

The regional jet phenomenon in the US has been stopped short by restrictive scope clauses. Regional jet sales have also been limited by some operators reverting back to turboprops or dropping routes. A close examination of each carrier reveals how each might develop.

# US regional airline development & fleet plans

**U**S Airways has recently reached an agreement with its pilot unions to add another 70 regional jets to its US Airways Express operation, in addition to the 70 it already operates. Although an important step in US Airways' plans for survival, an equally significant aspect is that it will result in mainline pilots flying regional jets. Other issues affecting future US regional airline fleet development are highlighted by this examination of the other US majors.

## General developments

Insight into developments in the US can be obtained from a recent study conducted for the Regional Air Service Initiative (RASI) by AvStat Associates. The study examined the schedules of US operators to determine what changes have occurred between January 2001 and January 2002. The highlights of the analysis were as follows:

- Regional operators introduced 100 all-new routes, 77 of which were exclusively flown by regional jets, 20 all-turboprop and three mixed.
- 41% of regional airline routes experienced change in 2001.
- Regional operators completely replaced major airline services on 111 routes.
- Mainline operators completely replaced regional services on 17 routes.
- Regional operators also introduced complimentary services on 102 routes.
- While 44 routes have seen a change from turboprop to regional jet equipment, almost as many, 34, have seen turboprops replacing regional jets.

- Regional operators ceased service on 128 routes. Of these 47 had previously been served exclusively by regional jets and 78 exclusively by turboprops.

- Of the 1,446 service changes, only 15 are related to point-to-point services from non-hub cities.

The last point confirms that regional jets have become hub feeders and replaced turboprops and extended the catchment areas of the hubs.

The apparent failure of so many regional jet routes, and the tendency for turboprops to replace regional jets as often as jets replace turboprops demonstrates not all markets can support regional jets. Also, the withdrawal of regional carriers from so many turboprop routes highlights how many turboprop markets are being dropped as operators migrate to all-jet fleets. It also shows regional airlines do not want to service some of the old turboprop routes, or cannot do so cost effectively.

## Airline developments

### Alaska Airlines

Alaska's main hub is Seattle, with a smaller hub at Portland. Both are provided with regional feed by sister company Horizon Airlines with a fleet of 11 CRJ700s (19 more on order), 12 F.28-4000s, 15 Q400s, 28 Q200s and eight Dash 8-100s.

Horizon Airlines is not constrained by scope clauses, and is therefore one of only five 70-100 seat regional jet operators in the US (the others being Air Wisconsin, American Eagle, Delta Connection and Mesaba). The F.28s and Dash 8-100s are being phased out as the CRJ700s and Q400s are delivered.

### American Airlines

American's principal hubs are Dallas-Fort Worth, Chicago, Miami and St. Louis, with smaller hubs at Boston, Los Angeles, New York La Guardia, New York JFK and San Juan.

Regional feed is provided mainly by wholly-owned American Eagle, with a fleet of 92 Saab 340Bs, six ATR42s, 25 ATR72s, 40 ERJ-135s, 24 ERJ-140s and 56 ERJ-145s. Disposition of the fleet is increasingly concentrated around hubs. For example, the hub at Chicago O'Hare is all-Embraer jet and San Juan is all-ATR. AMR's acquisition of TWA brought with it a number of other operators that were operating feeder services as TW Express into St. Louis, and have been re-branded as American Connection.

Chautauqua originally had an agreement with TWA to operate 15 ERJ-145s. However only eight had been delivered when TWA went bankrupt and was purchased by AMR Corp. Chautauqua then committed to operate 12 ERJ-145s on behalf of America West Airlines, but in mid-2001 AMR made a new commitment to Chautauqua for 15 ERJ-140s which were duly ordered from Embraer. The eight ERJ-145s were therefore joined by seven ERJ-140s, but will be gradually replaced by the remaining eight ERJ-140s as the ERJ-145s are taken over by America West.

Prior to TWA's sale to AMR, Chautauqua also operated five Saab 340s on behalf of TW Express, but the last of these were withdrawn last December.

