Aviation Strategy

Issue No: 21 July 1999

Repercussions of the Air France/Delta alliance

So Air France has made its decision and opted for Delta as its long-term partner (for ten years at least), as predicted with uncanny accuracy in the April edition of *Aviation Strategy.* This removes one uncertainty from the global alliance scene and creates new ones.

Starting with Air France itself - its relatively fast move to ally itself with the number two carrier on the Atlantic and to drop Continental is perhaps indicative of a new commercial approach following part-privatisation. An interesting question now is: will the alliance precipitate its full privatisation, or at least the sale of a majority of the shares? This may well be the stipulation that the regulatory authorities in Brussels and Washington will require for allowing the two airlines to gradually proceed to an immunised alliance. Air France was apparently willing to consider this trade in order to get into the Wings alliance, a move that would have raised greater antitrust opposition.

Air France plus Delta is essentially an Atlantic alliance (as is Wings, despite Northwest's strong position in the Pacific market), and it is unlikely that it will develop into a global alliance in the foreseeable future simply because both airlines are going to have to concentrate all their resources on making it work.

Delta's record in this regard is not all that hot: it failed with the Frankfurt operation it bought from Pan Am in the early 1990s and its relationship with Swissair was frequently strained.

But with Air France, Delta may have found its natural position in Europe. With American at London and United at Frankfurt the logical airport for the other of the US's big three would have had to be Paris. CDG 2 is the alliance's single biggest asset, but (c*ontinued on page 2*)

ALLIANCE SHARES ON INTERCONTINENTAL ROUTES

% of 1999 ASKs	North Atlantic	Europe-Asia	Pacific
oneworld	24%	17%	17%
Star	18%	20%	19%
Wings	15%	5%	11%
Air France/Delta	14%	6%	3%
Swissair/Sabena	4%	3%	0%
Others	25%	49%	50%
TOTAL	**100%**	**100%**	**100%**

ALLIANCE SHARES ON INTERNAL ROUTES

% of 1999 ASKs	Intra-Europe		Domestic US
oneworld	25%	**American**	18%
Star	23%	**United**	18%
Wings	16%	**Continental + Northwest**	17%
Air France	9%	**Delta**	18%
Qualiflyer	15%	**US Airways**	9%
Others	12%	**Others**	20%
TOTAL	**100%**	**TOTAL**	**100%**

Note: *oneworld = BA, AA, Cathay, Canadian, Qantas, Iberia, Finnair, Air Liberte, Go, Deutsche BA; Star = Lufthansa, United, SIA, Thai, SAS, Condor, BM; Wings = KLM, Alitalia, Continental, Northwest, Braathens, KLM uk, Eurowings; Qualiflyer = Swissair, Sabena, Austrian, Crossair, TAP, THY.*
Sources: *BACK data, Credit Indosuez Cheuvreux, ESG.*

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the problem is that Air France's intra-European network is only 9% of total intra-European scheduled capacity, much smaller than all four of the other groupings. Moreover, it hard to think of a well-positioned, non-allied carrier that Air France could invest in to boost its market share (with one possible exception - see below).

This alliance will be an interesting mix of Gallic and southern good ol' boy cultures. It will also bring together Air France's militant unions with Deltas largely non-unionised (17%) workforce. However, Fred Reid, formerly head of Lufthansa's passenger business, has arrived at Delta with the reputation for structuring win-win alliances.

Sabena plus American

SAirGroup's reaction to the alliance announcement was admirable. Non-committal at first, it then announced that it was selling its 4% stake in Delta (a residue from the Global Excellence days). This would have raised about $370m, $220m of which was immediately used to secure a 20% stake in South African Airways, snatching SAA from under the nose of Lufthansa and SIA.

At roughly the same time Swissair confirmed plans to codeshare with American on flights between American's key Chicago, Boston and Miami destinations and the Swissair and Sabena hubs of Zurich and Brussels. In effect, all the DL codes on the joint services will be replaced with AAs, and it is inevitable that Dallas will replace Atlanta as a hub destination.

This development potentially provides American with a continental European hub at Brussels linking into Sabena's four-wave system there. This could possibly cause some friction within oneworld - for instance, when marketing Milan-Chicago, will American be selling MIL-BRU-CHI in co-operation with Sabena or MIL-LON-CHI in conjunction with BA, or both?

This development makes it more worthwhile for BA to bring Swissair into the oneworld group, which would imply some form of co-ordination of the oneworld and the Qualiflyer strategies. SAirGroup's strategy is centred around merging certain key activities of the member airlines like ground handling, catering, etc, and achieving economies of scale. These activities also generally produce higher rates of return than the airline operation. Would SAirGroup ever consider outsourcing Swissair to BA? After all, the profile of Swissair's passengers fits perfectly into BA's strategy of concentrating all efforts on serving business passengers. But this would probably be a bit too radical.

Another slightly worrying development for BA is that British Midland has relinquished the AA code on its flights. This is being interpreted as a prelude to an IPO or an outright purchase by SAS (or Lufthansa) of the 51% of the carrier that SAS doesn't own, placing the second largest operator at Heathrow firmly in the Star alliance. A more remote possibility is that Air France/Delta might try to seize the opportunity to bolster their intra-European network, even though they would probably have to pay well over the top to get SAS to sell its stake.

Boeing is bouncing back

The downturn in the aviation cycle was well illustrated at the Paris Air Show in mid-June by the fact that Boeing and Airbus both used the show for the first time to unveil their bullish long-term view of the market, the ones where they point to upwards of 15,000 jets needed by the world over the next 20 years (see pages 4-6).

The reason both chose to do this (did they confer? Is that allowed?) is that orders are relatively thin on the ground and neither had much to crow about. So far this year Airbus seems to be in the lead bagging orders, although of course Boeing's sales of jets rolling out its hangars is still about double the level of those being made at Toulouse.

But Boeing nabbed the cheekiest sale of the show when it announced that it was selling some 777s to Singapore to replace some earlier A340s SIA has already ordered. Boeing was so keen to recover ground with this key customer (it lost out when SIA ordered the upcoming A340-500/600s instead of 777s) that is has agreed to take the A340s off the carrier's

Aviation Strategy is published 12 times a year by *Aviation Economics* on the first of each month

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ISSN 1463-9254

hands. This raises the delicious prospect of Boeing salesmen selling Airbuses at some point.

But this cheek is typical of the mood of rising confidence back in Seattle these days after a disastrous couple of years. The contrast between Boeing and Airbus at Paris could not have been more striking - Boeing is coming back and Airbus is still at odds with itself over becoming a real company.

At the last Paris gathering two years ago, Boeing Commercial Airplane Group was in denial about the problems building up in its factories. Its bombastic boss Ron Woodard boasted about the huge orders he was landing, while ignoring the fact that his suppliers could not keep up. By the end of that summer the story was out, and Boeing had to halt its lines. Last September at Farnborough Harry Stonecipher, Boeing corporation president, stood in for the fired Mr Woodard. He wore sackcloth and ashes, apologising to customers right left and centre.

Two years later ... a different story

This time in Paris, Boeing Commercial's new boss, Alan Mulally, was rolling out figures to demonstrate how the company was getting back on track. By the end of this year his payroll will have shrunk by 34,000 since its peak last year; overtime is already down from the 25% needed to cope with the production backlog to an acceptable 9% today. Aircraft output is rising from 564 last year to 620 this year. Boeing's margins are still well short of the 7/8% which Mulally is targeting, but they are improving.

The Seattle company's problem is that it is trying to repair margins over the next couple of years just as the throughput starts to go down in line with the order downturn. As Boeing indicated last December, this will knock some $10bn off revenues and hurt profits down the line. But these headline numbers will only distract attention from the underlying improvement, which Airbus would be foolish to ignore.

It won't, if its director Noel Forgeard has anything to do with it. At the show he repeated the mantra that has been heard several times since last November. The consortium's biggest danger is that its success in landing orders leads to complacency, he said. Asked whether he would resign if the partners did not quickly re-start talks on converting Airbus into a single corporate entity (SCE), he replied with a Gallic shrug and bit of Descartian logic-juggling: "I say I will not resign because, no, it will not happen that way". As he always insists, it cannot not happen. Decode all that and it is clear he is increasingly fed up with not being able to run Airbus properly as a true private-sector company and he will be off soon if nothing happens.

His greatest hope was the privatisation of Aerospatiale, as Aerospatiale-Matra would trigger a change of attitude there, removing the last obstacle to the SCE. But Yves Michot, boss of Aerospatiale Matra, was still chuntering on about Airbus being essentially "an industrial project" and the conversion being merely a "legal technicality".

Forgeard disagrees: he sees proper centralised management leading to better supply chain control, lower inventories and higher stock turns, which could yield savings of more than $1bn a year. The way Boeing is going, he will soon need them if he is to sell any aircraft at a profit. Besides Boeing's cost-cutting, the SIA deal shows that its is remaining aggressive on prices and deals.

BAe's stiff upper lip

The biggest laugh of the show was Aerospatiale-Matra and British Aerospace pretending they were not upset at Dasa, part of DaimlerChrysler, buying Casa of Spain, thus making it the dominant partner in Airbus Industrie with 42.1%.

Dasa boss Manfred Bischoff confirmed shortly afterwards that Dasa was probably going to be floated off. Meanwhile British Aerospace and the French group are whispering in corners about getting together to counter-balance the Germans. *Plus ca change ...*

Manufacturers agree to disagree on demand for large aircraft

Boeing and Airbus unveiled their latest market forecasts at the Paris Air Show, and not surprisingly agreed to disagree on the most contentious part of the jet market - demand for large capacity aircraft.

