hub. Mesa is currently operating 3 Canadair RJs from Phoenix to Santa Barbara, Fresno and Des Moines for America West. Prior to the introduction of the RJs on these routes, Des Moines had been operated with Mesa's Fokker 70 jets, for America West, while both Santa Barbara and Fresno had been operated with Mesa turboprops. Since the bankruptcy of Fokker, Mesa has eliminated its few Fokker 70s from the fleet. The RJ operations for America West have been performing ahead of expectations and Mesa and America West are actively discussing expansion of their use of regional jets. America West's pilots are not unionized and the carrier has no restrictions on the use of regional jets, other than a first right of refusal on any of Mesa's proposed jet operations.

9. Mesa - US Airways

In 1990 US Air and Mesa signed a ten-year code-share agreement under which Mesa agreed to operate as US Air Express at US Air's major hubs at BOS, PHL, PIT, MCI, MCO, TPA and MSY. Until January 1998, all operations were flown with a fleet of 64 turboprop aircraft. However, under an agreement between US Airways (US) and Mesa reached in November 1997, Mesa began to operate Canadair regional jets in January 1998 from PHL, with additional jet operations planned in 1998 from CLT and DCA.

Under their agreement, US Airways determines the routes and schedules of the regional jets and Mesa is paid a flat fee per operated flight, which is a departure from Mesa's normal code-share agreements. The agreement covers operation of US Airways' first 12 regional jets and will utilize newly delivered aircraft as well as those being redeployed from Mesa's former independent operations in Texas and Colorado. The RJs are being used to service routes ranging from 129 miles up to 806 miles, with an average stage length of 462 miles. Mesa has begun new service as well as replaced and supplemented service which used to be operated with its turboprop aircraft. To date, no mainline US Airways jet operations have been supplemented or replaced with RJs. Although Mesa is US Airways only RJ operator, US Airways may soon begin regional jet operations in the northeast under an agreement with Wexford Management, which recently purchased US Airways commuter carrier Chautauqua Airlines, and which has firm orders for 80 Embraer EMB-145 jets.

US Airways pilots' scope agreement limits aircraft size to 69 seats. Initially, 12 can be operated in the first year following the agreement, with up to 15 in the second year and up to 25 in the third year. Also, no RJ can be operated on a route served by mainline jets in the previous 12 months.

10. Midway

Midway Airlines is the only U.S. carrier which utilizes its regional jets solely as a part of its mainline fleet and not its commuter operation. Based in Raleigh/Durham, Midway serves 20 markets from RDU, primarily in the eastern U.S., operating 124 departures daily with 12 F-100s, 1 A-320 (148 seats), 2 Canadair RJs and its commuter carrier Corporate Airlines. The average passenger trip length on Midway is 584 miles with yields of nearly 20 cents. All of its operations are either to or from its RDU hub, where it has an extensive operational and marketing relationship with American Airlines.

In October 1997 Midway announced its plan to acquire 8 additional CRJs to be delivered by December 1998, with options for an additional 20. The order was valued at \$207 million. The first delivery occurred in late 1997 and revenue service began in December 1997. Midway is scheduled to receive all 10 of its firm order CRJs by December 1998, adding strength to its status as being the youngest domestic fleet at 2.8 years of age at the end of 1998. Midway's RJs are being used to increase frequency on existing routes as well as to expand into new markets. Thus far, 3 existing routes, Orlando, Boston and Philadelphia, are receiving RJ service, with PHL service having been converted to all-RJ service. Because 70% of its traffic is business passengers, versus 40% industry wide, Midway expects the RJ fleet to help it continue as the industry's yield-per-passenger-mile leader (.24 cents). To date, the average RJ stage length is 493 nm.

