Aviation Strategy

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Alliance juggernaut grinding to a halt?

It was no surprise that the BA/AA immunised alliance has not taken place. But its official failure is an indication that the global alliance juggernaut may be grinding to a halt.

BA was never going to concede the number of Heathrow slots required for the UK authorities to present a credible "open skies" proposal to the US, and the US DoT pre-empted the situation by declaring on July 28 an outright rejection of the BA/AA alliance.

Bob Ayling of BA and Don Carty of American have made some anodyne statements about continuing the happy relationship that has developed over the past three years - but what does the residual agreement hold for the two carriers? There is FFP co-ordination - but that is not all that important now that serious business travellers belong to multiple schemes - there is lounge sharing, and there is mutual feed.

However, BA probably does not need AA feed all that much in the US domestic market. Serving some 26 points there, it probably covers directly some 80% of its North Atlantic traffic. In any case, its new strategy emphasises high yield point-to-point business travel.

From American's perspective, the end of a mega-deal with BA is not too distressing either. It can build up its own premium traffic to London Heathrow from JFK where it has been investing heavily in a new hub. And then there is the Sabena/Swissair codeshare alliance.

We covered some of the implications of this new agreement in the previous edition of *Aviation Strategy*. Now it seems to be assuming even greater importance. Belgium has had an open skies agreement for many years, so there is no real constraint on American boosting frequencies to Brussels.

This means that American in conjunction with Sabena and Swissair will potentially be able to offer extensive connections to/from other European points over Brussels to the US in direct competition with BA at Heathrow. Zaventem airport is uncongested, newly-refurbished, with a new terminal due to open in two years, and Sabena has a well-designed four-wave hub system. In addition, American/Sabena will be capturing much more of the Belgium/Luxembourg-US O&D market, which is also an important connecting market for BA.

It is also worth noting that the other continental BA/AA link has been broken, following American's decision to move its Paris operation from Orly to CDG2 while BA's Air Liberte services remain at Orly.

Even before the DoT's rejection filtered out of Washington, Swissair had started to pour cold water on an alternative scenario - that it would join oneworld, following its withdrawal from Atlantic Excellence in the wake of the Air France/Delta agreement.

Indeed, there would be no particular commercial logic for Swissair to join oneworld *unless* American really wanted it to. BA and Swissair compete for the same type of business passenger, and Swissair evidently isn't going to risk conceding part of its segment to BA.

The next step in the BA transatlantic saga? American to progress its proposed virtual merger with US Airways, the carrier BA abandoned three years ago to pursue the global alliance with American?

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Market balance: reasons to be cheerful

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The good news is that a global surplus in aircraft akin to that of the early 1990s is no longer likely. The latest ESG forecast, issued in July (which *Aviation Strategy* follows regularly), now predicts that the surplus this year will be the equivalent of 757 jet units, or under 6% of supply, and that it will hover around this level for a couple of years before declining around 2003.

This new forecast sharply reverses a clearly identifiable trend in ESG forecasts over the past three years (see, for example, *Aviation Strategy,* March 1999) which had seen the predicted global surplus grow seemingly inexorably. Now, the estimated surpluses for 1999 and 2000 have been reduced by about 18% since the equivalent forecast in July 1998.

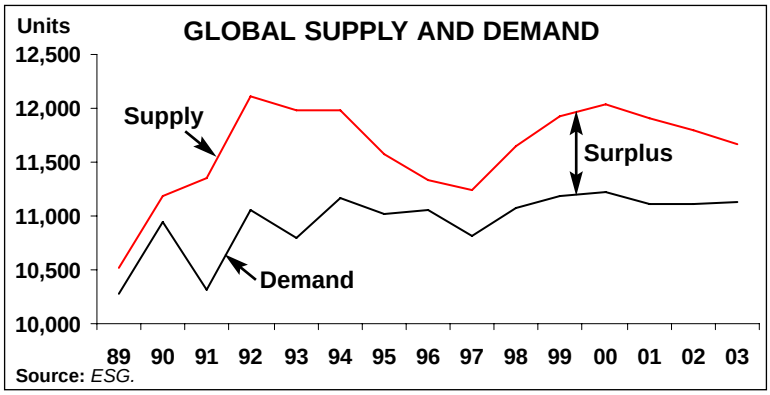
The first reason for the change is a more optimistic outlook for traffic - in particular Asia has recovered much more quickly and robustly than anticipated, so that there is a net increase rather than net decrease in aircraft demand from Asian airlines. Recent reports tend to support this judgement: for example, the latest AAPA statistics for April show that international RPKs are up 7.9% on an annual basis (and April 1998 was not one of the really depressed traffic months). However, there is a huge variation in the Asian airlines' performance - China Airlines grew at 21% while PAL's traffic was down 40%.

The second reason, which applies over the longer term, relates to a changing view on the size composition of the world fleet. Over the years ESG has been reducing noticeably the average size of aircraft in the world fleet. The latest forecast shows a further downward revision, although ESG has not gone as far as Boeing in this regard. (This means, depending on utilisation and load factor assumptions, that more jets will be needed to carry the same number of passengers.)

Regional Jets are coming more and more into the picture, but more importantly, airlines are clearly signalling their preference for 777s and A330/340s. As the table below shows, there is no space for a new large capacity aircraft like the A3XX in the ESG world view, so presumably this forecaster is not very popular with Airbus.

Remarkably, ESG has slightly reduced its retirement forecast, mainly because of the technical reason that scrapping in 1998 exceeded the expected total for last year. Here, ESG is being conservative, keeping the forecast number of scrapped units at 250-350 a year for the next four years, reflecting only a moderate impact from the implementation of Chapter 3 noise rules.

So what we are seeing is, hopefully, a gentle glide into the down phase of the aviation cycle rather than a crash landing. While the supply/demand balance is undoubtedly softening, the deterioration has not been as bad as expected. On the North Atlantic, for instance, great worries were expressed about the influx of capacity from Asia; indeed the AEA has reported an ASK increase of 14% for the first five months of this year, but traffic has grown by 13% in the same period.



Source: *ESG.*

Reasons to be puzzled

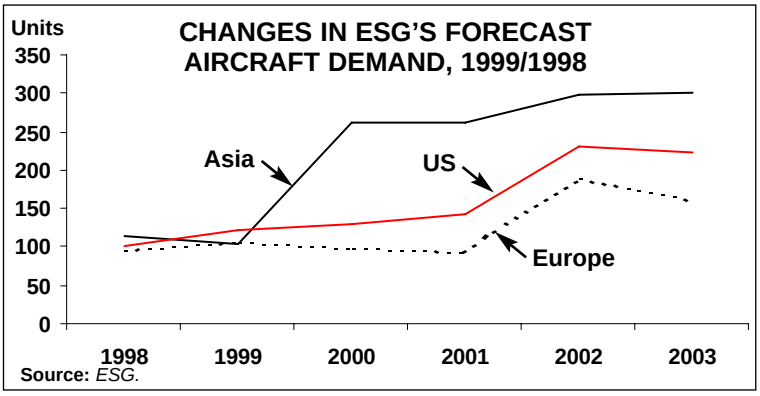
However, there are still a number of key questions

regarding the precise nature of this phase of the cycle.

First, although traffic is rebounding in Asia, airlines in that region are having to make the painful change from operating in a relatively high-yield environment to a generally low-yield one. This means continued cost cutting, productivity improvements and rationalisation through mergers and joint venture - in other words an accelerated version of the transition that European flag-carrier were forced into in the early and mid-1990s. Otherwise, even the relatively modest increase in the Asian fleet predicted for the early years of the next century will not materialise.

Second, one wonders whether some of the US carriers have pushed their non-growth strategies too far. Assuming that all the planned Stage 2 conversions take place, as they have to, by the end of this year, the Majors will only have enough additional capacity available to accommodate a 1-2% increase in domestic traffic without pushing load factors up to more uncomfortable levels. And it is now very clear that US passengers are resisting what are regarded as exorbitant business-class and full-economy fares.

Third, the strategy of preferring 777 and A330/340 types over traditional jumbos is becoming conventional wisdom among the main intercontinental airlines, which is always dangerous. Airlines are in effect pushing up their per seat costs in anticipation of higher per seat yields resulting from a higher proportion of business-class passengers on their intercontinental flights.



In choosing this strategy, airlines are moving away somewhat from the predictable demand growth associated with the leisure industry to the uncertainties of partly competing with the communications business. Faster, easier communications via the Internet and tele-conferencing will undoubtedly generate more business opportunities and business travel, but it will also cut marginal business trips - and no one can be certain of the net impact of these two trends.

ESG JET AIRCRAFT DELIVERY FORECAST

	1994	1995	1996	1997	1998	1999F	2000F	2001F	2002F	2003F	2004F
Airbus A300	23	17	14	6	13	8	8	4	4	4	4
Airbus A310	2	2	2	2	1	2	2	2	-	-	-
Airbus A318	-	-	-	-	-	-	-	-	20	40	45
Airbus A319/320/321	64	55	72	127	168	205	242	195	170	155	150
Airbus A330	9	30	10	14	23	39	46	45	30	35	35
Airbus A340	25	19	28	33	24	25	20	20	25	30	35
Boeing 717	-	-	-	-	-	12	30	20	20	20	30
Boeing 737-300/400/500	121	89	76	132	116	44	2	-	-	-	-
Boeing 737-600/700/800/900	-	-	-	3	165	276	280	215	185	160	175
Boeing 747-400	40	25	26	39	53	48	12	12	18	25	30
Boeing 757	69	43	42	46	50	66	48	35	25	25	25
Boeing 767	40	36	42	41	47	41	45	40	35	35	40
Boeing 777	-	13	32	59	74	85	64	60	60	60	60
Boeing MD-11	17	18	15	12	12	8	6	-	-	-	-
Boeing MD-80/90	23	32	36	42	42	40	3	-	-	-	-
AVRO/BAe 146	28	22	26	22	20	25	15	10	10	10	10
Fokker 70/100	34	41	17	7	-	-	-	-	-	-	-
CRJ-50/70	26	40	53	59	77	70	70	65	50	40	30
EMB-145	-	-	2	33	60	80	80	70	50	40	30
Do-328	-	-	-	-	-	16	27	27	28	21	21
TOTAL UNITS	**521**	**482**	**493**	**677**	**945**	**1,090**	**1,000**	**820**	**730**	**700**	**720**

Source: *ESG, July 1999.*

JetBlue's high capitalisation, high growth plan

The launch of JetBlue (formerly known as New Air) is now expected towards the end of this year, having so far attracted some $130m of venture capital from investors such as George Soros. For an airline that is still some months away from taking its first passenger booking, JetBlue has generated a great deal of hype. So how viable is the strategic plan of this self-proclaimed "mega new entrant"?

In the April issue of *Aviation Strategy* we reviewed JetBlue's proposed network out of New York JFK, focusing on the major market opportunities that the airline could exploit. Remarkably, traffic volumes on many domestic routes from JFK had fallen by more than 30% from 1985/86, the time when People Express was at its peak. And yields on some of these routes look to be very high. Consequently, JetBlue confidently forecast strong traffic stimulation factors resulting from its entry and was able to sketch out a plan whereby it would develop a network of 44 points in the first three years of its operation.

In this article we will be concentrating on other elements of the JetBlue strategy, in particular the importance of exceptionally high start-up capital, without which the venture would not have gone ahead. JetBlue's management attributes the failure of so many start-ups to inadequate capitalisation, which leads to excessive concentration on the conservation of cash at the expense of longer term strategic expansion.