Although *Aviation Strategy* is sceptical about the worth of market forecasts from parties with much to gain from what the figures say (i.e. the manufacturers), it is nevertheless interesting to note the similarities and differences between Boeing and Airbus's latest analyses.

Firstly, though, a word or warning. Direct comparisons between the two forecasts can be misleading since, interestingly, the two define the jet market in different ways. For example, Boeing includes 50-seat regional jets (such as the Embraer 145) but Airbus only includes 70-seaters upwards. Boeing excludes Russian aircraft such as the Tu-134, Tu-154, Yak-42, IL-62 and IL86, while Airbus includes them. There are many other differences as well, but it would take most of this article to list them.

Perhaps most irritating of all, the manufacturers do not give out precise breakdowns of their forecast by all aircraft, as the tables on these pages show (and these forecasts are presented exactly as released by the manufacturers). So Airbus, for example, lumps all aircraft in each seat category other than those named in an "other" total. Boeing is an even worse offender, as it lumps all aircraft together in seat categories, and gives no individual numbers at all. At least the two manufacturers are now considering the same period (1999-2018) - this didn't use to be the case!

BOEING 1999 CURRENT MARKET OUTLOOK

	Fleet 1998	Deliveries 1998-2018	Retirements 1998-2018	Fleet 2018
Single-aisle				
50-106 seats (F28/70/100; BAC1-11 BAe 146/RJ70/85/100; DC-9-10; 717-200; Canadair RJ/BRJX; Emb 135/145/170/190; Fairchild 528/728/928)	1,231	4,116	437	4,910
107-120 seats (737-1/2/5/600; DC-9 MD-87; Caravelle; Concorde, A318)	2,258	1,326	1,400	2,184
121-170 seats (737-3/4/7/800; 720; A319 MD-81/82/83/88; 727-200; A320; Trident-3; Mercure; MD-90; DC-8-10/20)	4,446	6,450	1,490	9,406
171-240 seats (737-900; 757; A321 707-300B/C; DC-8-3/4/5/6/70)	1,295	2,912	453	3,754
Intermediate twin-aisle				
230-310 seats (767; A300; A310; A330-200)	1,292	2,090	73	3,309
311-399 seats (777-2/300; A330-300; A340; L-1011; DC-10; MD-11)	1,035	2,323	173	3,185
Large (747; 747X; A3XX)	1,021	933	280	1,674
TOTAL FLEET	**12,578**	**20,150**	**4,306**	**28,422**

The forecasts

Airbus's 1999 *Global Market Forecast* forecast (which can also be seen on the Internet via www.airbus.com) can be summarised as follows:

- The passenger jet fleet will grow from 9,993 in 1998 to 18,020 in 2018, and the dedicated freighter fleet will grow from 1,453 aircraft to 3,422.
- Over the period 8,907 passenger aircraft will have to be "replaced". Of these, 3,252 will be "recycled" back into the active fleet with other operators and 2,305 converted into freighters. 3,350 passenger aircraft will be retired, along with 1,086 old freighters.
- 15,518 new aircraft will be delivered over 1999-2018, worth approximately $1.29 trillion in 1999 prices.
- The average number of seats per passenger aircraft will rise from 180 in 1998 to 218 be the end of 2018.

Boeing's 1999 *Current Market Outlook* (available on www.boeing.com) can be summarised as:

- The total jet fleet (passenger and freight) will increase from 12,578 in 1998 to 28,422 in

2018. The proportion of regional aircraft (50-106-seaters) will rise from 10% to 17%.
• Over the period 4,306 aircraft will be retired.
• 20,150 new aircraft will be delivered over 1999-2018, worth $1.38 trillion in 1998 prices. 4,116 of these will be regional aircraft.

Differences on large aircraft

The area where the two manufacturers are most divergent in their views is very large aircraft. Quite simply, Airbus believes there is a substantial market (and that's why it is developing the A3XX), and Boeing doesn't. Boeing can justify its viewpoint by empirical observations. Because of the fragmentation of long-haul markets and the popularity of twin-jets, the average size of aircraft in the global fleet has actually been declining over the past ten years. Airbus essentially is saying that this trend has to come to end at some point largely because of the constraints on

AIRBUS 1999 GLOBAL MARKET FORECAST

	Fleet 1998	Deliveries 1998-2018	Replacements 1998-2018	Fleet 2018		Fleet 1998	Deliveries 1998-2018	Replacements 1998-2018	Fleet 2018
Avro 70	17	0	17	0	**767-200**	109	0	109	0
F28	113	0	113	0	**767-200ER**	102	10	92	20
F70	36	0	26	10	**A310-200**	56	0	56	0
RJ700	0	25	0	25	**A310-300**	95	1	86	10
Tu-134	3	0	3	0	**Other 210-seaters**	0	1,849	0	1,849
Other 70-seaters	0	385	0	385	**767-300**	97	8	95	10
Avro 85	54	18	31	41	**767-300ER**	351	59	278	132
BAC1-11	11	0	11	0	**A300**	96	0	96	0
DC-9	52	0	52	0	**A300-600**	46	0	46	0
Other 85-seaters	0	379	0	379	**A300-600R**	145	1	139	7
717	0	115	0	115	**A340-200**	14	0	11	3
737-100	4	0	4	0	**Other 250-seaters**	0	1,411	0	1,411
Avro 100	45	13	23	35	**747SP**	19	0	19	0
BAe 146	122	0	122	0	**767-400ER**	0	54	0	54
Concorde	13	0	0	13	**777-200ER**	96	197	48	245
DC-9-30	385	0	385	0	**A330-200**	11	89	5	95
DC-9-40	40	0	40	0	**A340-300**	119	53	91	81
F-100	237	0	221	16	**A340-500**	0	16	0	16
Other 100-seaters	0	1,136	0	1,136	**DC-10**	209	0	209	0
737-200	663	0	663	0	**L-1011**	83	0	83	0
737-300	996	21	869	148	**MD-11**	110	0	93	17
737-500	373	2	287	88	**MD-11C**	9	0	9	0
737-600	8	125	0	133	**Other 300-seaters**	0	972	0	972
A319-100	117	428	41	504	**747-200**	198	0	198	0
DC-9-50	94	0	94	0	**747-300**	77	0	77	0
MD-80	725	0	723	2	**777-200**	66	12	47	31
MD-80-83	239	26	224	41	**A330-300**	74	67	73	68
Yak-42	8	0	6	2	**IL-86**	3	0	3	0
Other 125-seaters	0	1,763	0	1,763	**MD-11ER**	2	0	0	2
707	1	0	1	0	**Other 350-seaters**	0	688	0	688
727	594	0	594	0	**747-100**	28	0	28	0
737-400	437	9	407	39	**747-400**	411	87	373	125
737-700	78	310	15	373	**777-300**	10	34	17	27
A320-100	23	0	23	0	**A340-600**	0	36	0	36
A320-200	634	406	536	504	**Other 400-seaters**	0	728	0	728
MD-80-88	157	0	147	10	**747SR & D**	48	0	48	0
MD-90	93	16	57	52	**Other 500-seaters**	0	560	0	560
Tu-154	45	0	45	0	**600-seaters**	0	372	0	372
Other 150-seaters	0	2,475	0	2,475	**800-seats**	0	228	0	228
737-800	55	429	12	472	**1,000-seaters**	0	48	0	48
737-900	0	40	0	40	**Pax. aircraft**	**9,993**	**18,020**	**8,907**	**19,106**
757-200	720	111	603	228					
757-300	0	17	0	17	**Cargo aircraft**	**1,453**	**3,055**	**1,086**	**3,422**
A321-100	80	35	68	47					
A321-200	29	106	10	125	**TOTAL ACFT.**	**11,446**	**21,075**	**9,993**	**22,528**
IL-62	8	0	5	3					
Other 175-seaters	0	2,050	0	2,050					

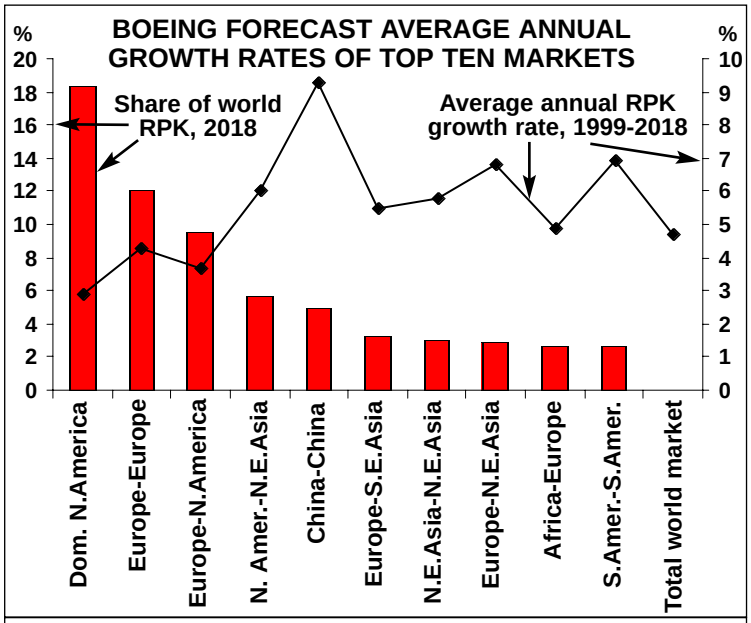
Note: *Of the 21,075 "deliveries", 15,518 are new aircraft, 3,252 are recycled aircraft & 2,305 are freighter conversions.*