11. Northwest - Mesaba

Northwest Airlines (NW) is served by several commuter carriers, but its primary feeder carrier, Mesaba Airlines, is the only one to operate regional jets for NW. In 1995 Northwest acquired 30% ownership of Mesaba and, in 1997, a 10-year extension of the carrier's code share agreement was signed. Today, Mesaba offers nearly 700 daily departures for Northwest to 84 cities. It operates a fleet of 73 turboprop aircraft along with 11 Avro RJ-85s which are used to feed Northwest's DTW hub and its MSP hub, from 18 cities in the midwest and west. In October 1996, Northwest and Mesaba agreed on terms for the operation of NW's first 12 regional jets and negotiations are underway for placement of additional regional jets. In June 1997 Mesaba began operating its first two RJ-85s. In April 1998 Mesaba and NW agreed on the operation of 6 additional Avros, set to begin in June 1998. Mesaba is the only U.S. carrier to operate the RJ-85 in a two-cabin configuration, including 16 first-class seats, for a total of 69 all-leather, high-pitch seats. This configuration meets terms of the NW pilots' scope agreement capping RJ capacity at 70 seats. Northwest and its pilots are currently renegotiating their contract and regional jet usage is being reconsidered.

Mesaba leases its regional jets from NW and operates them on a wet-lease basis for the carrier. NW recently exercised options for 24 additional RJ-85s in addition to its initial firm order for 12 aircraft. The initial order, valued at \$300 million, will be complete in May 1998, with one aircraft delivery every

other month proceeding from then through May 2002. Mesaba's RJ deployment has focussed on existing Northwest mainline DC-9-10 markets with low demand, making the higher capacity DC-9s available for redeployment elsewhere. Examples of RJ usage include MSP to Aspen and Jackson Hole and Detroit to Westchester. Mesaba's average stage length for the Avro fleet is approximately 400 nm. Load factors for Mesaba's RJs have exceeded expectations, averaging 60%. Northwest and Mesaba are also considering purchasing both the 50 and 30-seat regional jets for additional airlink operations, especially for use at NW's smaller Memphis hub.

12. United Airlines

United Airlines (UA) utilizes several regional carriers to feed its primary hubs. However, it has three primary feeders -- Air Wisconsin, Atlantic Coast and Trans States -- that operate several types of regional jets. The UA pilots' scope agreement, as ratified in November 1997, limits United's RJ fleet to jets with 50 seats or less and no more than 65 total aircraft. Initially, only 30 jets can operate through the year 2000, as the mainline narrow body fleet grows by 10 aircraft. Then, after 2000, as the UA mainline fleet grows, 3 RJs can be added for every one additional mainline narrow body jet added to the fleet. Further, regional jets cannot replace aircraft flying mainline routes, with the exception of Air Wisconsin's BAe-146 aircraft.

13. UA - Air Wisconsin

Air Wisconsin operates BAe146-100s, -200s and -300s for United Airlines on an exception basis to the UA pilots' scope clause, and has been doing so since purchasing the jets, as well as related facilities at the Aspen Airport acquired from a Hollywood producer who had purchased the jets from their original owner, Aspen Airways. Air Wisconsin operates 1 146-100, 10 146-200s and 5 146-300s, with 2 additional 200s set to join the fleet in May 1998. Initially, the BAe aircraft had been difficult to operate and uncomfortable to the passenger. This has changed in the past 2 years as Air Wisconsin has changed all but its BAe 146-100 seating configuration from a tight 6-abreast to a very comfortable 5-abreast, while reducing operating difficulties to a minimum. The carrier is actively looking at regional jets in the 35-70 seat range for its newly acquired Mountain Air Express operation at Denver which will soon begin operations as a UA express carrier. Several long, thin routes from Denver, including Casper and Sheridan, Wyoming, and Montrose, Colorado, are being studied for these jets. To date, the longest RJ route Air Wisconsin operates is DEN to Santa Barbara, 916 nm, and its shortest is ORD-MKE at 67 nm.