Trans States has 12 ERJ-145s, three ATR72s, five ATR42s and 25 Jetstream 41s. The ATRs and 11 Jetstream 41s operate as American Connection. The 12 ERJ-145s and balance of Jetstream 41s operate as US Airways Express. Trans States originally ordered 15 ERJ-145s plus 12 options with 10 committed to TWA and five to US Airways.

## US MAJOR REGIONAL AIRLINE SCOPE CLAUSE LIMITATIONS-LATE 2001

Carrier	Maximum seats	Maximum weight	Fleet size limit	Other limitations
Alaska Airlines	No limit	No limit	No limit	None
America West Airlines	No limit	No limit	No limit	None
American Airlines	70	70,000lbs	No limit below 45 seats Maximum 67 jets of 45-70 seats	1) Limits non-hub flying to less than 15% of total 2) Average stage length limited to less than 550nm 3) Block hours less than 40% of total 4) ASMs less than 5% of total
Continental Airlines	59	No limit	No limit	If maximum capacity (59 seats) is exceeded, mainline pilots will be given opportunity to fly the equipment
Delta Airlines	70	85,000lbs	No limit 50 seats or below. Maximum of 75 jets 51-70 seats Up to 20 Avro/BAE 146s exempt	1) Average stage length on 85% DL connection is less than 900nm 2) Limits non-hub flying to less than 10% of total 3) Maximum of 6% of flying between DL hubs with more than 50 daily departures. FLL-TPA/ORL & TPA-ORL excluded
Northwest Airlines	55	70,000lbs	Actual maximum based on total narrowbody fleet.	1) Limits not applied to aircraft with less than 45 seats. 2) Up to 36 Avro/BAE 146s exempt 3) Some carriers exempt from maximum unit formula 4) Limits on certain routes
TWA	60	60,000lbs	1) 45 jets max 2) Actual maximum based on mainline jet fleet (1 RJ) for 2 larger jets when mainline fleet is more than 188)	

TW Express was only operating three of its allocation of ERJ-145s when TWA went bankrupt and was purchased by AMR. Fortunately for Trans States, US Airways increased its commitment to 12 aircraft and all are now operating as US Airways Express. The three remaining aircraft on order were cancelled and the original options allowed to lapse, but in mid-2001 AMR made a new commitment to Trans States for 10 ERJ-140s. Prior to their delivery, however, American's downsizing and its scope clause problems forced Trans States to postpone indefinitely the delivery of these 10 aircraft.

American's existing scope clause limits the regional jet fleet of American Eagle to 67 aircraft with a capacity of 45-70 seats, but allows an unlimited number of aircraft with 44 seats or less. This agreement was followed by orders for 25 Canadair CRJ700s and 42 Embraer ERJ-145s.

American subsequently increased its ERJ-145 order to 56 aircraft, fully expecting a revised scope agreement to allow practically unlimited regional jet operations in exchange for a cap on seat capacity by American Eagle of 50 seats. In the event this 'optimism' was ill founded. American launched the 44 seat

Embraer ERJ-140, with a massive order for 130 aircraft in October 2000 to circumvent its pilots.

Although the ERJ-140 order allowed American to increase the number of regional jets in the fleet, the substantial downsizing of the mainline operation after September 2001 resulted in a further scope clause coming into play. This governed the size of the American Eagle operation in terms of the number of ASMs flown relative to the mainline operation.

American Airlines now has to be very creative to avoid reducing the size of the Eagle operation. First it is ceasing to serve 60 turboprop markets; second it is removing a large number of seats from its ATR42s and Saab 340s; third it is looking to sell its Puerto-Rican-based operation, Executive Airlines, and fourth it is gradually changing over from full codeshares to American Connection flights.

The overall result is that American Eagle can continue to expand its regional jet fleet, while still complying with the scope clause, but at a considerable cost. With deliveries of the airline's CRJ700s already in progress, the airline will have to soon dispose of the 14 extra ERJ-145s, because they would take the 45-70 seat fleet above the 67 aircraft limit.

In the absence of progress on a revised scope clause, future fleet planning at American Eagle is limited to the continuing expansion of the ERJ-140 fleet. Existing options for 25 CRJ700s and additional ERJ-145s cannot be exercised.