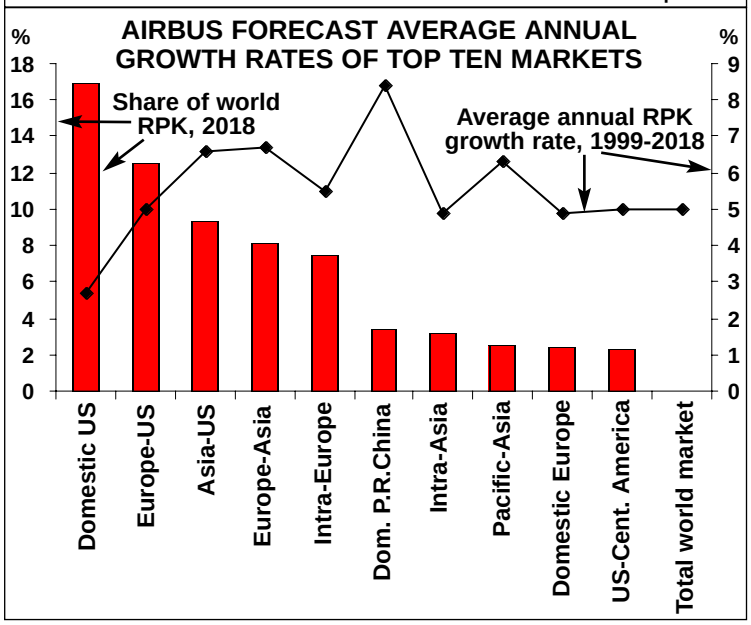
airport capacity, and at that point the only way of meeting demand on trunk intercontinental routes will be with the new super-jumbos.

Airbus reckons there will be demand for 1,924 aircraft of 400 seats or more over 1999-2018 (and a whopping 1,256 aircraft of 500 seats or more).

Boeing on the other hand believes there will be demand for just 933 aircraft of 400 seat size and above over the same time period. 1,924 versus 933 aircraft is a massive difference, but the accuracy of these forecasts is crucial, as in effect Airbus will be betting the company if it decides to develop an A3XX family (which would cost an estimated $12bn).

If Airbus goes ahead with its new models and its forecast is right, then Boeing may become a permanent number two in the jet market and would be very unlikely to catch up. If Airbus is wrong, then the mistake may be fatal to the consortium/SCE. A launch decision for the A3XX is expected in the second half of 2000, depending on commitments from potential customers.





The traffic outlooks

Taking a step back, and looking at the manufacturers' forecast traffic demand (where all aircraft figures are, theoretically, derived from), there are again significant differences in methodologies. However, they can be overcome to some extent by focussing on RPK growth over the total time period concerned (1999-2018).

The graphs on the left include a comparison between Boeing and Airbus's traffic forecasts by region. Although there are some differences in regional definitions (e.g. Airbus divides out the US and Canada while Boeing doesn't, and Boeing divides Asia into smaller regions, while Airbus doesn't), a consistent pattern emerges.

Domestic North America will remain the largest market in the world over 1999-2018, but it is mature and has the lowest growth rate of the top 10 markets. On the other hand, the domestic Chinese market will be the fastest-growing over the next 20 years, with an average annual growth rate of 9.3% according to Boeing and 8.4% according to Airbus. This will make it the fifth or sixth most important market in the world by 2018. Other fast-emerging markets are Intra-South America (see pages 7-9), and between Asia and Europe/North America.

Overall, the two RPK growth forecasts are remarkably consistent. Boeing estimates average annual RPK growth of 4.7% over 1999-2018, and Airbus has a rate of 4.6%. Here at least the two jet manufacturers are in agreement - after all, a global growth rate of around 5% p.a. is a tenet of faith in this industry.

Latin America - who will succeed?

Last month *Aviation Strategy* looked in detail at the alliances that are taking place both between Latin American and US airlines and also among the Latin American carriers. This follow-up article takes an overview of the Latin American market and the prospects for the airlines serving it.

Since 1990, when American Airlines bought Eastern's Latin American routes for $400m, the face of Latin American aviation has changed dramatically. American's entry coincided with the adoption of democracy and the free market system from Mexico to Argentina. Traffic between the US and South America has doubled in the intervening years, and it has evolved into one of the world's fastest-growing commercial airline markets.

The total US-Latin America and Caribbean market has grown from 26m to 36m passengers in 1990-97, and the US carriers' market share has gone from just under 59% to 63% (and in the US-South America market from 43% to 53%). This has become the most exciting commercial aviation market in the world - for the past three years more US citizens have travelled between the US and Latin America than between the US and Europe.

1998 was admittedly a difficult year. The final numbers for 1998 are not yet available, but during the first 10 months total traffic grew by only 5.7%. But this is still a vibrant number compared to, say, domestic US traffic, and it is clear that the region's various financial crises did not impact passenger volumes in anything like the way that the Asian crisis reversed passenger growth there.

Again, US carriers continued their market share growth by stealing four percentage points in 1998. As Delta and others expanded aggressively they added 21% to capacity, depressing yields in many markets and contributing to the financial crises at several Latin American airlines.

But US-Latin American traffic is only half the story. A recent study carried out by *AvMan* showed that 80% of all Latin American commercial aircraft landings and take-offs never touched the US - in other words, the activity was entirely within the region.

The deregulatory process

While all of Central America has "Open Skies" with the US, so far only Peru in South America has signed up to such an agreement, though Chile will follow soon. Argentina has agreed to Open Skies by 2003 but talks have recently fallen apart over the timetable. Colombia, Venezuela, Ecuador, Bolivia, Paraguay and Uruguay are all denoted as Category 2 or 3 - which means the national carriers cannot add capacity to the US, because of safety and security concerns. While that situation exists, Open Skies with the US would be suicidal.

Within the region, the five nations of the Andean Pact (Colombia, Venezuela, Ecuador, Peru and Bolivia) signed Open Skies for their airlines in 1994, since when traffic within the region has exploded. Mercosur (Argentina, Brazil, Paraguay, Uruguay, Bolivia and Chile) has moved in that direction with the December 1997 Fortaleza Agreement, a form of Open Skies allowing airlines in the region to fly any route not included in the individual bilateral.

Most countries have introduced some form of deregulation/liberalisation domestically, from Mexico to Argentina. Argentina, Peru and Venezuela have also liberalised foreign ownership, and Peru has experimented with cabotage for foreign carriers.

Alliances and consolidation

Latin America has been going through both deregulation and privatisation, which has opened up new commercial opportunities at the same time as traumatising some of the incumbents. As Enrique Cueto of LanChile stated recently: "To attract adequate financing, airlines must operate in a liberalised environ-

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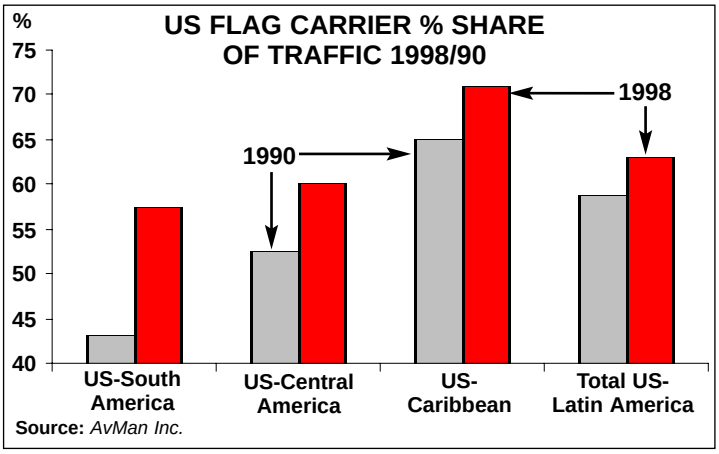
ment". The only problem is surviving long enough.

All the Latin American flag carriers are now privately controlled, although governments retain minority positions in AeroPeru, Aerolineas, LAB, Ecuatoriana and others. Unlike in Europe, some flag carriers have been allowed to go bankrupt - e.g. Viasa in Venezuela and Air Panama. But there has also been some tacit support for others that got into trouble. Varig has just has its balance sheet strengthened through the swapping of government liabilities for equity, and Transbrasil has received similar treatment.

There is scope for more equity investments from US Majors. Continental is a high-profile player at the moment, though it pulled out at the last minute from its 49% investment in AeroPeru, apparently because the government refused to place a six-month moratorium on new start-ups. Last year Continental also pulled out of a 19% investment in Colombian carrier ACES after it seemed the deal was settled. Now Continental is looking at the largest Colombian carrier, Avianca - which is the only major airline in the region without an alliance partner (its codeshare with American never having been approved) - and at ASERCA, which has just acquired 70% of Air Aruba, and at Grupo TACA (which has backed another Peruvian start-up, TransAm).

ACES, meanwhile, continues to seek equity from American, Delta or United. American is interested in Aeropostal and maybe in LanChile in order to consolidate its Southern Cone position as part of an agreement involving Aerolineas. Delta and United might decide to take a position in the CINTRA IPO later this year and end up with equity in Aeromexico and Mexicana respectively. Delta is also supposed to be a potential investor in Transbrasil.



At this point, one question needs to be raised - will consolidation and failure of national carriers bring a reaction from the regulators to re-regulate, and will we see a spate of new government-backed airlines?

It's not likely throughout the region, but we are seeing examples in Ecuador (where the air force-backed TAME is now flying international routes and has announced that it wants to serve the US) and Peru (where TAN, another air force-backed airline, has announced that it is looking to acquire 737s). Certainly the potential for near-monopolies exist and this could generate consumer backlash - something we are beginning to see in the US.