14. UA - Atlantic Coast Airlines

Atlantic Coast Airlines (ACA) operates as United Express at Dulles Airport. Begun as a UA feeder carrier in 1989, ACA today operates 480 daily flights, with more than 200 daily departures at Dulles, and carries 1.7 million passengers annually with revenue of more than \$300 million per year. As the largest carrier at Dulles, ACA operates to 44 cities in 19 states in the eastern U.S., stretching from Maine to Florida, all primarily to feed United at Dulles. At IAD, Atlantic Coast serves 34 cities but only has direct competition to 7. The fleet consists of 61 turboprop aircraft and 6 Canadair RJs. As

of March 1998, ACA operates its 6 RJs to 8 cities with ranges between 224 miles and 890 miles and an average stage length of 539 miles.

ACA ordered its first CRJs in January 1997, receiving its first in July, even though United and its pilots had not yet agreed to allow their use within the UA system. United guaranteed funding of ACA's lease payments, crew costs and market promotional expenses for its new jets through the end of 1997 or until an agreement was reached to allow their use in United's colors. In November 1997, UA and its pilots agreed to allow the regional jets to be flown in United's colors and service commenced later that month. Since receiving its first jet in July ACA has averaged one delivery per month. In March 1998 ACA announced it was exercising options to increase its CRJ total to 23 firm orders to be delivered through 1999, with 25 options remaining. The aim of ACA's RJ program has been to grow the Dulles hub with service to new destinations. This goal will be broadened since DOT granted ACA O'Hare slot exemptions to begin new regional jet operations as United Express.

Dulles is a major international, not domestic, hub for United, which leaves room for ACA's jet fleet to grow in medium-distance markets. IAD is within 1000 miles of 72% of the U.S. population and thus an attractive hub for the CRJ. As the Dulles hub grows, ACA will seek to use the new jets to displace turboprops in high-density, short-haul markets in order to allow the turboprops to try to penetrate new, smaller markets. An example of this strategy is ACA's exploration of supplementing its turboprop flights between IAD and its 3 strongest markets, JFK, EWR and BOS, with regional jet service at peak business times to increase capacity and feed to UA. In two strong feeder markets, IAD-ATL and IAD-TPA, ACA's RJs have supplemented United jets. In only one market, IAD-RDU, have the RJs supplemented turboprops. In this market, with the addition of 2 RJs, ACA now operates 10 daily turboprops and 2 daily regional jets. ACA plans to maintain its large 19-seat fleet at least through the year 2000.

ACA is limited in how far it can grow as a RJ operator for United due to the United pilots' scope clause. As part of the scope clause and UA's initial utilization of 30 jets, ACA can operate 27 and Trans States 3. Both Trans States and ACA are seeking additional rights from UA to fly more regional jets.

15. UA - Trans States Airlines

Trans States Airlines is primarily a TWA feeder carrier at STL and JFK. However, at JFK, it also operates services for both United and Delta. Further, at LAX and SFO it operates for US Airways, Northwest and Alaska Airlines. At O'Hare, under a separate certificate, it owns United Feeder Services, a company which operates 9 ATP turboprops, owned by United, on a pay-for-cost-plus basis for United. In its initial bid to operate regional jets, Trans States has ordered 9 EMB-145s to serve as a United Express carrier at O'Hare, with options for an additional 25 jets. It is scheduled to receive its first jet aircraft in April, then one other in May, with 5 scheduled for 1999 and the remaining orders scheduled to arrive in the year 2000. Trans States will begin jet service as a United feeder at O'Hare with 3 daily round trip operations to Chattanooga, followed by service to Roanoke and Tri Cities pursuant to a recent DOT award of O'Hare slot exemptions. Trans States jet service will serve these

new markets for United and have an initial range of up to 515 miles. Trans States is looking to expand its jet operations with United and, failing an agreement to do so, will seek to operate jets for one of its other large partners such as Delta at JFK.