Significance of the A320 order

The main use of the start-up funding will be aircraft deposits. In April JetBlue ordered 25 A320s, with options for a further 50. In addition it is leasing further A320s from ILFC and SALE. Unit prices for the orders are, of course, a secret but, as this was a prestigious order for Airbus to win against competition from Boeing's 737-700s, it can be assumed that JetBlue got a very good deal. Indeed, it might be possible for JetBlue to stick rigidly to the Airbus delivery schedule - which approximately requires the addition of 10 aircraft a year - and lease aircraft out as a profitable sideline. The aircraft order is central to JetBlue's strategy for several reasons:

- First, JetBlue puts very strong emphasis on the safety perception of start-ups in the US. It clearly sees an all-new fleet as a major sales point in relation to other new entrants and also to established Majors. Promoting the all-new fleet will be an essential element in building JetBlue's brand.
- Second, its cost structure depends on utilisation of around 11.5 block hours a day, which is probably only achievable with an all-new, maintenance-guaranteed fleet.
- Third, JetBlue will use its Airbus commitments to leverage its negotiating power with the airport authorities. This is in contrast to the traditional start-up approach whereby new airlines first decide which points they intend to serve, then go to these cities to seek gates, check-in desks and concessions, but are generally in a weak bargaining position because their fleet plans, and hence growth prospects, are nebulous.

JetBlue's strategy is first to identify the routes that meet its requirements in terms of potential demand, then approach the airports with Requests for Proposals. In other words, JetBlue intends to makes the airports compete for its business, and expects to be able to play off one city against another. JetBlue is, in effect, borrowing a standard strategy from other industries - it gives the example of General Motors obtaining competing bids from several states before deciding where to locate a new plant. JetBlue will also concentrate on secondary airports in major markets, again with the aim of strengthening its negotiating position.

To connect or not to connect?

JetBlue's top management takes Southwest as its industry model - hardly surprising as most of these managers are either ex-Southwest or, like the CEO David Neelemen, ex-Morris Air - the Salt Lake City airline that was bought out by Southwest. It is therefore planning a point-to-point operation with no hubbing.

JetBlue expects that this strategy will curtail the competitive response of the incumbents. For example, JetBlue will probably start an operation from Buffalo to JFK, a route on which no other carrier offers jet service at present. Continental flies from Buffalo to Newark and US Airways from Buffalo to LaGuardia, but neither of these carriers could drastically reduce fares to JetBlue levels without greatly increasing their own local traffic and spilling important connecting traffic to destinations like Washington and Florida.

For distribution, JetBlue is going to heavily promote Internet bookings and will rely on its own internal reservations system (which was very successful when developed at Morris Air but which, it must be said, has posed problems for other small airlines that have bought the system and tried to adapt it for markets with connecting traffic).

In this regard, one wonders whether JetBlue is being too rigid in transferring a Southwest-type point-to-point operation to JFK. It may be missing a major market opportunity by largely ignoring short haul connections from international flights at the US's main gateway. (Also, it is worth remembering that BA and other foreign carriers were very interested in buying Pan Am Express as a JFK feeder in the early 1990s, though nothing materialised mainly because of ownership restrictions).

Southwest costs in New York?

A similar question about JetBlue's plans relates to its cost base. In its preliminary projections JetBlue appears to aiming at the same unit cost - 7.4 cents per ASM - as Southwest despite the fact that it will be operating in a much higher cost environment and that it will not be able to achieve the same economies of scale (Southwest's fleet contains 280 units).

JetBlue justifies its cost predictions by arguing that its costs are not escalated by seniority consideration in the way that Southwest's now are. Nevertheless, JetBlue's estimate that its average cost per employee will be around $36,000 against $48,000 at Southwest suggests that management has not fully appreciated the cost of living in New York.

On the other hand, JetBlue may be being too conservative with its unit revenues - around 7.7 cents per ASM against Southwest's 8.3 cents - as US Airways achieved 13.8 cents operating mainly in the short/medium haul East Coast market last year.

WestJet: how to fend off an incumbent

Meanwhile, north of the border WestJet, the small-scale Canadian version of Southwest, has just completed a successful IPO on the Toronto exchange, and continues to pose major problems for the incumbents.

Based at Calgary, WestJet employs all the classic low-cost strategies and tactics - point-to-point service, mostly direct sales, friendly service, and (in contrast to JetBlue) a fleet of cheap 737-200s. Founded in 1996. WestJet served 11 western Canadian destinations in 1998, carried 1.6m passengers and generated revenues of C$125.9m (US$86m) and net profits of C$6.5m (US$4.5m).

Despite its small size, WestJet has been remarkably successful in fending off a concerted attack on its routes from Canadian,

WESTJET'S STIMULATION EFFECT

Top five routes	1997 pax. (000s)	Change on 1995 (pre-Westjet)
Calgary-Victoria	161.7	156%
Kelowna-Victoria	191.9	118%
Edmonton-Vancouver	437.9	80%
Calgary-Vancouver	674.0	60%
Calgary-Edmonton	374.6	38%

which, having attempted to match WestJet 's services for eight months in 1998, was forced to withdraw and announce a "realignment" of its western network. The WestJet influence is behind the recent moves by Canadian and Air Canada to "rationalise" the market between them. In addition, Air Canada has been in talks with WestJet, and an alliance between those two airlines is a possibility.

Why have the incumbents, particularly Canadian, been unable to deal with this newcomer?

There would appear to be two critical elements - firstly WestJet has operating costs that are very much lower than the incumbents; secondly, on the routes that it entered it has managed to stimulate overall traffic growth of up to 150% (see table, left).

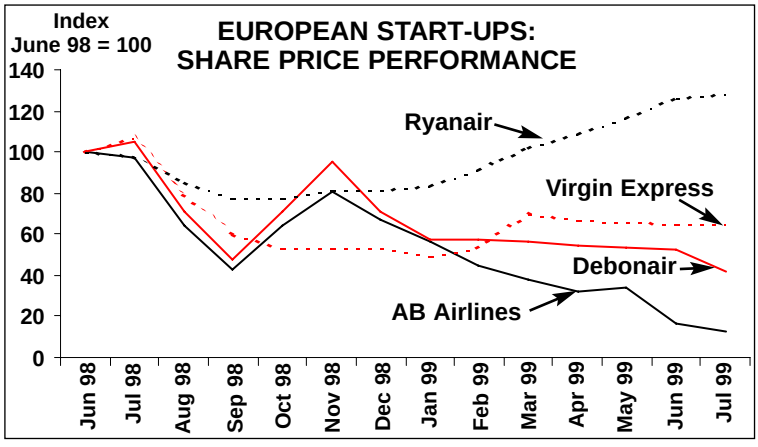
WestJet's advertising strategy has concentrated on educating the market generally about low-fare travel. When Canadian attempted to compete it had to advertise low fares on specific routes, which reinforced WestJet's message but undermined the economics of its own full-cost operations. Canadian ended up carrying new passengers at yields on which it could not possibly break even.

Canadian attempted to protect its yield by offering double and treble frequent flier miles but the impact was negligible in this market because the customers were infrequent fliers and highly price-conscious. To complete the cycle, when Canadian withdrew from the WestJet routes it in effect handed over the traffic volumes it had helped generate to the new entrant.

Shake-out due in European low-cost sector

A shake-out among the European new-entrants is imminent. Various stockmarkets are sending very clear signals about the viability of some of the new breed of low-cost airlines.

The graph below, which indexes stock prices to the middle of last year, when all new airline stocks were strong, shows a precipitous decline in the fortunes of Debonair and AB Airlines. Indeed, AB's continuing operation has looked particularly shaky in recent months and it has only been able to keep going through slot sales and a last-minute fund-raising exercise. Debonair has been consistently loss-making, and investors' confidence has been further eroded by the carrier's inability to meet even short-term forecasts.



These two airlines have failed to put together coherent, workable strategies. In Debonair's case the original strategy just seemed too complicated for a low-cost carrier - it involved linking a series of mini-hubs throughout Europe, which had the benefit of maximising utilisation but the serious flaw of low load factors. Nor was Debonair ever a clearly differentiated low-cost carrier - it operates from London Luton, clearly a leisure-orientated airport, but offered frills

that associated it with a business-type product. Fleet policy too appears erratic, originally opting for the four-engined BAe 146, which is not an obvious choice for low-cost operations, and now adding 737-300s (and at one point having been a putative launch customer for the 717).

Debonair is now changing direction, concentrating on wetleasing to Lufthansa CityLine and Swissair Express. This is also the official new strategy of AB Airlines.

It is actually quite difficult to discern what the old strategy was. Based at Gatwick, AB set out to promote itself as a "First for Value" airline that would form lots of alliances with established carriers at a slot-constrained airport. Its flotation last year was to fund the purchase of six 737-700s, but it was apparent that management had to firm up plans as to the routes the aircraft, still officially due for delivery from 2000 on, were to be deployed on.

Perhaps more surprising is the poor performance of Virgin Express. Here the low-cost carrier is suffering through its association with a high-cost Major. Or, to be fair to Sabena, which has undertaken a significant turnaround, VE's problem has been an association with difficult airline unions in a high labour cost country. The one thing a new entrant cannot afford is labour strife, but this is exactly what happened when management tried to relocate its headquarters from Brussels to Shannon in Ireland.

Richard Branson's intervention, and the imminent return of CEO Jim Swigart to the US, has calmed the situation, but the future for VE looks uncertain. In particular, will it continue to operate for Sabena on key routes like Brussels-Heathrow when Sabena starts to take delivery of its new A320s? Sabena/Swissair has become concerned about brand dilution, and has ruthlessly divorced its long-haul, low-cost associate, CityBird.

Stansted-based Go has, of course, even closer links with a Euro-major, being 100% owned by BA. Up to now the BA link has been seen as being the low-cost carrier's big advantage, especially in terms of cost of capital. Its first results are due to be published in August, and Stelios Haji-Ianniou is offering a prize to the person who guesses most accurately how much of the start-up capital has been used.

Nevertheless, Go appears to be expanding smoothly and has gained widespread brand recognition. And in a recent interview, CEO Barbara Cassini hinted at a possible IPO for the airline. Reducing BA's stake reduces the ability of the parent (or its unions) to curtail Go's development.

EasyJet is likely to come to the market at some point as well in order to fund its rapid expansion. Six 737-300s will be delivered this year, and the first of its 15 737-700s are due in July 2000. As well as switching some operations from Luton to Gatwick and potentially Stansted, it is building up secondary points at Geneva and Liverpool.

EasyJet's single biggest asset is its chairman Haji-Ianniou, whose flamboyance and

EUROPEAN GROWTH PLANS

	% ASK change forecast for full year 99/98	Forecast % share of total ASK 99
British Airways	5%	9.5%
Lufthansa	9%	8.5%
Air France	9%	8.5%
Iberia	7%	7.9%
Alitalia	4%	7.3%
SAS	10%	7.0%
Condor	10%	4.0%
LTU	-3%	3.3%
Hapag-Lloyd	40%	3.0%
Finnair	13%	2.8%
Sabena	15%	2.7%
Swissair	21%	2.6%
KLM	6%	2.5%
TAP	0%	2.1%
Braathens	36%	2.1%
Olympic	4%	1.8%
British Midland	11%	1.5%
Ryanair	29%	1.3%
Meridiana	14%	1.2%
Aer Lingus	15%	1.2%
easyjet	90%	1.1%
Crossair	31%	1.0%
KLM uk	2%	1.0%
Spanair	15%	1.0%
Austrian Airlines	-3%	0.9%
Air Liberte	1%	0.8%
Go	435%	0.8%
Deutsche BA	3%	0.6%
Eurowings	13%	0.5%
Other	9%	11.3%
TOTAL	**10%**	**100.0%**

Source: *Credit Agricole Indosuez Chevreux.*
Note: *Analysis by James Halstead from BACK/OAG data. Double counting due to codesharing has been eliminated.*

vision has driven the airline up to now. But when it comes to an IPO he will be faced with a new challenge - the financial community tends to be suspicious of larger than life characters, and will have to be convinced that the airline will be run as much for the benefit of the new shareholders as for the chairman/owner.

In contrast to the other quoted low-cost airlines, Ryanair's stock has continued to surge ahead on the back of an extremely good profit record. It seems to be genuinely establishing itself as the Southwest of Europe.