A future trend may well be for Latin carriers to form holding companies - owned by the carriers and other investors - in order to generate economies of scale and generate critical mass, enabling them to negotiate from strength. A second step in this might be public offerings within the region and possibly on Wall Street. CINTRA in Mexico has already proved that bringing two major airlines in that country under the direction of a holding company can produce excellent results within, if not outside, the home country. And TAM Group in Brazil is a form of holding company that has worked extremely well in the region.

Another important force in Latin American aviation is presented by the latest wave of start-ups. For example, Southern Winds in Argentina has recently fallen out of a strategic alliance with Aerolineas, but is rapidly adding 50-seater CRJs to its fleet and is opening up new routes in the southern part of the country. It doesn't necessarily discount forming other alliances, but by opening up routes not served by any airline it is stimulating and creating its own market in the same way that Southwest has.

AVANT in Chile, which recently acquired National Airlines (another domestic start-up), is owned by Turbus, a major bus company which has some interesting potential for combining bus and air and reaching hundreds of small communities with low cost transportation.

LAPA, (Lineas Aereas Privadas Argentinas), a 737 operation in Argentina, has carved out more than 30% of the domestic market and is planning to start US service (to Atlanta) later this summer. LAPA has demonstrated that frequency and price stimulation work and it is the launch South America customer for the 737-700.

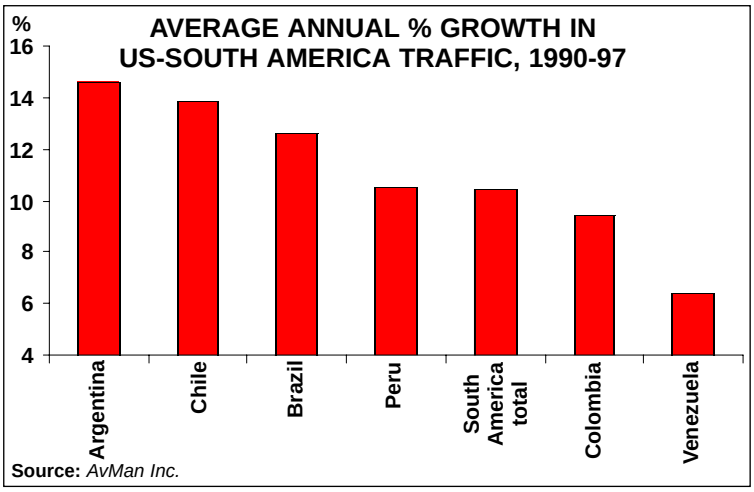
Survival/success/failure

There are three kinds of airlines that will survive and may prosper. The first of these are those airlines with a strong US and/or global equity partner, which are also able to form regional alliances. Examples include:

• Varig, a member of the Star alliance, which has not sold an equity stake but is talking to Lufthansa about it;
• Aerolineas Argentinas and LanChile, which are likely to have a regional cross border equity relationship as well as a major partnership with American;
• COPA, because of its equity relationship with Continental and potential for participating eventually in the Continental/ Northwest/KLM partnership;
• Grupo TACA, which although it has not yet announced an equity investment by a US Major, is a very likely candidate and may join Aerolineas as an equity partner of American, or COPA as an equity partner of Continental; and
• On the cargo side, Colombia's TAMPA and its equity partner Martinair is an example of the type of cross-border equity arrangement that could succeed in this sector.

The second type are airlines that have a strong management team and proven track record, as well as codeshare and/or other alliances with one of the US or European Majors - but without any equity (as yet). Examples are:

• ACES in Colombia, which has a codeshare agreement with Continental and has been looking for an equity investor;
• Aeropostal Alas de Venezuela, the born-again Venezuelan carrier that has agreements in place with Delta, Air France and (subject to government approval) with American;
• TAM Group in Brazil, which has a codeshare with American and has proven that it can be profitable in the worst of times in its core market, Brazil and Mercosur;
• Transbrasil, which has a codeshare alliance with Delta and has shown signs of a real turnaround during the past 12 months; and
• BWIA (which has just reported a $9m net profit in 1998, the first in its 50-year history) and Air Jamaica (yet to produce a profit, but the airline has a strong presence and a young management team that is doing a lot of things right) in the Caribbean, especially if they get together and form a regional holding company or other partnership and are successful in finding marketing and/or equity partners.



The third kind consists of the niche carriers with recognised strong management, which have developed a strong market presence at home without relying on an alliance partnership with any one - but which are strong candidates to sign one because of their strength in domestic and regional markets. Examples include:

• AVANT in Chile;
• AeroRepublica in Colombia;
• LAPA and Southern Winds in Argentina; and
• Air Caribbean in Trinidad & Tobago.

As for potential failures, all carriers are potentially at risk in such a competitive environment, but Lloyd Aero Boliviano and Ecuatoriana - both under VASP management - are obvious candidates, as is AeroPeru after the failure of the Continental deal. One observation is worth making - absentee owner-managers don't work, as witnessed by Iberia's investments in VIASA and Aerolineas Argentinas, and Aeromexico/Delta's investment in AeroPeru.

American Trans Air - the next US Major

After overextending itself with scheduled service expansion and turning loss-making three years ago, American Trans Air (ATA), the largest charter carrier in the US, recovered quickly and is now reporting record profits. It is on the verge of attaining "Major" carrier status with $1bn-plus revenues this year. How will ATA balance the opportunities available in the scheduled, commercial charter and military sectors to consolidate profitability?

ATA is a rare survivor among the older-established US carriers trying to make a living in the charter business. Founded in 1973 by its present chairman J. George Mikelsons, the Indianapolis-based carrier initially provided air services for Ambassadair travel club, utilising 720s and later 707s. In 1981, following deregulation, ATA was certified as a common air carrier and began providing capacity for tour operators.

The company grew rapidly in the 1980s, establishing itself as the nation's largest passenger charter operator, venturing into scheduled services and building up a sizeable military charter business. The annual operating revenues of Amtran Inc, a holding company formed in 1984, almost doubled to $422m between 1988 and 1992.

In early 1993 Mikelsons took Amtran public, raising $37.3m in an IPO that reduced his ownership to 75%, gave employees a stake, attracted many institutions and listed the company on NASDAQ. The debut was not well-timed as, during a general downturn of industry stocks, Amtran's share price plummeted from the $16 offer price to a low of $6 in 1994, but since then the stock has been a decent performer.

AMTRAN FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/notes
727-200	24	0	No plans to retire 727 fleet
757-200	9	3	Two in 2H99, one in June 2000
L-1011-50/100	14	0	
L-1011-500	2	3	Two in 3Q99, one in 4Q99
TOTAL	**49**	**6**	

After an unbroken profit record through the 1980s, Amtran reported marginal $2m net losses in both 1990 and 1992. But, rather exceptionally among the large US carriers, it reported a $5.6m net profit for 1991. Its ability to weather the recession so well was in large part due to the military business generated by the Gulf war.

But in 1996 ATA succumbed to the ills affecting the US low-cost airline sector generally - increased price competition from the major carriers or their low-cost subsidiaries in the East and higher fuel prices, followed by a sharp reduction in demand in the wake of the ValuJet crash and grounding. The situation was aggravated by rapid growth - ATA was adding capacity at a year-over-year rate of 30% just as demand collapsed. As a result, Amtran reported $36m and $27m operating and net losses respectively for 1996.

The company was able to recover because of its quick response to the crisis. In August 1996 Mikelsons ceded the role of CEO to Stanley Pace, a management consultant who had worked on Continental's successful turnaround. Pace implemented a modest downsizing, which included pulling out of many scheduled markets, disposing of seven 757s, cutting the workforce by 15% and improving on-time performance and customer service.

Although Stanley Pace stepped down after only nine months on the job (the current CEO/president is John P. Tague, with Mikelsons retaining the role of chairman), the good work had been done. Amtran turned itself around in 1997, reporting an operating profit of $13.5m and marginal net earnings of $1.5m.

Amtran celebrated its silver anniversary year with record operating and net profits of $75.4m and $40.1m respectively, on revenues of $919m, in 1998. For the first time, its profit margins (8.2% and 4.4%) were getting close to the lower end of the range reported by the major carriers.

The first quarter of this year saw record earnings for the fifth consecutive reporting period: a $16.5m net profit, representing 5.9% of revenues. This prompted Amtran's board to authorise the repurchase of 600,000 shares to enhance shareholder value, following an earlier programme covering 250,000 shares.

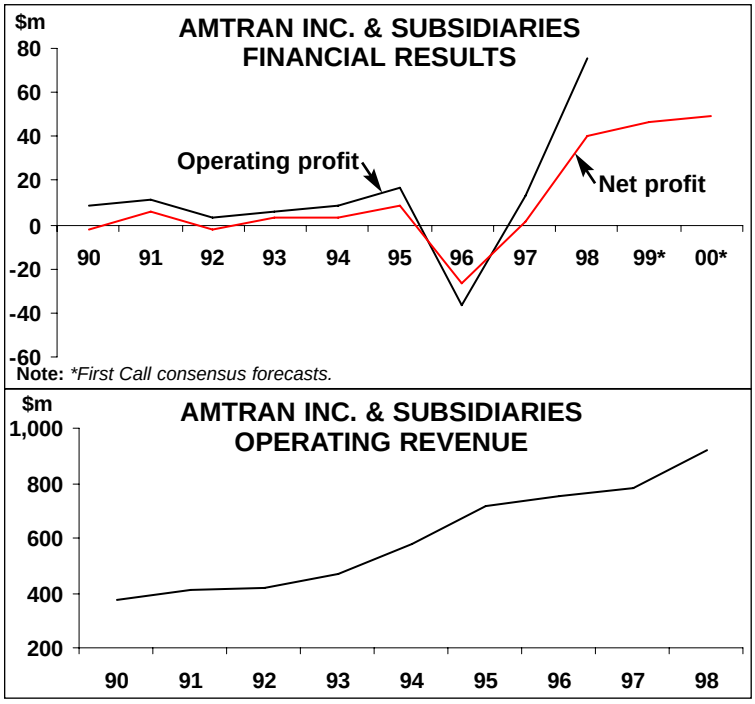
All of this has been reflected in Amtran's share price, which began to rise rapidly in early 1998. The price neared the $30-mark in July 1998 but then declined in line with the airline industry trend. This year has again seen steady improvement, to about $24 in late June.