### America West

America West's main operation is at Phoenix, but has smaller hubs at Las Vegas and Columbus. Regional feed is provided by Mesa Airlines at all three hubs as America West Express, with a fleet of 25 Canadair RJ200s. Chautauqua also flies 12 ERJ-145s from Columbus.

America West, like Alaska Airlines Group, is not constrained by scope clauses. America West has agreed with Mesa Air Group to operate a further 20 CRJ700s and 20 CRJ900s. The introduction of these larger capacity aircraft, however, is not going unchallenged by ALPA the pilot union at the mainline carrier, which is currently trying to have a scope clause applied retro-actively.

### Continental Airlines

Continental's main hubs are at Houston and New York Newark, and a smaller hub at Cleveland. Regional feed is provided primarily by wholly owned subsidiary Continental Express, with a fleet of 113 ERJ-145s, 30 ERJ-135s and a

*Delta's scope clause allows an unlimited number of regional jets up to 50 seats, and has the largest number of regional jets on order of any US regional carrier. Delta has also changed its strategy whereby it now has more than one regional partner feeding its hubs.*

declining turboprop fleet of 18 Embraer Brasilias, 31 ATR42-300s and 15 Beech 1900Ds.

Outstanding orders total a further 36 ERJ-145s, 75 ERJ-145XRs and 20 ERJ-135s. Continental Express has the declared intention of being an all-jet fleet by 2004.

Continental Airlines is arguably the least constrained by scope clauses, since it is allowed an unlimited number of aircraft of up to 59 seats. This explains its commitments to 225 ERJ-145s.

### Delta Airlines

Delta's principal hubs are at Atlanta and Cincinnati, with smaller operations at Dallas-Fort Worth and Salt Lake City.

Delta operates its regional flying as Delta Connection, which in turn employs four airlines to provide capacity. Two of these, Atlantic Southeast Airlines (ASA) and Comair, are wholly owned subsidiaries, while Atlantic Coast (ACA) and Skywest are independent operators.

ASA has its main base at Dallas-Fort Worth, but also serves the hub at Atlanta. Comair has its main base at Cincinnati and a hub at Atlanta, Dallas and mini-hub at Orlando. Delta Connection is pursuing a revised strategy following the pilot strike at Comair early last year. Regional feed at Delta's main hubs is no longer provided by just one regional partner.

ASA operates two CRJ700s, 73 CRJ200s, 19 ATR72s and 39 Embraer Brasilias. In contrast to Comair, which is scheduled to become an all-jet operator by the end of 2002, ASA plans to continue operating turboprops for several years to come.

Comair operates 101 CRJ100/200s and seven Embraer Brasilias. The remaining Brasilia turboprops will be replaced by 40-seat Canadair jets.

Atlantic Coast Airlines (ACA) established Atlantic Coast Jet in 1999 to operate as a Delta Connection carrier, with its own air operators certificate and 30 Fairchild Dornier 328Jets to serve Boston and Cincinnati. The two operations have merged into Atlantic Coast Airlines (ACA).

Skywest operates both Canadair RJs and Embraer Brasilias for Delta Connection serving Salt Lake City and Dallas-Fort Worth. Skywest's fleet



(including the aircraft flown as United Express) totals 55 CRJs and about 80 Embraer Brasilias. Skywest plans to operate 138 CRJs and 63 Brasilias.

Delta Airlines is allowed an unlimited number of regional jets up to 50-seat capacity. Delta has the largest number of regional jets on order. Above 50 seats Delta Connection is allowed to fly 75 51-70 seat jets plus 20 BAE 146/Avro RJs which are exempt. A significant portion of this 'allocation' has already been taken up by the 57 CRJ700s on firm order.

### Midwest Express

Midwest Express' principal hub is at Milwaukee. Regional feed is provided by wholly owned subsidiary Skyway Airlines as Midwest Express Connection.

Skyway has 10 328Jets and 15 Beech 1900Ds. A further two 328Jets are on order and the airline also holds 10 further options for the type.

Skyway also announced it had agreed to acquire up to 40 ERJ-140s (20 orders and 20 options).

### Northwest Airlines

Northwest's principal hubs are Detroit and Minneapolis, with a smaller hub in Memphis. Regional feed is provided by wholly owned subsidiary Express Airlines I and independently owned Mesaba.