CONCLUSIONS

With RJs comprising an increasing share of the regional industry's capacity, 11 % last year up from 8.6% in 1996, and with this number expected to grow even more rapidly in the coming years as new aircraft orders are filled, one thing is clear, the industry is rapidly changing. This period of change has been brought about by new regional jets, strategic alliances, and a strong economy that is fueling record demand for air travel. More than a dozen RJ aircraft types, produced by seven manufacturers, will enter the market in the next few years and as they do, the average capacity of regional aircraft, which grew from 18 seats in 1986 to 25 seats in 1996, will grow still higher. These changes are altering the public's perception of regional carriers and this is helping to sustain their record growth.

While airlines are receiving regional jets as rapidly as manufacturers can keep pace with current demand, high demand was not always the case. Only after the positive economics of the regional jet were proven by Comair, the domestic-launch customer, did management at other potentially interested carriers actively seek to obtain RJs. Once carriers decided to pursue regional jets, many still were faced with restrictive labor-management issues which prevented an earlier and more rapid deployment of RJs by these carriers' regional partners. The economics, along with the versatility and customer preference of the RJ, have prodded most major carriers, as evidenced by US Airways, United and American, to reach new accords with their organized employees to allow for greatly expanded use of the jets within their respective systems. Some carriers, including Northwest, remain at odds with their workforce concerning how far to expand regional jet usage while other carriers, such as Trans World Airlines, still operate without any regional jets in their system.

To date, regional jets in the United States have been used in five different ways: to replace turboprops, to supplement turboprops, to replace mainline jets, to supplement mainline jets, and to initiate new service. This wide array of usages underscores that other than a clear proliferation, the only clear trend on domestic RJ usage is the lack of one. U.S. carriers have found varying means of successfully operating their jets in manners particular to their operational objectives. One area of commonality among U.S. regional jet operators is that their success has resulted in added comfort levels and more frequent and quicker service in markets receiving RJ service. Similarly, in many cases carriers utilizing regional jets have been able to increase service in existing turboprop markets by using displaced turboprop aircraft. They have also been able to use these aircraft to begin service in entirely new markets which otherwise might have remained without air service. These benefits to the traveling public, while appealing, may produce results which the Department will need to monitor. As vast parts of, or entire regional fleets, are upgraded to regional jets, ranging in size from 32 to more than 100 seats, carriers with few remaining turboprops may reduce or abandon service to some of America's smallest communities which they determine cannot economically support service even with the smallest regional jet.

Thus far, the negative impact on small communities has been minimal while the positive impact of regional jets on communities of all sizes has been substantial. Carriers with regional jets, especially those first to introduce them into a market, have experienced positive load factors and increased profits. As regional jets continue to enter new markets, not as innovations but as common forms of carrier competition, it will be interesting to observe passenger preferences and carrier reactions. Carriers faced with direct RJ-to-RJ competition for the first time, in what had been their exclusive RJ market, may opt to withdraw from, or reduce service in, these markets. In other scenarios, carriers may seek efficiencies by consolidating their remaining turboprop service, or they may launch new RJ service into regional airports centrally located among small markets that, standing alone, could not justify the carrier's presence. This could lessen choices for the traveler while simultaneously spurring the growth of certain regional airports.

Although RJ usage has spread quickly during the past two years, the days of the jet-powered modern turboprops are far from over. Several carriers, including those operating fleets of regional jets, have actively used this period of rapid RJ expansion as an opportunity to purchase large quantities of turboprops in an effort to rationalize their turboprop fleets, a trend that should benefit small communities. Regional jets and modern turboprop aircraft have allowed the regional industry to achieve record growth. The FAA forecasts growth in this sector of the domestic airline industry to continue over the next ten years, with regional enplanements expected to double from current levels. Such growth in passenger traffic will likely increase passenger demand for regional jet service and possibly compound the problems already faced by some small communities. As the regional industry continues to develop rapidly and its benefits to the traveling public multiply, the Department will closely monitor any negative impacts on consumers and communities.