Amtran's stock performance has, of course, been helped by Wall Street's sudden interest in the company. It is hard to understand why analysts took so long to start covering the nation's 11th largest and fairly consistently profitable carrier. This may have been because of the old-fashioned and risky image of an operator that relies on the charter segment and may not have the right product to succeed in the scheduled business.

But the record first-quarter 1998 profits changed all that. Companies like Salomon Smith Barney and Morgan Stanley Dean Witter initiated coverage of Amtran early last year, with ratings such as "buy" and "outperform". SSB considered that the carrier was "finally ready to show positive earnings momentum". The four brokers reporting on Amtran to First Call still rate it as a "buy" and predict that earnings will rise by 11% to $3.41 per diluted share in 1999 and by another 6% in 2000.

Diversified revenue base, low cost structure

Like Tower Air and other US charter operators, ATA enjoys much flexibility in that it is able to switch capacity between commercial and military charters - and to some extent between charter and scheduled operations - as market conditions dictate. Charters can be used to test new markets before scheduled service is introduced. Currently 52% of Amtran's revenues come from scheduled services, while commercial and military charters account for about 26% and 12% respectively.



Unlike the new crop of low-cost carriers such as AirTran and Frontier, which have gone upmarket with separate business class products in an effort to improve their image in the post-ValuJet era, ATA has retained a very clear identity as a carrier focusing on the leisure segment. This is because of its determination to keep costs low. Its reputation as an old-established operator with a perfect safety record obviously helps. Like Southwest, ATA has always performed its own maintenance - at facilities at its main hubs in Indianapolis and Chicago-Midway - and even operates a centre training maintenance technicians.

The aim has always been to provide leisure travellers what they need: low-cost and convenient air service with few restrictions. However, recent expansion into higher-yield markets has prompted the carrier to start evaluating product enhancements, such as separate check-in and preferred seating for business travellers, that would not add substantially to costs.

Extremely low unit costs are a major advantage, which ATA has managed to retain despite scheduled expansion and rapid growth generally. In 1998 its operating costs per ASM, at 6.1 cents, were the lowest among the large US carriers. The rather alarming

9.3% surge in unit costs in the March 1999 quarter was attributed to the inclusion of two newly-acquired tour operators that do the bulk of their business in the winter period.

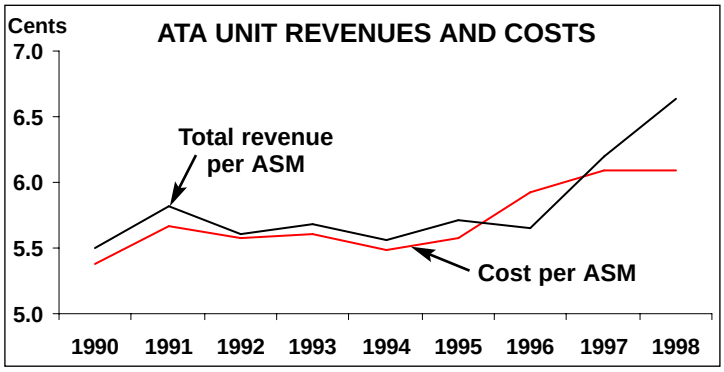
ATA also benefits from excellent labour relations. In late 1996 it secured a favourable four-year contract with its pilots and flight engineers. Although current negotiations with the flight attendants - whose contract became amendable at the end of last year - are proving tough, there is no sign of any labour unrest.

The past year has seen substantial improvements on the revenue side thanks to a better pricing environment and efforts to reduce seasonality. In 1998, when unit costs remained flat (attributed to an improved budgeting process as crew training and labour costs rose sharply), scheduled service yield and unit revenues surged by 7.4% and 9.9% respectively. A new revenue management system is expected to improve scheduled service unit revenues by 2-3% next year.

The Amtran empire

Another factor that differentiates Amtran from the 1990s low-cost new entrants is that a whole host of support companies have been gathered under the holding company umbrella. The older-established subsidiaries include ATA Vacations, ATA Training, ATA Air Freight (cargo sales and marketing) and American Trans Air ExecuJet (business aviation). Recent months have seen the addition of Chicago Express (feeder carrier), Amber Air Freight and two Detroit tour operators - all were existing partners and some were already partially owned by Amtran.

The Amber Air Freight transaction involved Amtran increasing its stake from 50% to 100% in the company that markets its belly-hold cargo and mail capacity. Amber has been very successful, experiencing strong profit growth in recent years, and is expected to earn $13m revenues and contribute $6m in pre-tax profits this year.



In late May Amtran completed the acquisition of Chicago Express, which has been its feeder partner at Chicago-Midway since 1996. The commuter carrier operates Jetstream 31s, linking ATA's hub with points such as Grand Rapids and Lansing in Michigan, Des Moines in Iowa, Dayton in Ohio and Madison in Wisconsin. The plan is to grow the business with service to more secondary cities, and utilising larger aircraft is currently under consideration.

Charter versus scheduled

After the initial Indianapolis-Ft. Myers flights in 1986, ATA began to expand its scheduled service rapidly in the early 1990s. Between 1990 and 1995, that segment grew from just 7% to about 50% of Amtran's total revenues, as a substantial network was built from the Indianapolis and Chicago-Midway hubs, as well as from Milwaukee and Boston, to Florida, the Caribbean, the West Coast and Hawaii.

However, the new services yielded disappointing results. The rapid pace of expansion caused unit costs to soar and aggravated competitors, while the product on offer was not up to scratch. The ValuJet effect was the last straw, and in late 1996 ATA pulled out of many scheduled markets in favour of refocusing on the core charter business. This involved eliminating all scheduled service from Boston (to various Florida cities) and on five other routes to Florida and the Caribbean.

The carrier retained profitable scheduled routes, all of which then originated from its two Midwest hubs. This was generally regarded as a smart move as Indianapolis and Chicago-Midway are important leisure and business markets but do not capture the attention of the major carriers like Boston does. Serving common destinations from those cities also allows operating synergies. Consequently, scheduled expansion resumed almost immediately.

Over the past two years the strategy has been, first, to continue to build leisure-oriented operations from the Midwest. ATA has substantially increased service to the West Coast and Florida, returned to Jamaica on a seasonal basis and added Mexico and Puerto Rico to the network.

Second, the carrier has ventured into key business markets such as New York (JFK and LaGuardia), Dallas (DFW), Denver and Philadelphia. This is a new strategy but not really that risky as ATA is not stepping on the major carriers' toes by operating out of Midway. The three-per-day Midway-Philadelphia service that began in May provides the only non-stop connection in that market.

Third, after testing the transatlantic market with charters for three years, this summer ATA has launched seasonal scheduled service from JFK to Shannon, Dublin and Belfast, with same-aircraft originating service from Midway and Los Angeles. In another move to utilise new hubs outside the Midwest as opportunities arise, San Juan has been linked with separate services from JFK and Ft. Lauderdale.

Thanks to scheduled expansion, last year ATA was able to report a profit in the fourth quarter for only the second time in the company's history. Expansion in that sector will therefore continue and scheduled revenues are expected to reach $600m this year. However, ATA will not follow the example of Sun Country, the nation's second largest charter carrier, which totally revised its strategy by becoming a scheduled operator in June (it is now challenging Northwest in its key markets out of Minneapolis). ATA's commercial charter division, which is run fairly separately from the scheduled division, will continue to grow as well.

Like Tower Air, the nation's third largest charter operator, ATA anticipates strong growth in military charter revenues. It has long been the largest civilian provider of passenger airlift for the US military - a role that has made it less sensitive to the vagaries of the economic cycle. The Yugoslav conflict has provided a major boost to ATA's military revenues, which are expected to double to $125m this year. Citing an overall strategy of "significantly improving our presence in the military market", which will be facilitated by the addition of longer-range L-1011-500s, Amtran expects its military revenues to grow by 60% to $200m next year.

Fleet and financing plans

ATA's current 49-strong fleet consists of 24 727-200s, nine 757-200s and 16 L-1011s. The 727-200s were added in 1993 as 727-100 replacements, and there are currently no plans to replace the bulk of that fleet.

The 757 was introduced in 1989, when an opportunity came to acquire good-quality aircraft from SIA, and the type is used primarily in scheduled service. Two additional 757-200s are due to join the fleet this autumn and a third, which is expected to replace an existing 727-200, in June next year. This will give ATA a fleet of 11 757s.

The main charter workhorse in ATA's fleet is the Lockheed L-1011, which has been utilised since 1985. Earlier this year the carrier introduced to service the first two of five longer-range L-1011-500s acquired from Royal Jordanian last year. The third aircraft is expected this month (July) and the fourth and fifth by year-end.

The L-1011-500s are a welcome addition to the charter business, which has apparently been short of capacity for over a year. The type will enable ATA to serve more destinations around the world on a non-stop basis. The carrier said recently that the commercial and military charter contracts already secured have effectively "sold out" the 500s and that further fleet expansion may be considered in 2000.