Express I has its main base at Memphis with hubs at Detroit and Minneapolis. Mesaba is based at Minneapolis, but also serves the hub at Detroit as a result of the transfer of the Saab 340Bs from Express I. Mesaba is also building its presence at Memphis. Turboprops are operated as Northwest Airlink by both operators, and jets as

Northwest Jet Airlink.

Express I has 36 CRJ200s and 20 Saab 340s. All 54 of the CRJs ordered by Northwest have been allocated to Express I. The Saab 340s are being returned to their lessors or transferred to Mesaba.

Northwest filed an Initial Public Offering (IPO) prospectus with the Securities and Exchange Commission. One of the details contained within the prospectus is that the airline, renamed Pinnacle Airlines for the IPO, will receive 83 CRJs from Northwest by mid-2004. Since all 54 CRJ200s are already earmarked for the airline, this suggests it will also receive at least 29 of the 75 CRJ440s ordered by Northwest.

Mesaba operates 36 Avro RJ85s and 77 Saab 340s. The effect that the recent uneven distribution of the CRJs has had on Mesaba is demonstrated by comparing the recent traffic growth of the two airlines. Express Airlines I has experienced tremendous growth in recent years, with RPMs in 2001 some 66.5% higher than in 2000. In the same period Mesaba experienced a decline of 7.1%. The 'Northwest' turboprop fleet is expected to decline from its current level of 97 to 49 aircraft, and the Avro RJ85 fleet is limited to 36 by the scope clause.

Beyond the 75 CRJ440s, further expansion of the regional fleets is limited by the Northwest scope clause. This limits regional jets to 55 seats and a maximum gross weight of 70,000lbs. The total number of these aircraft allowed is based on the size of the mainline narrowbody fleet. The 36 Avro RJ85s are exempt, as are aircraft with a seat capacity less than 45. When it placed the order for 75 CRJ440s, Northwest also took out 175 options. Without changes to the scope clause, expansion of the CRJ440 fleet is the only way forward.

## US REGIONAL AIRLINE JET FLEETS AND OUTSTANDING ORDERS

Mainline grouping	Regional operator	Aircraft type	Ordered	Total ordered
Alaska Airlines	Horizon Air	CRJ700	30	30
America West	Chautauqua	ERJ-145	12	4
	Mesa Air Gp	CRJ200	25	
	Mesa Air Gp	CRJ700	20	
	Mesa Air Gp	CRJ900	20	77
American Airlines	American Eagle	ERJ-135	40	
	American Eagle	ERJ-140	139	
	American Eagle	ERJ-145	56	
	American Eagle	CRJ700	25	
	Chautauqua	ERJ-140	15	275
Continental Airlines	Continental Express	ERJ-135	50	
	Continental Express	ERJ-145	225	275
Delta Airlines	ACA	328Jet	30	
	Atlantic Southeast	CRJ200	45	
		CRJ700	12	
		CRJ100	110	
	Comair	CRJ700	20	
		CRJ200	79	
	Delta Connection	CRJ700	25	
		Skywest	CRJ100/200	46
Midwest Express		328Jet	12	
Midwest Express		ERJ-140	10	32
Northwest Airlines	Express Airlines I	CRJ200	54	
	tbd	CRJ440	75	
	Mesaba Airlines	RJ85	36	165
United Airlines	Air Wisconsin	CRJ200	60	
	Air Wisconsin	BAE 146	18	
	ACA	328Jet	32	
	ACA	CRJ200	96	
	Skywest	CRJ200	55	261
US Airways	Chautauqua Airlines	ERJ-145	26	
	Mesa Air Gp	ERJ-145	32	
	Trans States	ERJ-145	12	70
Mesa Air Gp		ERJ-145	4	
Mesa Air Gp		CRJ200	7	
Midway		CRJ200	26	37

## United Airlines

United's main hubs are Chicago and Denver, with smaller operations at Los Angeles, San Francisco and Washington Dulles.