Ryanair's formula for success is based on consistent growth and consistent management. It has evolved its image from being regarded as an Irish regional to being the leading European low-cost carrier. However, its pricing policy is not simplistic and on certain flights it charges fares equivalent to those of its full-service competitors. Ryanair's strategy of operating to secondary airports at or close to a major destination has generally paid off; customer resistance seems to have been minimised by offering good ground connections.

Finally, it is worth remembering the potential of the low-cost market in Europe. As the table on page 7 indicates, only about 3% of the intra-European scheduled or semi-scheduled capacity this year will be provided by such airlines.

Power play: implications of the GE/Boeing deal

General Electric's winning of an exclusive deal to power the proposed long-range versions of Boeing's 777 took the breath away from rival engine makers Pratt & Whitney and Rolls-Royce. They hadn't believed the original proposal from GE's chairman Jack Welch to his opposite number at Boeing, Phil Condit, when the story first leaked in February. They were stunned by the eventual deal, announced in early July.

GE will develop a new 115,000lb thrust version of the GE 90 engine to power two versions of the new long-range 777. The 777-200X will be able to carry 300 passengers in three classes up to 10,100 miles and the 777-300X will be able to carry 360 passengers in three classes up to 8,300 miles. But this deal has much greater significance to the future of both engine competition and Boeing's battles with Airbus Industrie than any previous contest to power an aircraft. It's what Jack Welch is calling a boundaryless (a favourite word of his) deal.

Welch made enormous efforts to win this deal, pressuring Condit heavily. He told Condit (in his weakened state as head of the manufacturer, following major production problems over the past 18 months) that he needed the backing of the world's most prestigious brand name, GE. Then he offered a deal that it would have been hard to reject.

Costs and details of the deal

GE has made a heavy commitment to the new 777 programme. GE will pay up to half of Boeing's expected $1bn development cost of the aircraft, in addition to the $500m or so it is expected to cost to increase the engine's power to 115,000lbs of thrust (20% more than any engine now in service). From the start of the contest all three engine makers were offering to pay around $200m to cover the cost of an updated engine pylon and other engine related structural changes, plus half the certification cost of the new plane. GE offered to absorb up to another $300m of Boeing's costs. The deal dumbfounded Pratt & Whitney's Bob Leduc when he went to Seattle to make a last-minute, sweetened - but still inadequate - final offer.

Under the exclusive arrangement, Boeing alone will sell the aircraft-engine

package, although Welch insisted that the agreement restricts Boeing's ability to discount prices outside preset limits. GE will take a fixed share of the revenues, and will share any financial risk involved if the new 777 fails to live up to any of its performance guarantees - not just engine-related problems.

A great concern has been whether the airlines would accept being offered only GE 90 engines on the 777. Earlier versions of this engine had caused trouble, and British Airways for one planned to switch to Rolls-Royce engines. So far Rolls-Royce has the lion's share of 777 engine orders (47%), with Pratt & Whitney getting 25% and GE 28%. To allay airline fears, GE will offer fixed-price off-wing maintenance of the new GE 90 engines, including spare parts, at a pre-set cost of so many dollars per flight hour. It's what Boeing engineers say amounts to power by the hour.

Since the announcement, several airlines have been moaning about the switch to exclusive GE power for the new 777. We'll see over the coming year or so whether large piles of GE's dollars will change their tune.

New 777 development, new threat to A340

There are fascinating technical elements to the deal, too. Boeing was attracted to the GE 90 not just by Welch's largesse. Seattle was convinced that GE was the most likely of the three engine makers to get a 115,000lb engine into service in time to head off competition from Airbus's A340-500 and A340-600. GE has cleared up its earlier technical problems with the engine and is applying the latest computerised 3-D aerodynamic modelling to smooth airflow inside the engine, plus new composite materials for the main, front fan of the engine. (The notion that Boeing picked the GE 90 because of low noise, as reported by the *Financial Times* in London, is a poor joke.)

What Airbus probably does not yet appreciate is that GE and Boeing have their eyes on an even bigger GE 90 that will power an ultimate long-range 777 intended to demolish the A340 as a competitor. The front fan of the new GE 90 has already grown in diameter much more than has been admitted. This means that the new GE 90 engine will have the potential to produce even more than 115,000lbs of thrust, and will eventually be used to power a 777 that will combine the 360 seats of the 300X version with the 10,100 mile range of the 200X version.

The next step is an actual launch of the new 777. That will wait until Boeing/GE have around 40 orders. One likely launch customer is Air France (more or less a tied customer since Snecma is a partner in the GE 90). Boeing/GE also hope for an Asian launch customer too, maybe Cathay or perhaps Singapore. The leasing companies, especially GE Capital, will come later. Which version of the new 777 will be launched first depends on what the airlines order; the first will launch in late 2003 and the second in January 2004.

Welch: an industry icon

Why was Welch so keen to win this order? After all, it was not that long ago that he was so cross with his jet engine operation over the GE 90's embarrassing troubles that he told them not to spend another cent on its development. Now he's stumping up a billion dollars to add to the $2.2bn so far invested in the programme.

First there is the prospect of $20bn in engine sales over the next 20 years or so. But probably more important is what would have happened to the GE 90 without this deal. The engine can only be used on the 777 - no other aircraft is large enough to need it. Without this deal, Welch faced the prospect of having to write off all that $2.2bn (he has in fact already written off $275m of it).

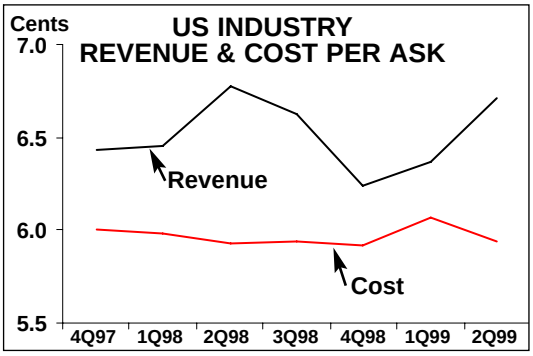
Second, Welch, an icon of American business, has to step down as chairman of GE in the next year or two. The last thing he wants is to risk going out with a massive loss tarnishing his image. In this regard, another billion dollars is a small price for GE to pay to preserve the reputation of a hero of American capitalism.

US industry beats expectations with 2Q 1999 results

The US industry slightly surprised Wall St. analysts with better-than-expected second-quarter 1999 results, as fears that capacity increases would hit profits badly proved to be untrue. Even though combined 2Q 1999 ASKs increased by 4.5% compared with 2Q 1998, industry RPKs rose by 3.3%, resulting in just a 0.9% fall in year-on-year load factor to 73.0%.

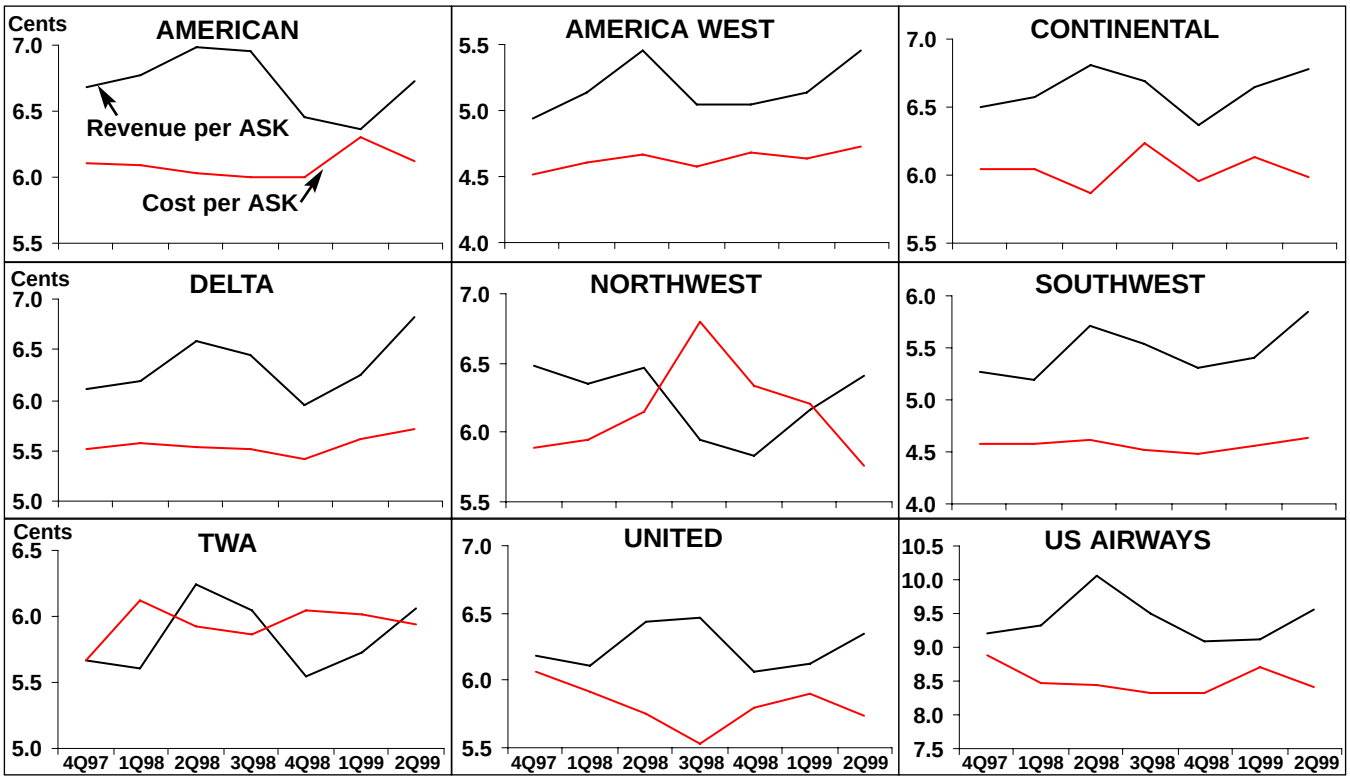
Second-quarter combined operating profits for the nine major airlines totalled $2,630m - just 5.3% down on the record $2,778m combined operating profit in 2Q 1998. But net profits for the nine airlines in 2Q 1999 totalled a record $2,069m - beating the 2Q 1998 figure by a substantial 25.2%. The gap between US industry unit revenue and cost has now widened to 0.78 cents per ASK, just behind the record 0.86 cent gap of 2Q 1998.

Delta posted its highest-ever quarterly operating and net income figures, while **Northwest** returned to profitability for the first time since 2Q 1998 (also see pages 11-15).



Particularly strong figures were posted by **Southwest,** which for the first time topped the quarter-billion dollar mark for quarterly operating profits.

The only airlines to report a drop in both operating and net profits in 2Q 1999 compared with 2Q 1998 were **TWA** (which is still posting net losses), **Continental** (where salary costs rose by 19% in the quarter) and **American** (which partly blamed “air traffic control and weather disruptions”).



Northwest looks to the future after labour woes end

Northwest has just returned to profitability after last year's work slowdowns and debilitating pilots' strike. Are its labour troubles now over and has business traffic returned? What are the prospects for Asia and global alliance-building?

While most of its competitors reported reduced earnings for the quarter ended June 30, Northwest had reason to celebrate. It posted a net profit of $120m, breaking a three-quarter string of losses totalling $434m. Although the latest result represented just 4.6% of revenues, it was more than double the earnings in the same period last year, when work slowdowns by pilots and machinists first began to affect the company's bottom line.

After its turnaround in 1994 and up to and including 1997, Northwest was one of the US industry's best profit-performers. This was in large part thanks to an $886m three-year package of wage concessions secured in 1993, as well as extensive route and debt restructuring, which enabled unit costs to be lowered.

But the labour honeymoon came to an end in the second half of 1996, when the wages of Northwest's workers snapped back to the August 1993 pre-concession levels. The net impact of that on the profit and loss account was actually not that detrimental, because the company was able to stop issuing common and preferred stock to employees (a practice that had been recorded as huge non-cash operating cost items).