Virtually all of the L-1011 fleet is owned, as are two of the 757s and nine 727s - the latter because they were taken off operating lease over the past year or so. In December 1998 Amtran raised $125m in senior unsecured debt to purchase and modify the -500s and one 727 and subsequently also secured a new four-year $75m bank credit facility. In August 1998 the company had to shelve a planned equity offering of 3.7m common shares due to unfavourable market conditions, but the debt issue and continued strong financial performance have meant that those plans will not be revived this year.

By Heini Nuutinen

THY and the delights of privatisation

THY (Turk Hava Yollari), the Turkish national airline, is located on the edge of Europe and has also been on the edge of a privatisation for the past five years. It has succeeded in joining the Qualiflyer alliance but the actions of the Turkish government have not been very helpful.

THY has been one of the fastest growing of the AEA carriers, doubling its capacity over the past five years and carrying more than 11m passengers in 1998. The Turkish economy has also grown at rates twice that of the main European economies (albeit from a much lower base and at the expense of very high inflation).

THY's financial results have been unexciting (see graphs, right). In 1998 it made a marginal loss at the operating level (the equivalent of US$8m) but was able to report a $15m net profit mainly because of exchange rate gains. InvestA, an Istanbul-based stockbrokerage, forecasts roughly the same results for 1999.

THY and the PA

Currently 1.8% of THY's stock is quoted on the Istanbul stock exchange, and the other 98.2% is owned by the Privatisation Authority (PA), the government body charged with selling off state companies. With such a small float, stockmarket capitalisations are almost always misleading, but for the record THY was being valued at the equivalent of US$1.9bn at the end of June.

There have been various false starts with the THY privatisation during the 1990s, but the latest strategy is to find a trade investor for about 30% of the airline prior to an IPO. Credit Suisse First Boston has been appointed as global co-ordinator for the sale, and the PA circulated another tender to ten investment banks for additional advisory work.

THY's management has to refer all strategic decisions to the PA and cannot make any significant change without the authority's permission. Relations between THY and the PA have not been particularly smooth, and there are two main areas of contention.

First, the Privatisation Authority has frozen THY's full participation in Qualiflyer and put on hold various plans including a joint cargo operation and a joint regional airline operation with Swissair. The logic behind this action is that THY cannot be allowed to enter into a major alliance during the pre-privatisation process as this would deter bids from other trade investors.

Second, THY has a socio-political role to play, which the PA is supposed to help subsidise. THY is obliged to provide services to cities in the southeast of the country that are under a state of emergency because of the Kurdish separatist movement. On these routes - officially referred to as the OHAL routes - THY has to offer 50% fares to government officials and their families and then is supposed to recover the other 50% from the PA.

The PA, however, does not have the cash available and has told THY to track down the money in the various ministries whose officials use the flights. But before THY can even begin to do this it needs official approval from the state planning organisation, which so far has not acted. Turkish bureaucracy is evidently a challenge. Yet the sums involved are significant - the receiv-

THY FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/notes
727-200	1	0	
727-200F	3	0	
737-400	26	0	To be returned to lessors by 2004
737-500	2	0	
737-800	11	15 (23)	5 in 1999, 7 in 2000, 1 in 2001, 2 in 002
A310-200	7	0	
A310-300	7	0	
A340-300	6	1	Delivery in 1999
BAe 146/RJ100	9	0	
BAe 146/RJ70	4	0	
TOTAL	**76**	**16 (23)**	Average current fleet age = 7 years

able is estimated as at least $21m, nearly one and half times THY's reported net profit in 1998.

Domestic operations

THY has a monopoly in the domestic market of over 6m passengers a year, achieves a load factor in excess of 75% and is able to set fares on a monthly basis in US Dollar terms on the trunk routes. Despite all this THY says that it makes a serious loss on these operations.

The reason is the mix of uncommercial routes - not just the OHAL routes - with some that must be profitable or indeed very profitable. According to the airline, there are six profitable routes in THY's domestic network - from Istanbul to Ankara, Antalya, Bodrum, Dalaman, Gaziantep and Izmir.

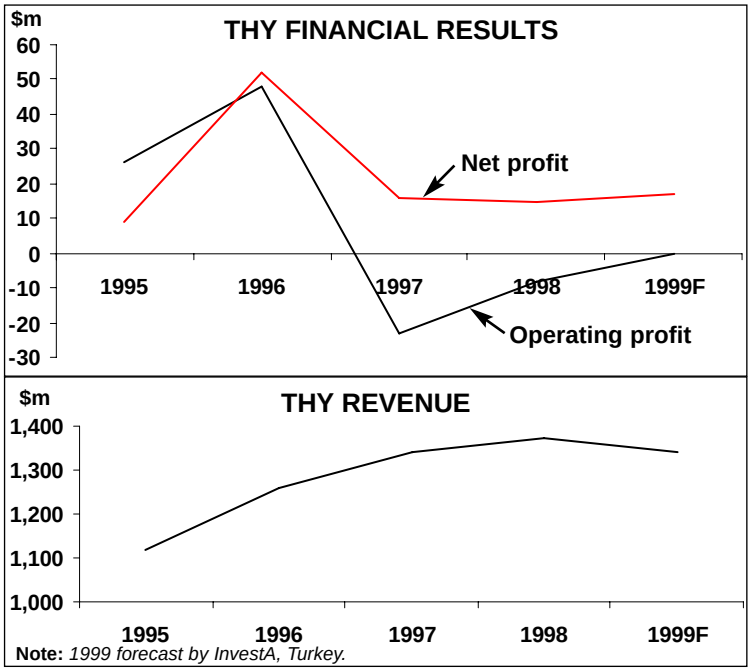
Prior to the PA's intervention THY's strategy for the domestic market was based on spinning off these operations (except for Istanbul-Ankara) to a subsidiary, which was to have been based at Ankara. The subsidiary would have operated all the other domestic routes, buying services like reservations, passenger handling and maintenance from the parent.

The main shareholders in this domestic airline were to have been Crossair, the Swissair-owned regional carrier, and Park Express, a start-up that had ordered five Avro RJ100s and was headed by a former chairman of THY. Unfortunately, in March this new regional airline had to postpone the start-up of its operations for about 12 months because government loans that it was expecting failed to materialise as state lending was curtailed before the national election in April.

Nevertheless, it is clear that THY needs a specialist, lower cost airline to cover its domestic operations. The alternative is for a new private enterprise to take all or part of them over. TURSAB, the local travel agencies association, has announced that it is considering establishing a company to bid for the domestic franchise.

The Turkish influence zone

When it is finally set up, the subsidiary airline will probably also take over some international operations, in particular those to central Asia. The collapse of the Soviet Union has greatly widened Turkey's zone of economic and political interests. Newly independent countries like Turkmenistan, Kazakhstan and Kirgizistan have substantial historical, cultural and Turkic language links.



Note: *1999 forecast by InvestA, Turkey.*

These countries also have oil and gas reserves but they remain painfully poor and economic recovery from the Soviet planning system is going to be a long process. It is unlikely that THY is able to justify its fairly extensive network to these countries on commercial grounds, but these services could be fulfilled by a specialist subsidiary.

THY owns 50% of KTHY, the airline of northern, Turkish-occupied Cyprus. As well as posing some very delicate political questions, KTHY is a also a financial mess. THY took over KTHY's management in 1997 and acquired its 50% stake by converting receivables into equity. It is still owed another $25m.

The European holiday market

Turkey as a holiday destination has in recent years grown in popularity while Spain and Greece have stagnated. The total market in 1998 is estimated at about 9m, a doubling over the past five years. But the country's prox-

imity to the Middle East, its links with the Balkans and the repercussions from the Kurdish conflict means that it is very vulnerable to short-term fluctuations in demand.

The market is highly seasonal - THY carries about 3m passengers annually in the European market, but it has twice as many passengers in the third quarter of the year as it does in the first quarter. The main traffic flows are to/from Germany, both for tourism and for VFR (there is a huge Turkish gastenarbeiter population in Germany), though tourism from the UK and France has been growing quickly.

So THY faces the problems of competing as a scheduled carrier, albeit a relatively low cost one, against northern European charters - LTU, Hapag, Britannia, Monarch, etc. - which are fully adapted to seasonality and whose cost structures are extremely low.

In addition, there is a substantial Turkish-based charter airline sector. Seven airlines operate some 50 passenger jets ranging from 737s to A300s. This is roughly the same capacity as THY's own medium-haul fleet, although two of these carriers are joint ventures with THY - KTHY and Sun Express, which is 40% owned by Condor, Lufthansa's charter subsidiary. As a result, THY's share of international traffic is only around 21%, compared to 35% for other Turkish airlines and 44% for foreign carriers.

OTHER TURKISH AIRLINES

	Current fleet	Orders (options)	Delivery/retirement schedule/notes
Air Alfa			
A300B4	3	0	
A321	2	1	Delivery in 1999
Anatolia			
A300B4	3	0	
727-100	1	0	
Istanbul Airlines			
737-300	3	0	
737-400	9	0	
737-800	1	0	
Kibris (KTHY)			
727	4	0	
A310	1	0	
Onur Air			
A300	2	0	
A320	1	0	
A321	1	0	
MD80	5	0	
Pegasus Airlines			
737-400	8	0	
737-800	1	0	
Sun Express			
737-300	3	0	
737-400	2	0	
737-800	0	5	Delivery in 2000
TOTAL	**50**	**6**	

THY will inevitably face more competition in this market as the charters increasingly operate as semi-scheduled airlines, transporting tourists whose requirements no longer fit neatly into the standard two-week, one location packages, and providing regular low-cost links for the overseas Turkish population. And in order to compete for higher-yielding business traffic THY has to attempt to match the product offered by the main European scheduled airlines.