Regional flying is undertaken as United Express by three independent operators, Air Wisconsin, Atlantic Coast Airlines (ACA) and Skywest. The last two also operate as Delta Connection carriers. United has allowed its regional operators to replace mainline services in a number of markets. Air Wisconsin replaced mainline services from Los Angeles with Canadair RJs. ACA Canadair RJs replaced some mainline United Airlines services at Chicago O'Hare.

Air Wisconsin operates exclusively as a United Express carrier with 18 BAE 146s, 20 Canadair CRJ200s and 19

Dornier 328 turboprops into Chicago, Denver and Los Angeles. The Dornier 328 turboprops are being reduced to 10 by July 2002. The type has already been phased-out of United Express' Chicago hub. Air Wisconsin will concentrate its operations around the 60 CRJ200s it has on order and the BAE 146 fleet.

ACA operated until 1999 exclusively as a United Express carrier. It now also operates for Delta with a fleet of 30 328Jets, but ACA's United Express operation serving United's Chicago and Washington Dulles hubs is larger.

ACA's fleet, for its United Express operation, is 62 CRJ200s, 31 BAE Jetstream 41s and three Fairchild Dornier 328Jets. ACA has been allocated a total of 96 CRJs within United's overall regional jet limit of 261 aircraft, and so ACA has a total of 34 remaining on order

(96 less 62). The Jetstream 41s are earmarked for disposal.

Although ACA operates 30 328Jets on behalf of Delta, ACA is believed to be talking to Bombardier and Embraer about alternatives.

Skywest operates CRJs and Embraer Brasilias as United Express. These also serve Dallas and Salt Lake City for Delta Airlines. The withdrawal of the Dornier 328s at Air Wisconsin and Jetstream 41s at ACA will leave Skywest as the only turboprop operator in the United Express system.

Until 2000, United Airlines' scope clause limited United Express to a maximum of 65 jets of no more than a 50-seat capacity, although the 18 BAE 146 aircraft of Air Wisconsin were exempt.

A new agreement allows the airline to replace 150 turboprops on a one-for-one basis for jets certified with up to 50 seats. Further expansion of the regional jet fleet was linked to the expansion of the mainline fleet beyond a baseline of 451 narrowbodies and 141 widebodies. For each additional 747/767/777, United Express was permitted five more jets. For every 100-seat plus narrowbodies three extra regional jets are permitted, and for each 70-99 seater one additional regional jet is allowed.

United grounded a large portion of its narrowbody fleet as a result of 11th September 2001, going below the baseline fleet of 451. ALPA declared the entire regional jet operation to be outside the scope clause as a result. Negotiations are on-going, but since a total of 243 regional jets are currently in-service, or on order for the United Express network, it is no surprise that operators such as Skywest are looking for alternative homes for their aircraft. US Airways, in particular, with its recently renegotiated scope clause, may become a home for up to 70 of these aircraft.

## US Airways

US Airways' main hubs are at Charlotte, Philadelphia and Pittsburgh with smaller hubs in Boston, New York La Guardia and Washington National.

Regional feed is provided as US Airways Express by three wholly owned subsidiaries, Allegheny Airlines, Piedmont Airlines and PSA Airlines. There are also four independent operators: Chautauqua, Mesa Airlines, Shuttle America and Trans States Airlines.

Despite having 70 regional jets in the colours of US Airways Express, none of them are operated by the wholly owned airlines, and US Airways is the only US 'major' not to have placed an order for regional jets.

Allegheny Airlines operates 40 Dash 8-100s, Piedmont Airlines operates 69

American's scope clause allows an unlimited number of jets with less than 45 seats. It originally expected a revised clause allowing an unlimited number of aircraft with a maximum seat capacity of 50. When this did not materialise it ordered 130 ERJ-140s to circumvent its scope clause.

Dash 8-100/-200/-300 and PSA Airlines operates 31 Dornier 328 turboprops.

None of these carriers has benefited from the regional jet revolution, in fact recent investment of any kind has been limited. There is little prospect for near-term investment, since as part of its discussions with the pilot unions USAirways made it clear it was unable to consider financing new regional jets. Instead it wanted the independent airlines to finance them in exchange for contracts to operate them.

Independent carrier Chautauqua operates 26 ERJ-145s and 11 Saab 340As for US Airways. Chautauqua plans to be an all-jet operator by 1st November 2002.