But the subsequent inability to secure new contracts with the unions led to labour actions and a strike that cost the company well over $1bn in lost revenue and increased expenses in the 12 months to the end of March 1999.

The unions had been pressing for sizeable pay increases - after all, their pay was still at 1992 levels. They had become increasingly agitated about the management's insistence on work-rule changes and productivity improvements and, in the end, lost patience at the lack of progress in the negotiations.

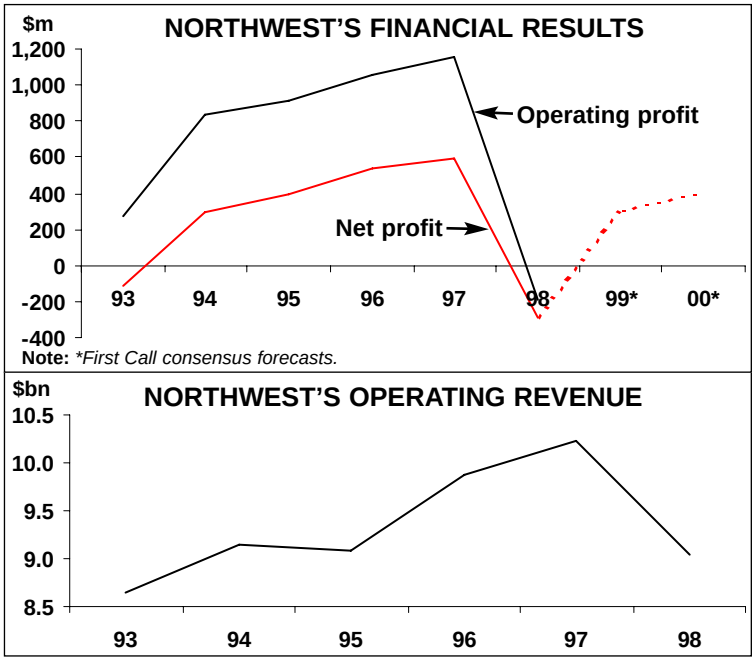
The troubles began with work slowdowns by mechanics in the spring of 1998, which cost an estimated $100m on a pre-tax basis in the second quarter of last year. The 18-day shutdown of operations due to the pilots' strike in September and the preceding 30-day cooling-off period caused $630m of financial damage in the third quarter. Another $90m of negative effects were recorded in the post-strike recovery period in October-December. As a result, Northwest reported a $286m net loss for 1998, down from a profit of $583m in the previous year.

The impact on 1998 earnings had, of course, been fully anticipated by Northwest's management and the financial community. But then came the unpleasant realisation that while leisure traffic had bounced back quickly with the help of fare sales, business traffic remained sluggish to return.

This reflected continued poor customer perception, not helped by a deterioration in service quality and on-time performance. Northwest reported another $29m net loss for the first quarter of this year,

NORTHWEST AIRLINES' FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/notes
727	38	0	
747-100	2	0	
747-200	31	0	
747-400	12	2	Delivery in 1999
757	48	25	Delivery in 2000-2002
DC-9	176	0	
DC-10	41	0	
MD-80	8	0	
A319	2	48 (100)	Delivery in 1999-2003
A320	70	0	
A330	0	16	Delivery in 2004-2005
CRJ-200LR	0	12 (70)	Delivery in 2003-2004
TOTAL	**428**	**103 (170)**	Average fleet age = 20 years



blaming $90m residual negative effects from the strike.

The June quarter results indicate that Northwest is at last well on its way to a full recovery from the strike. The company says that it has made "substantial progress" in recapturing its former share of business traffic, though yields and unit revenues have remained weak due to industry-wide domestic softness and continued troubles in Asia.

Significantly, in the latest period Northwest managed to reduce its unit costs to less than 8.5 cents per ASM from the 9-10 cents recorded in the previous four quarters. Cash reserves, which halved to $480m in the six months to December 31, had recovered to $618m by the end of June.

Are the labour troubles now over?

The strike was settled when Northwest and its pilots agreed on a new four-year contract, which represented a straightforward compromise on the pre-strike positions. In return for some productivity concessions, the pilots secured 3% annual pay rises, retroactive pay, stock options, a new profit-sharing programme, the phasing-out of a two-tier pay scale, furlough protection and restrictions on the use of regional jets by commuter partners. The deal was quickly ratified by union members.

As an indication of a new phase in management-pilot relations, in February this year agreement was reached quickly on pay rates on the A319, which was due to enter the fleet last month (July). To their credit, Northwest's pilots have also co-operated fully on the implementation of domestic alliances. Pilot approval for the Continental alliance was secured well before the strike, and the new contract sealed things by granting the desired job protections.

But the pilots' deal was only a starting point as contracts still had to be secured with five other large unions, and there was trouble brewing with two key groups. The IAM-represented workers had already authorised a strike, while talks with the flight attendants, represented by Teamsters, had entered federal mediation.

Progress with the non-pilot groups has been mixed. On the positive side, dispatchers, represented by TWU, along with most of the small unions, settled fairly quickly. Also, the IAM strike threat dissipated as the National Mediation Board (NMB) declined to declare the talks at an impasse and IAM's attention was diverted to fighting a challenge from a competing union.

The Aircraft Mechanics Fraternal Association (AMFA) subsequently won the right to represent Northwest's mechanics, inspectors, cleaners and custodians (some 9,300 workers). The remaining 21,000 IAM members signed three new four-year contracts in February.

But the mechanics' contract negotiations have been delayed by an NMB investigation of the AMFA election results, which were declared fair and valid only recently. This has meant that contract talks will not start till the autumn. It is hard to predict what kind of a negotiating stance the relatively little-known union will adopt.

AMFA's position may, of course, be influenced by the outcome of the ratifica-

tion vote for the June agreement with the flight attendants, which is at present scheduled for August 26. The tentative deal was significant in that it averted a very real threat of new labour disruptions at Northwest. In early June the flight attendants overwhelmingly approved a strike vote; although the NMB did not release them into the statutory "cooling-off" period that could have led to a full-blown strike, the Teamsters were planning to employ the highly disruptive "HAVOC" tactic of striking selected flights on a random and unannounced basis.

The problem now is that there appears to be considerable opposition to the deal among the rank and file, even though the final provisions are believed to have made Northwest's flight attendants among the highest-paid in the industry and gone a long way in closing the gap in pensions and benefits. At this stage (late July) the general feeling is that the vote could go either way.

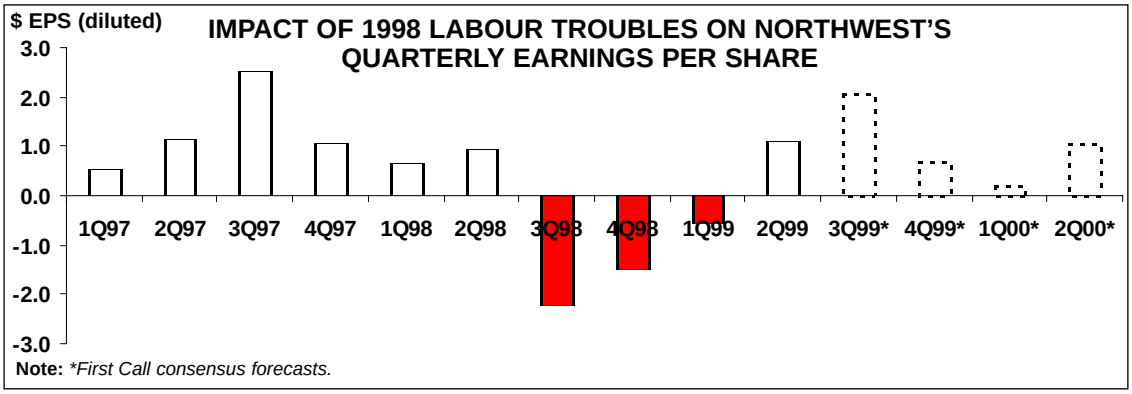
Quality, performance and image issues

The constant negotiations with so many unions have made it hard for Northwest to focus on repairing its service quality and image, which used to be impeccable before the 1998 labour troubles. However, recent efforts to improve operational performance have been successful. In June last year the carrier came worst in the DoT's on-time performance and customer complaints rankings, and just six months ago it was still in the bottom half of the league. But in May (the latest month for which statistics are available) Northwest was second-best in both those criteria and had considerably improved its baggage handling reliability.

This has no doubt helped bring back business travellers, but that all-important segment is not likely to recover fully until all the labour contracts have been settled. It is totally inconceivable that Northwest's management would allow another strike or even a near-strike situation to develop, but mere public protests by labour groups add to the image problem. Before tentative agreement was reached with the flight attendants, the workers picketed at airports against "corporate greed" and disrupted the company's annual shareholder meeting to the extent that it had to be closed early.

But labour disruptions have not been responsible for all the damage. Northwest is still suffering the consequences of its response to a snowstorm that hit its Detroit hub in early January. A recent DoT report concluded that Northwest "jeopardised passengers' well-being" by holding them in aircraft on the ground for up to eight hours without water, food or working toilets.

The carrier now faces a class action lawsuit from the stranded passengers alleging negligence, intentional infliction of emotional distress, false imprisonment and breach of contract. The debacle will go down in the history books also because it prompted legislative moves for a "passenger bill of rights" - now likely to be replaced by voluntary ATA-led reforms.



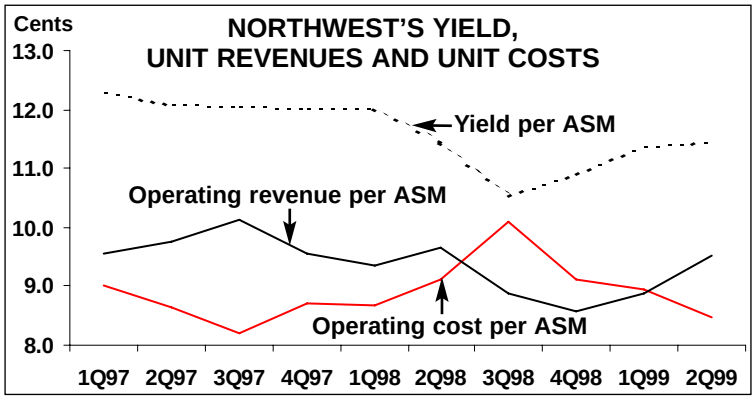
Note: **First Call consensus forecasts.*

The DoT report criticised Northwest's lack of emergency planning, poor internal communications, bad management of the crisis and senior management's flippant comments in the aftermath - all hinting at a multitude of management problems at the carrier. In recent years Northwest has also been widely criticised for its poor treatment of the media (of which there was no evidence when the company was contacted by *Aviation Strategy* for the purposes of this article).

Occasional fines for maintenance violations are nothing unusual in the US industry, but Northwest is less able to afford the unfavourable publicity at present. Over the past eight months it has been fined several times for maintenance and security violations (the security company was replaced in March).

The snowstorm incident led to various changes in emergency procedures and planning. In order to be more responsive to its Detroit customers, Northwest assigned its executive VP customer service, Ray Vecci, to the additional newly-created position of president for Michigan operations.

The past year's turmoil has led to extensive management changes. First, CFO Jim Lawrence was replaced with former CFO Mickey Foret, who was later also named president of Northwest Cargo. Marketing chief Michael Levine's resignation in January was taken as an opportunity to strengthen international operations, marketing and sales with three new appointments or promotions. Northwest has also named new heads for planning, domestic revenues and information services, appointed a new VP for alliances and revamped its finance department.



Contrary to earlier speculation, John Dasburg, president and CEO since 1990, survived the pilots' strike. In a well-timed move just two weeks before the January snowstorm, Dasburg signed a long-term contract to remain in that position. However, the appointment of Richard Anderson as Northwest's first-ever COO will enable Dasburg to focus much more on the global alliance and other strategic issues.