In this regard THY's acceptance into Qualiflyer was a major achievement for the Turkish flag-carrier. It has been given credibility through its codesharing and joint flight arrangement with Swissair on Istanbul to Zurich and Geneva, and with Austrian on Istanbul-Vienna. Moreover, participation in the alliance-wide FFP means that it should be able to capture a reasonable share of the Turkish business market.

The full benefits of the Qualiflyer alliance will come from the planned co-ordination of the partner airlines' sales and marketing networks, essential for the reform of THY's rather unwieldy distribution system. Cost savings are also expected from the consolidation of the member airlines' ground handling services. However, as noted above, full activation of the alliance has been put on hold.

Before THY can play a proper hubbing role within Qualiflyer (or another of the alliances) major infrastructural improvements will have to be made. An additional terminal and a third runway are being built at Istanbul Ataturk airport, and construction of a new airport at Istanbul is due to start soon and should be completed in 2002. The competitive airport threat in the region comes from the all-new Athens Spata airport, which will open in 2001 or 2002.

The long-hauls

From an outside perspective it is difficult to assess THY's long-haul network. It operates a fleet of six A340-300s, with another one to be

delivered in the next 12 months, on long, thin routes to which they should be ideally suited. But both its load factors and its utilisations (61.3% and 13.2 block hours/day in 1997) are low by AEA standards.

This productivity would make it very difficult for THY to break even on its long-haul operations as low revenue plus high finance costs would normally outweigh low operating expense. This is despite the fact that THY's flying crew costs are well below European scheduled norms - for example, cockpit crew salaries are about a third of the AEA average and crew utilisation is about 10% above.

However, the long-haul network is an unusual mixture of destinations - New York, Chicago, Johannesburg, Capetown, Bangkok, Singapore, Karachi, Tokyo, Shanghai and Beijing. Some of these routes have been selected for political reasons - for example, the Chinese services, started in June, are designed to foster Turkey-PRC relations and are unlikely to be commercially viable.

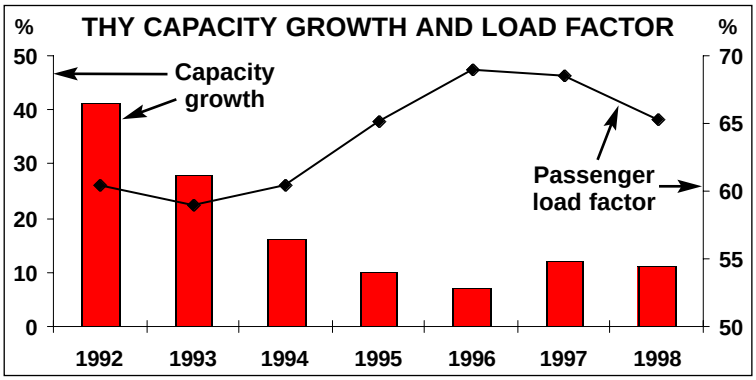
THY's challenge on the long-hauls is to achieve better loads and to push up yield - which means getting into a global alliance so that its does not lose business passengers to competitors who can provide smoother connections and the vital FFP miles. THY has made a breakthrough here, establishing a codeshare with JAL, but the North Atlantic market looks problematic.

Delta would have been the obvious partner as it is the only US carrier to operate from New York to Istanbul and so some form of joint service would have been possible. Also, THY's expansion plans include a service to Atlanta. However, in the wake of the Delta/Air France alliance, Swissair's relationship with Delta is in jeopardy and this in turn has negative repercussions for the other Qualiflyer members, including THY.

Fleet plans

THY's fleet plans revolve around the replacement of its 26-unit 737-400 fleet with 26 new generation 737-800s. Eleven have already been delivered and most of the rest will be taken over the next 12 months, while 19 of the -400s will be returned to their lessors.

Including the two A340s (one just delivered, the other due in 2000), THY's total expenditure



on new equipment amounts to around $1bn. Eximbank credits cover 85% of the 737-800 order.

The concern for THY is whether the continuing depreciation of the Lira, which has lost 90% of its value against the US Dollar over the past five years, will result in an escalation in its financial charges. THY, however, points out that it is naturally hedged against this development as some 83% of its revenues are in Dollars, Euros or other hard currencies.

Outlook

THY's management must feel somewhat frustrated by the block on full activation of its Qualiflyer membership. Also, Swissair is by far the most likely candidate to take equity given its recent spending pattern. Nevertheless, THY could market itself effectively to the leading European airlines in the other alliances.

Lufthansa already has an ownership link through Condor and Sun Express, and might be willing to contemplate an investment in THY given the strong economic links between the two countries and the volume of the VFR traffic. A renovated and expanded Istanbul airport could fit into British Airways'/ oneworld's strategy of developing different types of hubs for different purposes throughout Europe. Athens' Spata might seem to be the first choice given the new Speedwing management contract at Olympic, but many obstacles have to be overcome before that airline is turned around. Finally, Air France might be interested in THY simply because of a shortage of other candidates to join its new alliance with Delta, and, as mentioned above, Delta would probably be the best US partner for THY.

The sources of labour discontent

The last few years have been a relatively affluent period for airlines in North America and Europe. But they have also been characterised by union militancy with disruptive and expensive strikes at Northwest, American, British Airways and Air Canada in addition to the airlines where labour unrest is expected, such as Iberia, Alitalia and Air France. It would seem that many airline unions - particularly pilots unions, whose members are well-educated and internationally-minded - simply do not feel they have a communion of interest with airline managements.

On the other side, airline managers frequently appear oblivious to the causes of this disaffection, and hence are heavy-handed in face-to-face negotiations. There is plenty of evidence to suggest that in recent management/labour disputes, negotiations have been allowed to break down too quickly and that airlines have lost more in strike or sickout costs than the original cost saving that they were hoping to extract from labour.

Why is labour conflict so endemic in this industry?

Part of the reason lies in the cyclicality of the airline industry. For successful airlines the best time to start cutting costs is before the peak of the cycle has been reached, in preparation for more difficult times (and before labour supply/demand trends strengthen the union position). This is what British Airways' management attempted to do two years ago, but their actions instead provoked a strike and caused widespread disgruntlement in the process.

From the unions' perspective, this timing could not be less "fair". Their members are being asked for sacrifices when profits are booming and investors are receiving good returns. From the investors' perspective, if management fails to address labour cost issues then they bear all the pain in a downturn whereas employees, initially at least, will be unaffected.

Explaining the importance of enhancing shareholder value is a very difficult message to get across to employees - even when they themselves own stock - but many airline managers don't even bother to make the effort.

The complexity of union contracts is another source of friction and conflict. Negotiations are rarely just about pay; they also involve complicated work rules and conditions. If unions feel that they have lost out on the pay side of negotiations - which managements tend to emphasise because it's those numbers that end up in the headlines - there will be the potential for a series of disputes over the implementation of work rules, which can be hideously detailed and, unless meticulously drafted, open to various interpretations.

Unions also tend to suspect - often with justification - that management will be employing all its ingenuity to find ways around the agreement. This appears to be at the core of American Airlines' pilots dispute over the purchase of Reno Air and its possible development as a low-cost subsidiary.

Corporate limbo

Pilots and flight attendants live in a sort of corporate limbo. They are, of course, employees but their only regular contacts with the airline management are when they log on and off from flying duty. They are not really involved in the day-to-day business of the airline.

This curious alienation has an important effect on the collective mindset. Information among pilots and flight attendants has traditionally been disseminated via the unions. And now the Internet has accelerated this

flow of information and allowed almost instantaneous exchange of opinion among geographically-dispersed groups through websites and bulletin boards.

Some observers think that the Internet has added to the volatility of union actions. For example, just before the infamous American sickout earlier this year there was frenetic activity on APA's website.

However, dominating everything from an airline union's perspective is the principle of seniority, a system which is unique to the aviation business. Seniority directly affects two paramount issues - pay and work schedule - and frequently means that the interests of the employees are directly opposed to company strategies such as alliances, rationalisation and outsourcing.

Explaining seniority

The following explanation of seniority comes from The Newfoundland Group, which, despite its name, is a consultancy based in Dallas. It consists of current Southwest pilots who specialise in mediating between investor and union interests in airlines.

In aviation, all employee groups, except headquarters personnel, are based entirely on seniority lists. When a new person is hired he or she is placed at the bottom of the list. As the company grows, he or she moves up the list as new people are hired. But merit and job performance have absolutely no effect on the employee's position in the seniority ladder, even over a career of 30 years - the only way there is movement is if someone retires above or people are added below.

Everything is decided from the seniority list, and pay is based on years of experience. The person at the top of the list also chooses his or her work schedule first, the number two person chooses next and so on. Employees working 6am-3pm shifts on Monday through Friday face lighter loads and primarily business people. More junior employees, working 3pm-12 midnight Friday through Tuesday, have to deal with the leisure travellers, who are much more difficult. Most aviation schedules are based on lots of overtime, which is distributed by seniority, and all vacations are also divvied out by the same methodology.

Within the pilot ranks, seniority magnifies pay issues because Captains are often paid 50% more than experienced First Officers and up to seven times more than the newest pilot joining the company. Pilots move from the right seat (First Officers) to the left seat (Captains) based entirely on internal growth.

So the life of the aviation worker is affected more by internal growth than profits (although consistent unprofitability will eventually affect workers in a really big way). This is one of the reasons labour consistently reacts so negatively to alliances, mergers and buy-outs. They want internal growth, not a stronger, larger network.