Trans States Airlines operates 12 ERJ-145s and 14 Jetstream 41s for US Airways Express.

Mesa Airlines operates 32 ERJ-145s for US Airways, making it the largest jet operator within US Airways Express. This fleet, combined with Chautauqua's and Trans States' ERJ-145 fleets, takes the total to the allocation of 70 allowed under the last scope clause. Mesa originally operated CRJs for its US Airways operation, but switched to ERJ-145s, changing all US Airways Express jet services to the ERJ-145.

Shuttle America was purchased by Wexford Capital, and is receiving 18 Saab 340Bs for operation as US Airways Express.

US Airways has the most limiting scope clause of all the US mainline operators. US Airways had a radical plan to ensure its survival as an independent operator. Expansion of its regional jet fleet to approximately 250 aircraft was key to its strategy, far beyond its scope clause limit of only 70. Included within this were 60 to be operated by the mainline airline as replacements for larger narrow bodies.

The amount agreement allows the addition of 70 more aircraft by US Airways Express operators. This is under ALPA's 'jets for jobs programme, however, under which at least 50% of all pilot jobs generated by use of the new jets must go to furloughed mainline pilots. All the jobs at Potomac Air must go to furloughed mainline pilots in the event that US Airways places any of the 70 aircraft at the reactivated US Airways Express carrier.



### Mesa Air Group

Mesa Air Group is the only US operator of both Bombardier and Embraer 50-seat jets, and also the only one to have orders for the CRJ900. Mesa Air Group operates through six business divisions: America West Express, Air Midwest, US Airways Express, Mesa Airlines, Frontier Airlines and CCAir.

Mesa Airlines operates all the regional jets within the group (32 CRJ200s and 36 ERJ-145s) together with 16 Dash 8s.

The Dash 8s and 25 of the CRJ200s are operated as America West Express, while 32 ERJ-145s fly for US Airways. The remaining seven CRJ200s are operated on a risk-sharing basis with Frontier Airlines as Frontier Jet Express.

Consolidation has seen Mesa's fleet of Beech 1900Ds shrink from over 100 to 50. Air Midwest is the only operator of the type in the group, with 40 flown as US Airways Express, five as America West Express and six as Mesa Airlines.

Mesa Air Group's third operating company, CCAir, is another US Airways Express operator. At the beginning of 2002 it was operating eight Dash 8s and nine Jetstream 32s. CCAir had a dispute with its pilot union, and CCAir was left with five Dash 8s. A new contract was accepted, and Mesa Air Group will transfer the ERJ-145s it currently operates for US Airways to CCAir. This agreement limits CCAir to aircraft with no more than 90 seats.

The Mesa Air Group will start a fourth operating company, Freedom Airlines. This has been created especially to operate 20 CRJ700s and 20 CRJ900s for America West.

Mesa Air Group will consolidate its

fleets to Mesa Airlines operating CRJs and Dash 8s, Air Midwest with Beech 1900Ds, CCAir with ERJ-145s and Freedom Airlines with CRJ700/900s.

## Obstacles to expansion

### Scope clauses

The decline in the US domestic market has opened up a number of opportunities for airlines to fly smaller aircraft. The biggest obstacles are the pilot union scope clauses and the airlines' own reluctance to operate small jet aircraft in the mainline organisation. Few operators are beyond the scope clauses.

Alaska Airlines Group and America West Airlines are the few carriers that are free, but ALPA is trying to have a scope clause retroactively applied at America West. Outsiders see the current economic climate as the ideal opportunity to take on the pilot unions, but they overlook two important factors.

First, by taking on the unions the airlines would almost certainly be closing themselves down (witness the strike at Comair and decline of CCAir).

Second, the air transportation industry is regulated under the Railway Labor Act. This gives the National Mediation Board certain regulatory powers with respect to disputes between airlines and labour unions. Ultimately it can force the airlines to settle disputes.

The regional jet orders for the US operators are broken down (see table, page 41). It highlights that existing orders exhaust the allowances allowed under the scope clauses. The only immediately available option to many of these carriers



is therefore large-scale increases in the fleets of smaller 30-44 seaters. Even here many operators are constrained by the overall size of their regional fleets.