A promising alliance position

Alliances are one bright spot that Northwest certainly intends to build on. Its longstanding relationship with KLM, which was the first-ever airline deal to secure antitrust immunity in the US and has been a commercial and financial success, is much more advanced in terms of the extent and depth of co-ordination than any of the other international alliances. The earlier equity link was never a happy one and it was severed two years ago, but Northwest describes the alliance as a "marriage for life".

Consequently, the latest plans to expand the Wings alliance to integrate KLM's partner Alitalia hold considerable promise. Alitalia formally joined the combine in May and an antitrust immunity application for a three-way global joint venture system was filed with the DoT. Under a precedent set by past deals, approval seems certain once Italy signs an open skies ASA with the US, which is expected to be in the near future (following provisional agreement reached in November).

The ending of the pilot strike enabled Northwest and Continental to start implementing their domestic alliance. Northwest completed its acquisition of a controlling stake in Continental in November 1998, in defiance of a DoJ lawsuit seeking to block the transaction but after agreeing to various changes designed to prevent an actual transfer of control for a period of 10 years.

This was quickly followed by FFP links and codesharing on domestic and Asian routes, which now covers about 4,000 weekly flights between 261 cities and involves the exchange of about 2,000 passengers per day.

Since the other two domestic alliances have not implemented domestic codesharing (nor are they likely to in the foreseeable future), Northwest and Continental gained a useful head start over their competitors. Northwest estimates that the Continental alliance added about $18m to its pre-tax earnings in the second quarter of the year, and is projected to generate about $80m in 1999. Expanded co-operation with longtime partners Alaska and Horizon has no doubt added to the revenue benefits.

There are obviously hopes that Continental, which already codeshares with Alitalia, will eventually formally join the transatlantic alliance, but that will have to be dealt with separately because of the DoJ lawsuit over the domestic alliance. The litigation, which is not active at present, has not in any way hindered the implementation of the domestic alliance, but it is a point of concern for the Alitalia antitrust application that the DoT has apparently requested extra information about Continental's possible role in the Wings alliance.

Prospects

Northwest is expected to consolidate its financial recovery in the remainder of this year. The current First Call consensus estimate is a net profit of around $300m for 1999, rising to $400m in 2000 (see chart, page 12) - nowhere near the record $500m-$600m earnings posted in 1996 and 1997. However, there is considerable variation in individual analysts' estimates, reflecting the many uncertainties that the carrier still faces.

If all goes well, the two contracts that remain open will be amicably settled by year-end. Labour costs will rise, but so will those of competitors - and Northwest has a distinct unit cost advantage to start with. But it still faces formidable challenges in Asia, where Northwest has the highest revenue exposure amongst the US carriers.

Since the first quarter of 1998 Northwest has reduced its Asian capacity by approximately 15% and restructured the network extensively in favour of more nonstop service in business-oriented markets. Although Asian countries such as Korea now appear to be on the road to recovery, Japan - where Northwest operates most of its flights - is still down in the dumps.

Nevertheless, the slump is believed to have bottomed out. Ticket sales from Japan have grown a little each month this year, so Northwest's overall loss from Asian operations should be less in 1999 than last year.

But the carrier acknowledges that Asian financial recovery is still a long way off and that network adjustments will continue. Expanded co-operation with Asian carriers should also help. Over the past year Northwest has begun codesharing with Air China (performing well) and its existing marketing partner Japan Air System and signed a Memorandum of Understanding on commercial co-operation with Malaysia Airlines.

Huge industry capacity additions have sharply reduced yields and profitability on the Atlantic routes this year. So, like some of its competitors, Northwest is now heavily dependent on the domestic market for profit generation.

The airline was previously lucky in that its route system had minimal exposure to low-cost operators. But that has now changed as carriers like Spirit, Sun Country and new-entrant AccessAir have discovered Minneapolis and Detroit in a big way and, by all accounts, are doing very nicely picking up traffic in some key business markets.

However, Northwest's dominance of its hubs - which is now being even further strengthened by extensive utilisation of regional jets by its commuter partners - means that the carrier will not lose those battles.

By Heini Nuutinen

Vienna hub the key to Austrian's entry into a global alliance

In 1998 Austrian Airlines Group posted the best results in its 40-year history (see chart, right). So far this year, the Austrian government has reduced its stake to below 50% for the first time, and the Group is well on target to produce another record performance. But despite this success, can Austrian Airlines really succeed long-term in an aviation world where small carriers appear vulnerable and powerless?

Austrian Airlines was founded in 1957, and shares were first listed on the Vienna stock exchange in 1988. By the following year 37.9% of the company was in private hands, with Swissair increasing its stake to 8% and ANA owning 3.5%. In 1990 the Austrian government's stake fell to 51.9% as Swissair upped its interest to 10%, ANA to 9% and Air France took a 1.5% share. In April 1999, however, ANA sold its stake to two Austrian banks and the following month an issue of 800m shares (which raised ATS 3bn - all of it earmarked for aircraft purchases) resulted in the Austrian government's stake being reduced to 39.7%, thereby doubling the free float to 28%. The current capital split is shown on page 19, and market capitalisation as of the end of July is ATS 8.3bn ($713m).

The Austrian Airlines Group includes Austrian Airlines, Lauda-air and Tyrolean Airways (which is now responsible for the Group's domestic and regional traffic). Austrian bought a 42.9% stake in Tyrolean in 1994, and increased its share to 85.7% in 1997 and 100% in 1998. A 36% stake in Lauda-air was acquired in 1997. The Group carried 7.8m passengers in 1998 - 12.2% up on 1997, and the network covers 160 scheduled destinations in 68 countries, plus 80 charter destinations. The Group also includes shareholdings in financial and insurance companies, IT and travel firms.

The record results of 1998 look set to continue. First-quarter 1999 Austrian Airlines Group figures show a 17.0% increase in RPKs, helping the company achieve a 3.8% increase in turnover. The Group recorded an ATS 155m ($11m) pre-tax loss in the quarter compared with an ATS 42.3m loss in 1Q98, but this comparison is distorted by aircraft and investment sales in 1998. Once these have been stripped out, the net result for the first quarter of 1999 was 14.3% up, which "exceeded expectations", the company says. The Kosovo crisis and the situation in Turkey - which has hit charter flights - will affect second-quarter results (half-year results are released on August 18), but the airline is still on target to beat 1998 profits in full-year 1999. Traffic was up by 9.3% in January-May 1999 compared with the same period in 1998.

The Group's management has set ROE and ROCE as the benchmarks for Austrian's performance. ROE increased from 3.2% in 1996 to 18.4% in 1998 and ROCE rose from 3.6% to 9.6% over the same period, and these will be key indicators for 1999 results.

AUSTRIAN AIRLINES' FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/notes
MD-80	15	0	All to be retired by 2002
A310	3	0	All to be retired by 1Q2000
A320	3	10	Delivery in 2000-2005
A321	5	2	One in 1999, one in 2001
A330	2	2	Delivery in 1Q2000
A340	4	(2)	
Fokker 70	6	0	
TOTAL	**38**	**14 (2)**	Average fleet age = 7 years

Top-ranked management

Much of the credit for Austrian's success in recent years must go to Herbert Bammer and Mario Rehulka, who were appointed as joint presidents in 1993 (when the airline's losses were at their greatest). Both men have been with Austrian since the 1960s, and so know the company inside-out. Despite the theoretical problems of having two executives in charge in an airline, the

Bammer/Rehulka double act appears to work smoothly.

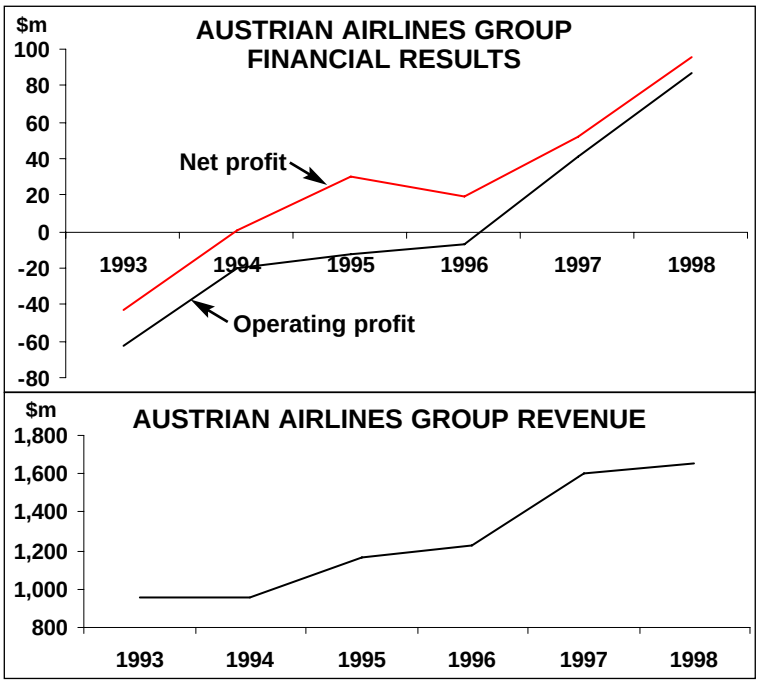
The turnaround they engineered has been based on three principles: keeping a grip on the domestic market by investing in potential competitors (most crucially Lauda-air); building up Vienna as an east-west hub; and cost-cutting. These efforts are still continuing, but it is a more recent fourth strand of their strategy - international alliances - that holds the key to the future of Austrian Airlines.

The Austrian market and the Vienna hub

Austrian Airlines Group's acquisition of 100% of Tyrolean Airways and 36% of Lauda-air means that the Group's share of the domestic market is approximately 60%. However, Austria is tiny compared with the major European markets (its population is just 8.1m), although Austrian is trying to extend its catchment areas into the neighbouring countries of Slovakia and Hungary.

Because of geography, the Vienna hub is an important asset for the group. Transfer passengers are growing at around 18% per annum for Austrian - almost three times the rate of growth for direct passengers. The Group accounts for 60% of slots at Vienna, which has been developed by the Group as a key connector to central and eastern Europe, and the central Asian republics of the former USSR. Austrian operates to 28 destinations in these regions, all linked via a four waves per day system at the Vienna hub. Minimum connection time at Vienna is 25 minutes (although in practice it can be a bit longer than this as there are two terminals). There is a reasonable amount of capacity left at Vienna, although plans are being prepared for a third runway in the next decade.

Curiously, Vienna has a rather odd advantage for Austrian in that it is among the more expensive airports in Europe - and that discourages other airlines from starting operations there. Although the local ground-handling monopoly is starting to break up, Vienna will remain a high-cost hub. Bammer insists that moving operations to the most obvious alternative - Bratislava, just 60km away in Slovakia - is a complete non-starter, and that Vienna will remain as the Group's hub.



Planned new destinations for the spring of 1999 included Atyrau in Kazakhstan, Baku in Azerbaijan and Yerevan in Armenia, but delays in acquiring the relevant traffic rights have meant a postponement of these routes until the summer of 2000. Tashkent in Uzbekistan is another possible new destination. Austrian is particularly looking to launch services into eastern European cities that are economically important, such as ports or cities in oil-producing regions. At present, eastern Europe accounts for just 16% of passengers carried by Austrian, although this proportion is rising rapidly. The Austrian Airlines Group also indirectly owns 19.4% of Ukraine International Airlines, which operates three aircraft.

At present, Austrian's main rival as a connector into eastern Europe is Lufthansa, with two east-west hubs - Frankfurt and Munich.

Global alliances

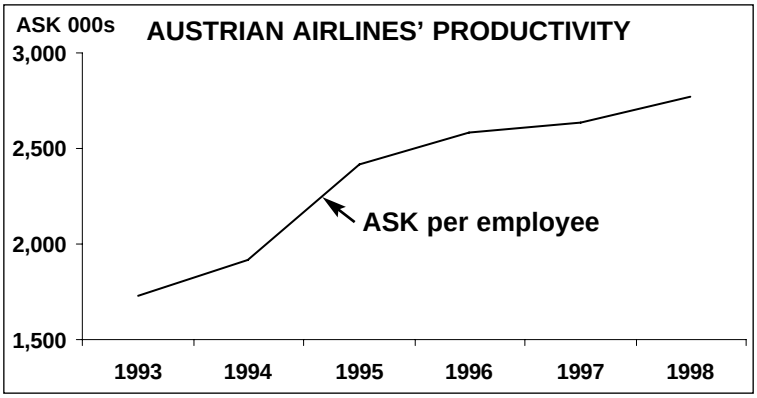
The importance of the Vienna hub gives Austrian a key bargaining chip in the hunt for international alliances. Austrian established the Atlantic Excellence alliance with Delta, Swissair and Sabena in 1997, and the

Qualiflyer alliance with Swissair and Sabena in March 1998. However, the future of Austrian's alliance strategy is uncertain following the announcement of the Air France/Delta tie-up.

As *Aviation Strategy* commented in the July issue (see pages 1-2), the Air France/Delta alliance could eventually lead to Swissair joining the oneworld group (although this is now looking less likely). Such a move would seal the fate of the Atlantic Excellence alliance, but at the same time Swissair would want to keep Qualiflyer going whoever it links up with, as Qualiflyer is central to Swissair's strategy. But whether Austrian would want to stay within Qualiflyer if it/Swissair aligns itself with a global alliance is another matter.

The Vienna hub's importance as a gateway to eastern Europe might even prompt British Airways or Lufthansa or whoever into insisting that Swissair brings in Austrian as a condition of joining a specific global allaince. In that case Austrian would have a very strong hand - although this does assume that Austrian would want to join whichever global alliance Swissair eventually picks.

One thing is certain, however, and that is that Qualiflyer is now dwarfed by the mega-alliances of oneworld, Star, Wings and Air France/Delta. Sooner or later Qualiflyer/Austrian/Swissair will have to link up with one of these alliances, but for the moment, Austrian is keeping its views to itself. All Bammer will say is that: "Ideally, the most comfortable arrangement with a partner is when we own it 100%! But we realise that we must be part of a global alliance, although we would prefer not to have equity links."



Cost-cutting

Operating costs per ASK have fallen by 20% over 1993-1998. Over that period - and despite large increases in capacity - staff numbers have fallen by 1,000 to 4,600 today. Yet Bammer and Rehulka have taken a softly-softly approach to staff reductions in a (successful) effort to maintain staff morale. Reductions have come through natural wastage and voluntary redundancies; there have been no involuntary job-losses. In a small company such as Austrian, whose culture is essentially very conservative and slow-moving, forced job losses would have had a disastrous effect on how remaining staff view the company. Today, most staff have share options and all employees receive a performance-related bonus.

One informal goal has been to reduce costs per ASK to the AEA average, says Bammer (Austrian had one of the highest unit costs five years ago). According to Austrian, the company has almost achieved this goal, and is now aiming to stay below the AEA unit cost average. However, Bammer admits that "cost-cutting is getting harder", as the first cuts are always the easiest.

Cost-cutting will not affect planned capacity growth. Target capacity growth for 1999 was 16%, but this is now more likely to be 11-12% due to the effects of the Kosovo crisis. At one time this forced the cancellation of services to 10 destination in the region, costing Austrian ATS 10m ($740,000) per week, although the only route still cancelled is Belgrade. The Kosovo crisis also prompted Austrian to impose an indefinite freeze on staff recruitment.

But despite the Kosovo effect, route expansion has gone ahead with the start of services to Chisinau, Tripoli, Montreal, Edinburgh, Lyon, Orlando and Puerto Plata so far this year. Capacity has also been increased on selected existing routes.

Capacity increases will largely be served by a substantial A320 order placed earlier this year (see table, page 16). The aircraft will be delivered over 2000-2005, and will help reduce the fleet's average age to five years.

The government stake

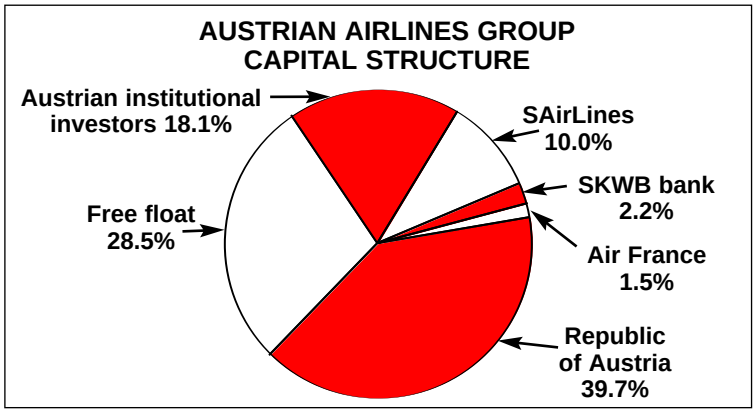
The government's stake - held through OIAG, the Austrian privatisation agency - will be diluted again if any further capital increases are undertaken (as the government has stated it will not participate in them), but at present there is no timetable for a sale of the government's interest. Bammer claims that the government stake, now it is a minority, will not affect decision-making at the airline. That may be so, but in any other market investors would be nervous at such a substantial government stake in a national airline.

Bammer counters this by claiming that the Austrian stockmarket is substantially different to, for example, the London market. "Here the small shareholders and the banks hold stocks for the long-term," he says "and are much less likely to react to any short-term developments".

The key decision

Despite all their success since 1993, Bammer and Rehulka could undo the good work by making the wrong global alliance choice. "If we pick the wrong partner" says Bammer, "that is all we will be remembered for." Austrian insists its partnership with Delta will continue and deepen (codesharing between Austrian and Delta began on Vienna-Dubai from June 25, and will be extended to Vienna-Tblisi in August and Vienna-Atlanta from October) - just as it insists that Qualiflyer will continue as well. But there is little else that the airline can say publicly.

Niki Lauda, now a minority shareholder in Lauda-air, has recently urged Austrian to make a decision on an alliance partner as soon as possible. There is even speculation that Lauda may prefer Star as the ideal candidate. That's an interesting proposition, as between them Lufthansa and Austrian would control the three main hubs into eastern Europe, effectively locking out all the other global alliances from easy access to the region. It's a scenario that the other global alliances - and in particular oneworld - should be extremely wary of. If a Star/Austrian deal did come off then oneworld's gateways into eastern Europe would have to come from Warsaw/LOT and/or Budapest/Malev.



Austrian may therefore find that it is wooed by both oneworld and Star - a situation that Bammer and Rehulka would relish. Yet Bammer's views on Niki Lauda's presumed preference for Lufthansa are firm. "Niki Lauda doesn't speak for Austrian" he says, "and anyway it is us that owns 36% of Lauda-air." However, this may be more a case of damping down alliance speculation than a direct rebuff of the Lufthansa/Star alliance option.

Bammer says that Austrian's global alliance decision will be made by the end of 1999 at the latest, and that any speculation by outsiders on the preferred partner is just fruitless. Maybe so, but Austrian must realise that its choice can only be decided once Swissair makes its own global alliance decision. Although Bammer will not comment, Austrian may be adopting a wait-and-see strategy. It certainly cannot afford to make a premature choice that could be made totally irrelevant by a different Swissair move (which would then split Qualiflyer). It would be far better, surely, to let Swissair choose first. Not only would the options available become far clearer to Austrian, but which way Swissair swings may make the "losing" global alliances even more keen to prevent Austrian going the same way.

With the Vienna east-west hub Austrian holds an important card, and Bammer is astute enough to know that not only is it Austrian's entry into the global alliance game, but that he doesn't have to play it until absolutely necessary.

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1991	114.8	65.2	56.8	120.9	84.3	69.7	80.0	53.1	66.4	267.6	182.0	68.0	397.8	257.9	64.7
1992	129.6	73.5	56.7	134.5	95.0	70.6	89.4	61.6	68.9	296.8	207.1	69.8	445.8	293.4	65.8
1993	137.8	79.8	57.9	145.1	102.0	70.3	96.3	68.1	70.7	319.1	223.7	70.1	479.7	318.0	66.3
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74.0	334.0	243.6	72.9	503.7	346.7	68.8
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73.0	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72.0
May 99	17.4	10.9	62.5	19.1	14.9	78.1	11.5	8.1	70.6	42.2	30.5	72.3	62.5	43.1	69.1
Ann. chng	9.2%	4.5%	-2.9	12.1%	11.0%	-0.8	-0.7%	2.4%	2.1	8.7%	6.9%	-1.2	8.9%	6.5%	-1.5
Jan-May 99	79.9	47.9	59.9	83.7	61.4	73.4	55.3	41.2	74.5	196.0	142.7	72.8	289.7	199.5	68.9
Ann. chng	6.8%	4.7%	-1.2	13.7%	12.9%	-0.6	-1.1%	1.6%	2.0	9.3%	7.7%	-1.0	8.7%	7.3%	-0.9

Source: AEA.

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1991	835.1	512.7	61.4	108.0	75.2	69.6	117.0	78.5	67.1	44.3	27.4	61.8	269.2	181.0	67.2
1992	857.8	536.9	62.6	134.4	92.4	68.7	123.1	85.0	69.0	48.0	27.4	57.0	305.4	204.7	67.0
1993	867.7	538.5	62.1	140.3	97.0	69.2	112.5	79.7	70.8	55.8	32.5	58.2	308.7	209.2	67.8
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62.0	300.3	212.9	70.9
1995	900.4	591.4	65.7	130.4	98.5	75.6	114.3	83.7	73.2	62.1	39.1	63.0	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	961.0	679.1	70.7	150.3	118.5	78.8	112.1	81.6	72.8	84.0	52.3	62.3	346.4	252.4	72.9
May 99	84.2	58.8	69.8										30.3	22.5	74.5
Ann. chng	5.1%	1.8%	-2.3										0.9%	1.0%	0.1
Jan-May 99	404.8	280.9	69.4										143.0	102.7	71.8
Ann. chng	3.0%	3.2%	0.1										2.0%	2.7%	0.5

Note: US Majors = American, Alaska, Am. West, Continental, Delta, NWA, Southwest, TWA, United, USAir. **Source:** Airlines, ESG.

ICAO WORLD TRAFFIC AND ESG FORECAST

	Domestic			International			Total			Domestic growth rate		International growth rate		Total growth rate	
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK %	RPK %	ASK %	RPK %	ASK %	RPK %
1992	1,305	837	64.2	1,711	1,151	67.3	3,016	1,987	65.9	3.0	4.6	15.1	15.3	9.5	10.5
1993	1,349	855	63.3	1,785	1,205	67.5	3,135	2,060	65.7	3.4	2.0	4.4	4.8	3.9	3.6
1994	1,410	922	65.3	1,909	1,320	69.1	3,318	2,240	67.5	4.6	7.9	6.9	9.4	5.9	8.8
1995	1,468	970	66.1	2,070	1,444	69.8	3,537	2,414	68.3	4.1	5.4	8.5	9.4	6.6	7.8
1996	1,540	1,043	67.7	2,211	1,559	70.5	3,751	2,602	79.4	4.9	7.4	6.8	8.0	6.0	7.8
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
***1999**	1,733	1,196	69.0	2,557	1,814	71.0	4,290	3,009	70.2	5.9	4.3	5.3	6.1	5.5	5.4
***2000**	1,810	1,244	68.7	2,715	1,922	70.8	4,525	3,165	70.0	4.4	4.0	6.2	5.9	5.5	5.2
***2001**	1,868	1,273	68.1	2,837	1,992	70.2	4,706	3,265	69.4	3.3	2.3	4.5	3.7	4.0	3.2
***2002**	1,923	1,291	67.1	2,961	2,049	69.2	4,883	3,339	68.4	2.9	1.4	4.3	2.8	3.8	2.3
***2003**	1,973	1,353	68.6	3,093	2,187	70.7	5,066	3,540	69.9	2.6	4.8	4.5	6.7	3.7	6.0

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, July 1999.