As a result of the general decline of the mainline fleets, further large-scale orders beyond those already placed are unlikely. American Eagle's need to off-load seat-mile capacity is the most public demonstration, but United Express is also experiencing the same problem.

The simplest way to avoid the scope clause issue would be for the mainline operators to operate the regional jets. Despite all the events of recent months, none of the mainline carriers have put regional jets into their own fleets. Clearly the overall economics would not be so attractive. The real issue is that if mainline pilots operated the same equipment as the low-cost regional partners it would be increasingly difficult to maintain the different cost structures between the two.

## Financing

In the past requests for regional jet financing resulted in numerous offers and aggressive rates, but operators are finding it increasingly difficult to source financing for long-term leases. Fortunately falling interest rates have largely cancelled out the tougher financing terms, but the remaining issue is the ability to source the finance. The limited availability of investors is going to increase the pressure on the manufacturers and their governments to offer financing as part of the sale, rather than simply providing residual value guarantees.

The markets are taking a very close look at the availability of regional jets,

with deliveries of a large number of regional jets still outstanding.

Until September 2001 the availability of used RJs had been extremely limited. The bankruptcies of Midway in the USA and Ansett in Australia placed 36 CRJ200s on the market. Midway's aircraft are gradually being placed, with 10 going to Air Canada, two to Air Wisconsin and two to Mesa. Extracting the aircraft from a bankruptcy situation has proven time consuming which is arguably the reason why the Ansett aircraft remain grounded.

It has probably not escaped the financial community's attention that aircraft have been idle for extended periods, and aircraft owned by Bombardier and GECAS were placed first. Independent owners have even resorted to auctioning their aircraft. This is in addition to the general loss of investor confidence following the bankruptcy of household names such as Swissair, Sabena and Ansett.

Even previously enthusiastic investors, such as Deutsche Structured Finance (DSF), are now shying away. Having put together a portfolio of nine CRJ100/200 aircraft through sale and leasebacks, DSF had planned to order new aircraft direct from the manufacturer. DSF signed a memorandum with Bombardier for 30 CRJ700s and 20 CRJ900s, with options on another 30. DSF's enthusiasm was not even tempered by the problems of Air Littoral. In the words of their managing director Paul Steinhardt, finding new operators would not be an issue as there is "so much demand for the aircraft". This confidence was shattered by the events of last September and negotiations for the 50-aircraft order were suspended.

*Only independent regional carriers acting as USAirways Express operate regional jets. The scope clause had limited this to 70, but USAirways was hoping to increase this to 250 aircraft. It recently reached an agreement to add another 70 jets with its pilot union, but 50% of pilot jobs on the new jets must be given to mainline USAirways pilots furloughed by the capacity cutbacks that followed 11th September 2001.*

## Conclusion

Despite the dramatic changes in America's air transportation system, one area that has not changed is the overwhelming strength of the pilot unions. This is particularly true at American Airlines which is being forced into the absurd position of closing routes, turning away revenue by removing seats from its aircraft and selling a profitable subsidiary. American has the disadvantage of having one large organisation in American Eagle.

Mesa Air Group's recent success at CCAir has demonstrated the advantages of having more than one operator. Because it could shuffle its contract flying between its other operators it was able to exert pressure in the negotiations with the CCAir pilots.

To the outside world such extreme behaviour from both operators and their pilot employees is hardly helping to provide the stable environment preferred by investors and lending institutions. Financing future deliveries of regional jets is therefore not going to be as easy as those delivered to date.

While expansion of the regional jet fleets is largely a function of the scope clauses, the future for the turboprops is being shaped by a two-class system that appears to be developing within all the major airline groupings. While many operators are declaring their intentions to go all-jet, others are picking up the remnants of the turboprop operations. For example, at Delta Comair will be all-jet, but ASA will continue to operate the turboprops. Similarly at Northwest, Express Airlines I will be all-jet and Mesaba will continue to operate turboprops.

With so many former turboprop routes being discarded there should be plenty of opportunities for new operators to take advantage of. This combined with the availability of large numbers of very cheap aircraft could result in a whole new generation of regional operators. 