DEMAND TRENDS (1990=100)

	Real GDP					Real exports					Real imports				
	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan
1991	99	98	101	101	104	106	99	112	104	105	99	95	113	103	97
1992	102	98	102	102	105	113	103	112	109	110	107	101	115	104	96
1993	105	100	100	101	105	117	107	106	109	112	117	104	108	101	96
1994	109	103	103	104	106	126	117	115	115	117	131	110	117	107	104
1995	111	106	105	106	107	137	126	122	123	123	141	115	124	113	119
1996	114	108	107	107	111	152	135	128	128	126	155	124	127	116	132
1997	118	112	110	109	112	172	146	142	142	138	177	135	136	123	132
1998	122	115	113	112	109	173	150	152	150	135	196	144	147	133	121
***1999**	124	116	115	115	109	179	154	159	156	140	211	150	156	141	124

Note: * = Forecast; Real = inflation adjusted. **Source:** OECD Economic Outlook, December 1998.

COST INDICES (1990=100)

	Europe						US					
	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost
1991	106	109	103	105	108	88	100	102	102	101	103	84
1992	99	103	96	119	114	80	98	100	101	107	108	75
1993	100	100	90	133	118	82	101	98	99	116	115	67
1994	100	98	87	142	123	71	98	94	101	124	125	62
1995	99	97	86	151	128	67	99	93	98	129	127	61
1996	100	101	88	155	135	80	102	94	98	129	126	72
1997	102	105	85	148	131	81	104	94	100	129	129	69
***1998**	107	105	84	151	127	71	108	96	106	127	134	61

Note: * = First-half year. European indices = weighted average of BA, Lufthansa and KLM. US indices = American, Delta, United and Southwest. Unit revenue = airline revenue per ATK. Unit operating cost = cost per ATK. Unit labour cost = salary, social charges and pension costs per ATK. Efficiency = ATKs per employee. Average labour cost = salary, social costs and pension cost per employee. Unit fuel cost = fuel expenditure and taxes per ATK.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)						Exchange rates (against US$)						LIBOR
	US	UK	Germany	France	Japan		UK	Germ.	France	Switz.	Euro**	Japan	6 month Euro-$
1990	100	100	100	100	100	**1990**	0.563	1.616	5.446	1.389	0.788	144.8	8.27%
1991	104	106	104	103	103	**1991**	0.567	1.659	5.641	1.434	0.809	134.5	5.91%
1992	107	107	109	106	105	**1992**	0.570	1.562	5.294	1.406	0.773	126.7	3.84%
1993	111	109	114	108	106	**1993**	0.666	1.653	5.662	1.477	0.854	111.2	3.36%
1994	113	109	117	110	107	**1994**	0.653	1.623	5.552	1.367	0.843	102.2	5.06%
1995	117	112	119	112	107	**1995**	0.634	1.433	4.991	1.182	0.765	94.1	6.12%
1996	120	114	121	113	107	**1996**	0.641	1.505	5.116	1.236	0.788	108.8	4.48%
1997	122	117	123	114	108	**1997**	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
1998	123	120	124	115	109	**1998**	0.603	1.759	5.898	1.450	0.896	130.8	5.51%***
***1999**	125	122	126	116	108	**Jul 1999**	0.630	1.843	6.180	1.508	0.942	116.2	5.66%***

Note: * = Forecast. **Source:** OECD Economic Outlook, December 1998. **Euro rate quoted from January 1999 onwards. 1990-1998 historical rates quote ECU. *** = $ LIBOR BBA London interbank fixing six month rate.

ESG ESTIMATES OF 1999 JET PRICES

Model	Price ($m)	Model	Price ($m)	Model	Price ($m)
717-200	28.5	**767-200**	67.7	**A318**	29.3
737-300	30.8	**767-300**	77.8	**A319**	34.4
737-400	34.4	**767-400**	92.0	**A320**	39.9
737-500	27.3	**777-200**	113.2	**A321**	49.0
737-600	30.3	**777-300**	131.4	**A330**	106.2
737-700	34.4	**MD-80**	32.9	**A340**	109.2
737-800	43.0	**MD-90**	34.4	**AVRO/BAe 146**	24.8
737-900	48.5	**MD-11**	105.1	**Canadair RJ**	17.1
747-400/+	151.7	**A300**	82.9	**EMB-145**	16.1
757-200/300	50.4	**A310**	67.2	**Do-328**	16.7

Source: ESG, July 1999.

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
ATR	-					
Airbus	Jul 16	Spanair	10 A320s, 4 A321s		3Q00+	Confirmation of previous MoU
BAe	-					
Boeing	-					
Bombardier	Jul 29	Maersk Air	3 CRJ-700s, 2 CRJ-200s	$120m		+ 3 CRJ-700 options.
Embraer	-					
Fairchild Dornier	Jul 13	Atlantic Coast AL	25 328JETs, 30 428JETs	$733m	1Q00+	+ 55 options. 428JET launch order
	Jul 7	Ozark Air Lines	2 328JETs	$25m	3Q99	

Note: Prices in US$. Only firm orders from identifiable airlines/lessors are included. MoUs/LoIs are excluded. **Source:** Manufacturers.

	Group revenue US$m	Group costs US$m	Group operating profit US$m	Group net profit US$m	Total ASK m	Total RPK m	Load factor %	Group rev. per total ASK Cents	Group costs per total ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
American*														
Oct-Dec 97	4,228	3,871	357	208	63,308.3	42,715.7	67.5	6.68	6.11	19,681	9,366.9	5,025.2	53.6	88,302
Jan-Mar 98	4,229	3,802	427	290	62,405.4	41,846.6	67.1	6.78	6.09	19,267	9,207.0	4,889.4	53.1	87,569
Apr-Jun 98	4,497	3,889	608	409	64,471.8	46,075.9	71.5	6.98	6.03	20,901	9,512.3	5,317.6	55.9	87,076
Jul-Sep 98	4,583	3,958	625	433	65,920.1	48,093.9	73.0	6.95	6.00	21,457	9,739.3	5,466.1	56.1	89,078
Oct-Dec 98	4,152	3,857	295	182	64,317.3	43,811.6	68.1	6.46	6.00	19,805	9,526.7	5,060.1	53.1	90,460
Jan-Mar 99	3,991	3,954	37	158	62,624.3	41,835.4	66.8	6.37	6.31					
Apr-Jun 99	4,528	4,120	408	268	67,313.8	47,945.9	71.2	6.73	6.12					
America West														
Oct-Dec 97	473	432	41	20	9,573.7	6,219.9	65.0	4.94	4.51	4,375	1,200.4	670.1	55.8	11,232
Jan-Mar 98	483	434	49	25	9,408.0	5,851.4	62.2	5.13	4.61	4,149	1,180.7	630.2	53.4	11,329
Apr-Jun 98	534	457	77	41	9,787.8	6,899.1	70.5	5.46	4.67	4,643	1,228.9	733.0	59.7	11,645
Jul-Sep 98	499	453	46	22	9,884.3	7,108.3	71.9	5.05	4.58	4,665	1,240.4	746.9	60.2	11,600
Oct-Dec 98	507	470	37	20	10,037.2	6,491.9	64.7	5.05	4.68	4,335	1,261.2	688.1	54.6	11,687
Jan-Mar 99	520	469	51	26	10,135.4	6,485.5	64.0	5.13	4.63	4,263				
Apr-Jun 99	570	494	76	42	10,446.0	7,204.8	69.0	5.46	4.73	4,724				
Continental														
Oct-Dec 97	1,839	1,707	132	73	28,278.6	19,400.1	68.6	6.50	6.04	10,188	3,381.1	2,140.0	63.3	37,021
Jan-Mar 98	1,854	1,704	150	81	28,199.8	19,427.5	68.9	6.57	6.04	10,072	3,372.4	2,134.4	63.3	37,998
Apr-Jun 98	2,036	1,756	280	163	29,891.1	22,007.2	73.6	6.81	5.87	11,261	3,629.6	2,399.3	66.1	39,170
Jul-Sep 98	2,116	1,973	143	73	31,609.9	24,049.4	76.1	6.69	6.24	11,655	3,801.8	2,542.9	66.9	40,082
Oct-Dec 98	1,945	1,817	128	66	30,557.4	21,273.3	69.6	6.37	5.95	10,637	3,664.5	2,339.0	63.8	41,118
Jan-Mar 99	2,056	1,896	160	84	30,938.8	22,107.0	71.5	6.65	6.13	12,174				
Apr-Jun 99	2,198	1,942	256	137	32,448.3	24,009.1	74.0	6.77	5.98	11,493				
Delta														
Oct-Dec 97	3,433	3,101	332	190	56,177.4	38,854.9	69.2	6.11	5.52	25,464	7,941.4	4,639.6	58.4	69,982
Jan-Mar 98	3,390	3,053	337	195	54,782.2	37,619.0	68.7	6.19	5.57	24,572	7,766.6	4,448.9	57.3	71,962
Apr-Jun 98	3,761	3,167	594	362	57,175.5	43,502.6	76.1	6.58	5.54	27,536	8,189.9	5,049.5	61.7	74,116
Jul-Sep 98	3,802	3,250	552	327	59,017.9	45,242.3	76.7	6.44	5.51	27,575	8,486.8	5,196.9	61.2	75,722
Oct-Dec 98	3,448	3,128	320	194	57,810.9	39,947.7	69.1	5.96	5.41	25,531	8,244.1	4,699.3	57.0	76,649
Jan-Mar 99	3,504	3,148	356	216	56,050.3	39,163.9	69.9	6.25	5.62					
Apr-Jun 99	3,957	3,315	642	364	57,957.3	43,422.1	74.9	6.83	5.72					
Northwest														
Oct-Dec 97	2,491	2,264	227	105	38,465.5	27,791.0	72.2	6.48	5.89	13,383	6,247.0	3,820.5	61.2	48,852
Jan-Mar 98	2,429	2,273	156	71	38,260.1	27,038.2	70.7	6.35	5.94	12,704	6,052.7	3,513.4	58.0	49,776
Apr-Jun 98	2,475	2,355	120	49	38,332.7	29,533.7	77.0	6.46	6.14	13,676	6,102.8	3,745.5	61.4	51,264
Jul-Sep 98	1,928	2,204	-276	-224	32,406.3	24,295.8	75.0	5.95	6.80	11,148	5,107.4	3,058.6	59.9	50,654
Oct-Dec 98	2,212	2,404	-192	-181	37,947.0	26,534.3	69.9	5.83	6.34	12,962	6,125.2	3,588.9	58.6	50,503
Jan-Mar 99	2,281	2,295	-14	-29	37,041.3	26,271.8	70.9	6.16	6.20					
Apr-Jun 99	2,597	2,333	264	120	40,541.5	30,900.2	76.2	6.41	5.75					
Southwest														
Oct-Dec 97	975	847	128	81	18,501.4	11,654.2	63.0	5.27	4.58	12,612	2,361.5	1,222.6	51.8	24,454
Jan-Mar 98	943	831	112	70	18,137.1	11,102.3	61.2	5.20	4.58	11,849	2,304.2	1,161.6	50.4	24,573
Apr-Jun 98	1,079	870	209	133	18,849.6	13,236.7	70.2	5.72	4.62	13,766	2,394.0	1,378.0	57.6	24,807
Jul-Sep 98	1,095	891	204	130	19,762.1	13,620.3	68.9	5.54	4.51	13,681	2,519.0	1,420.4	56.4	25,428
Oct-Dec 98	1,047	888	159	100	19,763.0	12,603.4	63.8	5.30	4.49	13,291	2,504.1	1,317.4	52.6	26,296
Jan-Mar 99	1,076	909	167	96	19,944.0	12,949.2	64.9	5.40	4.56	12,934				
Apr-Jun 99	1,220	966	254	158	20,836.9	15,241.7	73.1	5.85	4.64	14,817				
TWA														
Oct-Dec 97	813	812	1	-31	14,348.8	9,570.2	66.7	5.67	5.66	5,743	1,966.4	1,098.0	55.8	22,322
Jan-Mar 98	765	834	-69	-56	13,626.4	9,276.3	68.1	5.61	6.12	5,629	1,879.7	1,046.5	55.7	22,198
Apr-Jun 98	884	838	46	19	14,142.2	10,787.3	76.3	6.25	5.93	6,417	1,979.0	1,186.2	59.9	22,147
Jul-Sep 98	863	839	24	-5	14,293.8	10,531.3	73.7	6.04	5.87	6,273	1,999.7	1,150.0	57.5	21,848
Oct-Dec 98	747	813	-66	-79	13,452.4	8,731.6	64.9	5.55	6.04	5,574	1,863.7	982.8	52.7	21,321
Jan-Mar 99	764	802	-38	-22	13,352.4	9,205.2	68.9	5.72	6.01					
Apr-Jun 99	866	848	18	-6	14,274.4	11,130.9	78.0	6.07	5.94					
United														
Oct-Dec 97	4,235	4,144	91	23	68,364.7	47,419.6	69.4	6.19	6.06	20,608	10,269.1	6,023.6	58.7	91,721
Jan-Mar 98	4,055	3,932	123	61	66,393.3	44,613.0	67.2	6.11	5.92	19,316	9,987.5	5,589.7	56.0	92,581
Apr-Jun 98	4,442	3,972	470	282	69,101.7	50,152.2	72.6	6.43	5.75	21,935	10,453.0	6,202.6	59.3	94,064
Jul-Sep 98	4,783	4,088	695	425	73,913.5	56,283.7	76.1	6.47	5.53	23,933	11,255.3	6,847.4	60.8	94,270
Oct-Dec 98	4,281	4,090	191	54	70,620.9	49,484.4	70.1	6.06	5.79	21,616	10,774.4	6,182.8	57.4	94,903
Jan-Mar 99	4,160	4,014	146	78	67,994.5	46,899.8	69.0	6.12	5.90					
Apr-Jun 99	4,541	4,108	433	669	71,573.6	50,198.9	70.1	6.34	5.74					
US Airways														
Oct-Dec 97	2,085	2,015	70	479	22,662.2	15,800.1	69.7	9.20	8.89	14,178	3,066.2	1,733.2	56.5	40,865
Jan-Mar 98	2,063	1,871	192	98	22,102.1	15,257.8	69.0	9.33	8.47	13,308	2,993.8	1,669.2	55.8	40,974
Apr-Jun 98	2,297	1,923	374	194	22,818.3	17,567.1	77.0	10.07	8.43	15,302	3,107.6	1,895.9	61.0	40,846
Jul-Sep 98	2,208	1,938	270	142	23,267.3	17,639.5	75.8	9.49	8.33	15,290	3,166.1	1,898.2	60.0	40,660
Oct-Dec 98	2,121	1,943	178	104	23,318.8	16,112.3	69.1	9.10	8.33	14,202	3,171.1	1,754.5	55.3	40,664
Jan-Mar 99	2,072	1,983	89	46	22,745.8	15,405.8	67.7	9.11	8.72					
Apr-Jun 99	2,286	2,007	279	317	23,891.7	17,557.5	73.5	9.57	8.40					
ANA														
Oct-Dec 97	SIX MONTH FIGURES													
Jan-Mar 98	3,459	3,545	-86	-68	40,446.9	26,187.7	64.7	8.55	8.76	20,102				
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	3,399	3,355	44	73	42,415.9	27,404.4	64.6	8.01	7.91	21,449				
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
Cathay Pacific														
Oct-Dec 97	1,921	1,784	137	117	28,932.0	18,917.0	64.4	6.64	6.17	4,810	5,325.0	3,718.0	69.8	
Jan-Mar 98	SIX MONTH FIGURES													
Apr-Jun 98	1,677	1,682	-5	-20	28,928.0	19,237.0	66.5	5.80	5.81		5,208.0	3,481.0	66.8	
Jul-Sep 98	SIX MONTH FIGURES													
Oct-Dec 98	1,769	1,713	56	-45	31,367.0	21,173.0	67.5	5.64	5.46		5,649.0	3,847.0	68.1	
Jan-Mar 99														
Apr-Jun 99														
JAL														
Oct-Dec 97	SIX MONTH FIGURES													
Jan-Mar 98	4,279	4,344	-65	-911	56,514.7	39,012.2	69.0	7.57	7.69	15,344	8,570.8	5,628.5	65.7	
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	4,463	4,262	201	133	58,439.5	40,413.9	69.2	7.64	7.29	16,008	8,959.7	5,725.4	63.9	
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Airline group only.

	Group revenue US$m	Group costs US$m	Group operating profit US$m	Group net profit US$m	Total ASK m	Total RPK m	Load factor %	Group rev. per total ASK Cents	Group costs per total ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
Korean Air														
Oct-Dec 97	3,029	2,774	255	-234	58,246.9	40,190.3	69.0	5.20	4.76	25,580		9,737.7		17,139
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98														
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
Malaysian														
Oct-Dec 97	TWELVE MONTH FIGURES													
Jan-Mar 98	2,208	2,289	-81	-81	42,294.0	28,698.0	67.9	5.22	5.41	15,117	6,411.0			
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	860	958	-98	-11			57.2							
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
Singapore														
Oct-Dec 97	SIX MONTH FIGURES													
Jan-Mar 98	2,336	2,080	256	258	39,093.6	26,224.3	67.1	5.98	5.32	5,822	7,303.0	4,951.5	67.8	
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	2,232	2,013	219	278	41,466.2	29,456.2	71.0	5.38	4.86	6,240	7,693.4	5,225.2	67.9	
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
Thai Airways														
Oct-Dec 97	656	649	7	-661	12,144.0	7,715.0	63.5	5.40	5.34	3,800	1,712.0			
Jan-Mar 98	631	558	73	610	12,211.0	8,522.0	69.8	5.17	4.57	4,000	1,715.0			
Apr-Jun 98	586	583	3	-121	12,084.0	7,963.0	65.9	4.84	4.82		1,700.0			
Jul-Sep 98	629	584	45	176	12,118.0	8,769.0	72.4	5.19	4.82					
Oct-Dec 98	727	647	80	170	12,599.0	9,195.0	73.0	5.77	5.14					
Jan-Mar 99														
Apr-Jun 99														
Air France														
Oct-Dec 97	SIX MONTH FIGURES													
Jan-Mar 98	5,126	5,079	47	18										
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	4,982			224			76.5							
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
Alitalia														
Oct-Dec 97	5,083	4,878	205	161	50,171.4	35,992.3	71.7	10.13	9.72	24,552				18,676
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98														
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99														
BA														
Oct-Dec 97	3,580	3,436	144	110	40,059.0	26,929.0	67.2	8.94	8.58	9,837	5,618.0	3,791.0	67.5	61,144
Jan-Mar 98	3,335	3,210	125	119	39,256.0	26,476.0	67.4	8.50	8.18	9,311	5,485.0	3,642.0	66.4	60,770
Apr-Jun 98	3,783	3,497	286	217	44,030.0	31,135.0	70.7	8.59	7.94	11,409	6,174.0	4,157.0	67.3	62,938
Jul-Sep 98	4,034	3,601	433	357	46,792.0	35,543.0	76.0	8.62	7.70	12,608	6,533.0	4,630.0	70.9	64,106
Oct-Dec 98	3,585	3,431	154	-114	44,454.0	29,736.0	66.9	8.06	7.72	10,747	6,277.0	4,111.0	65.5	64,608
Jan-Mar 99	3,343	3,481	-138	-119	43,544.0	29,537.8	67.8	7.68	7.99	10,285	6,130.0	3,933.0	64.2	64,366
Apr-Jun 99														
Iberia														
Oct-Dec 97	4,168	3,900	268	126*	37,797.6	27,679.2	73.2	11.03	10.32	15,432				
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98	TWELVE MONTH FIGURES													
Oct-Dec 98					45,515.2	32,520.9	71.5			21,753				
Jan-Mar 99														
Apr-Jun 99														
KLM														
Oct-Dec 97	1,630	1,570	60	23	18,096.0	13,555.0	74.9	9.01	8.68		3,114.0	2,414.0	77.5	35,092
Jan-Mar 98	1,538	1,568	-30	528	17,595.0	13,240.0	75.2	8.74	8.91		2,995.0	2,259.0	75.4	33,227
Apr-Jun 98	1,702	1,572	130	105	18,600.0	14,290.0	76.8	9.15	8.45		3,177.0	2,365.0	74.4	35,666
Jul-Sep 98	1,865	1,675	190	121	19,363.0	15,984.0	82.6	9.63	8.65		3,359.0	2,583.0	76.9	33,586
Oct-Dec 98	1,673	1,661	12	-15	18,476.0	13,767.0	74.5	9.05	8.99		3,214.0	2,415.0	75.1	33,761
Jan-Mar 99	1,550	1,670	-120	-45	17,716.0	13,294.0	75.0	8.75	9.43		3,088.0	2,284.0	74.0	33,892
Apr-Jun 99														
Lufthansa* **														
Oct-Dec 97	3,989	3,566	423	384*	30,209.0	21,691.0	71.8	13.20	11.80	10,839	5,457.0	3,919.0	71.8	59,630
Jan-Mar 98	2,902	2,860	42	223	23,742.0	16,236.0	68.4	12.22	12.05	8,778	4,618.0	3,171.0	68.7	54,849
Apr-Jun 98	3,507	3,081	426	289	26,132.0	19,489.0	74.6	13.42	11.79	10,631	5,078.0	3,575.0	70.4	54,556
Jul-Sep 98	3,528	3,167	361	198	26,929.0	20,681.0	76.8	13.10	11.76	11,198	5,231.0	3,748.0	71.6	54,695
Oct-Dec 98	2,929	2,106	823	96	25,530.0	18,259.0	71.5	11.47	8.25	9,819	5,204.0	3,676.0	70.6	55,368
Jan-Mar 99	3,301	3,210	91	64	25,445.0	17,942.0	70.5	12.97	12.62	9,658	4,972.0	3,435.0	69.1	56,420
Apr-Jun 99														
SAS														
Oct-Dec 97	1,334	1,204	130	63*	7,771.0	4,940.0	63.6	17.17	15.49	5,211				28,716
Jan-Mar 98	1,184	1,077	106	76*	7,761.0	4,628.0	59.6	15.25	13.88	4,863				24,722
Apr-Jun 98	1,323	1,149	174	107*	7,546.0	5,260.0	69.7	17.53	15.23	5,449				25,174
Jul-Sep 98	1,283	1,152	131	127*	8,283.0	5,843.0	70.5	15.49	13.91	5,714				26,553
Oct-Dec 98	1,368	1,266	102	46*	8,116.0	5,089.0	62.7	16.86	15.60	5,431				27,071
Jan-Mar 99	1,203	1,227	-24	-3*	8,062.0	4,713.0	58.5	14.92	15.22	5,017				27,110
Apr-Jun 99														
Swissair**														
Oct-Dec 97	2,084	1,946	138	147	18,934.8	13,770.8	72.7	11.01	10.28	6,352	3,536.4	2,538.1	71.8	10,132
Jan-Mar 98	SIX MONTH FIGURES													
Apr-Jun 98	1,907	1,780	127	86	18,983.8	13,138.7	70.5	10.05	9.38					9,756
Jul-Sep 98	SIX MONTH FIGURES													
Oct-Dec 98	2,187	2,070	117	165										10,396
Jan-Mar 99														
Apr-Jun 99														

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Pre-tax. **SAirLines' figures apart from net profit, which is SAirGroup. ***Excludes Condor from 1998 onwards. 4Q+ data are on IAS basis.

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