When a company is contracting, seniority can be most harmful to the highest wage earners - pilots. Pilots are highly trained at accomplishing one task - flying an aircraft. A pilot is poorly trained to transfer those skills to any other profession. When a pilot lands another flying job, he or she starts at the bottom - seniority cuts both ways.

Downsizing is inevitably bad for the employee, and downsizing without a transferable job skill is worse. Downsizing at an older age, without a transferable job skill, is the toughest. Pilots feel they are potential candidates for the second and third categories.

Solutions?

This review has attempted to explain why there is so much potential for labour conflict in the airline industry. Unfortunately, it is evident that there are no simple solutions. Employee share ownership schemes help to converge the perceived interests of unions, management and investors, but they certainly do not guarantee labour harmony.

The management qualities needed to avoid damaging labour disputes are very difficult to categorise objectively, but they do include consistency and openness - and these attributes have to be embodied in the CEO and/or chairman of the airline.

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
Apr 99	16.8	10.4	62.2	17.8	13.5	75.6	11.0	8.2	74.1	40.3	29.4	73.0	59.8	41.7	69.8
Ann. chng	8.6%	1.1%	-4.6	13.9%	13.4%	-0.4	-1.8%	0.2%	1.4	9.6%	7.1%	-1.7	9.2%	5.5%	-2.4
Jan-Apr 99	62.5	37.0	59.2	64.6	46.5	72.0	43.9	33.1	75.5	153.8	112.2	72.9	227.2	156.3	68.8
Ann. chng	6.3%	4.8%	-0.8	14.2%	13.5%	-0.5	-1.3%	1.4%	2.0	9.4%	7.9%	-1.0	8.7%	7.6%	-0.7

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
Apr 99	82.1	60.0	71.9										28.8	20.9	72.6
Ann. chng	4.0%	3.1%	-0.6										1.3%	2.5%	0.8
Jan-Apr 99	320.6	222.1	69.3										112.7	80.2	71.2
Ann. chng	2.5%	3.6%	0.8										2.3%	3.2%	0.7

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	1,300	840	64.6	1,711	1,149	67.2	3,011	1,989	66.1	2.7	5.0	15.0	15.2	9.4	10.7
1993	1,347	856	63.6	1,790	1,209	67.5	3,137	2,065	65.8	3.6	1.9	4.6	5.2	4.2	3.8
1994	1,403	924	65.8	1,930	1,326	68.7	3,333	2,250	67.5	4.2	7.9	7.8	9.7	6.3	9.0
1995	1,477	980	66.3	2,044	1,424	69.7	3,521	2,404	68.3	5.3	6.1	5.9	7.4	5.6	6.9
1996	1,526	1,046	68.6	2,163	1,537	71.1	3,689	2,583	70.0	3.3	6.7	5.8	7.9	4.8	7.4
1997	1,617	1,102	68.2	2,387	1,704	71.4	4,004	2,807	70.1	4.6	5.5	7.6	9.1	6.4	7.7
***1998**	1,624	1,122	69.1	2,470	1,751	70.9	4,094	2,873	70.2	0.4	1.8	3.5	2.7	2.3	2.4
***1999**	1,675	1,155	69.0	2,586	1,833	70.9	4,261	2,988	70.1	3.2	3.0	4.7	4.7	4.1	4.0
***2000**	1,738	1,194	68.7	2,729	1,930	70.7	4,467	3,124	69.9	3.7	3.3	5.5	5.3	4.8	4.5
***2001**	1,791	1,218	68.0	2,857	2,004	70.1	4,648	3,222	69.3	3.1	2.0	4.7	3.8	4.0	3.1
***2002**	1,806	1,210	67.0	2,916	2,015	69.1	4,722	3,225	68.3	0.8	-0.7	2.1	0.6	1.6	0.1
***2003**	1,857	1,273	68.5	3,066	2,165	70.6	4,923	3,437	69.8	2.9	5.2	5.1	7.4	4.3	6.6

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, January/February 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	**Jun 1999**	0.632	1.886	6.324	1.542	0.964	121.2	5.38%***

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.

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
ATR	Jun 15	Eurowings	5 ATR 42-500s	$68m	1Q00	
Airbus	Jun 16	ILFC	30 A318s, 15 A319s, 2 A320s, 10 A321s		02+	PW6000s for A318s
	Jun 16	Airlanka	3 A330-200s		3Q00+	
	Jun 15	SALE	20 A320s, 3 A321s		01-08	
	Jun 14	debis AirFinance	10 A319s, 15 A320s, 5 A321s		03+	Flexibility on A320 family selection
BAe	-					
Boeing	Jun 18	Singapore AL	10 777-200ERs	$1.9bn		From options
	Jun 17	Southwest AL	6 737-700s		00-01	
	Jun 17	TAROM	4 737-700s, 4 737-800s		4Q00+	
	Jun 17	Lauda Air	1 767-300ER		4Q00	
	Jun 17	Delta AL	6 737-800s, 1 757-200 2 767-300ERs			From options
	Jun 17	Hapag-Lloyd	1 737-800		2Q00	From option
	Jun 15	Korean Air	2 747-400Fs		2Q00	
	Jun 14	Jet Airways	10 737-800s	$550m	01-03	
	Jun 14	Midway Airlines	15 737-700s		00+	+ 10 options
	Jun 14	The CIT Group	10 737NGs		2Q01-03	
	May 28	Transavia Airlines	4 737-800s		00-02	+ 12 options
Bombardier	Jun 14	Horizon Air	15 Dash-8Q400s	$321m	3Q00-3Q01	+ 15 options
	Jun 14	SAS Commuter	2 Dash-8Q400s	$47m	3Q99+	
Embraer	Jun 16	InterCanadian AL	6 ERJ-145s	$230m	4Q99+	+ 6 options for ERJ-135/145s
	Jun 15	Proteus Airlines	8 ERJ-145s, 5 ERJ-135s		4Q99+	+ 5 options for ERJ-135s
	Jun 15	Regional Airlines	10 ERJ-170s	$350m	2H02+	+ 5 options
	Jun 15	KLM exel	3 ERJ-145s		1Q00+	+ 2 options
	Jun 15	Rheintalflug	2 ERJ-145s			+ 3 options for ERJ-135s
	Jun 15	Alitalia Express	6 ERJ-145s			+ 10 options
	Jun 14	Crossair	15 ERJ-145s, 30 ERJ-170s, 30 ERJ-190-200s	$4.9bn	4Q02+ 2Q04+	+ 25 options for ERJ-135/145s + 100 options for ERJ-170/190-200s
	Jun 12	Skyways	2 ERJ-145s			
Fairchild Dornier	-					

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*														
Jul-Sep 97	4,377	3,868	509	323	65,093.0	46,943.3	72.1	6.72	5.94	21,343	9,637.3	5,406.0	56.1	87,793
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	4,491	3,885	606	409	64,471.8	46,075.9	71.5	6.97	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					
America West														
Jul-Sep 97	462	425	37	18	9,623.6	6,779.9	70.5	4.80	4.42	4,692	1,205.8	724.3	60.1	11,506
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				
Continental														
Jul-Sep 97	1,890	1,683	207	110	28,462.1	20,982.1	73.7	6.64	5.91	10,822	3,331.3	2,206.5	66.2	35,630
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				
Delta														
Jul-Sep 97	3,552	3,121	431	254	57,424.7	42,783.2	74.5	6.19	5.43	26,478	8,112.8	4,946.2	61.0	69,502
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	3,760	3,165	595	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					
Northwest														
Jul-Sep 97	2,801	2,298	504	290	41,491.3	32,231.1	77.7	6.75	5.54	14,743	6,587.3	4,189.3	63.6	47,843
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	2,476	2,356	120	49	38,332.7	29,533.7	77.0	6.46	6.15	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					
Southwest														
Jul-Sep 97	997	845	152	93	18,494.3	12,176.9	65.8	5.39	4.57	13,019	2,362.1	1,274.1	53.9	24,273
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				
TWA														
Jul-Sep 97	908	845	64	6	15,922.4	11,447.0	71.9	5.70	5.31	6,324	2,209.2	1,284.2	58.1	22,539
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					
United														
Jul-Sep 97	4,640	4,077	563	579	71,375.4	53,721.0	75.3	6.50	5.71	22,641	10,566.8	6,561.1	62.1	90,324
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					
US Airways														
Jul-Sep 97	2,115	2,032	83	187	24,070.3	17,668.5	73.4	8.19	7.83	15,080	3,245.5	1,918.0	59.1	42,159
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					
ANA														
Jul-Sep 97	3,928	3,829	99	50	39,702.7	25,742.0	64.8	9.89	9.65	20,730				
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														
Cathay Pacific														
Jul-Sep 97	SIX MONTH FIGURES													
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														
JAL														
Jul-Sep 97	5,325	5,016	309	169	56,060.9	39,748.3	70.9	9.50	8.95	16,020	8,555.0	5,705.2	66.7	
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														

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														
Jul-Sep 97	TWELVE MONTH FIGURES													
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														
Malaysian														
Jul-Sep 97														
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														
Singapore														
Jul-Sep 97	2,549	2,171	379	402	38,125.4	28,216.7	74.0	6.69	5.69	6,135	7,231.9	5,091.5	70.4	27,777
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														
Thai Airways														
Jul-Sep 97	697	672	25	-1,050	11,462.0	7,668.0	66.9	6.08	5.86	3,500	1,639.0			
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														
Air France														
Jul-Sep 97	5,224	4,850	374	297			76.1							
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														
Alitalia														
Jul-Sep 97	TWELVE MONTH FIGURES													
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														
BA														
Jul-Sep 97	3,646	3,319	327	244	40,909.0	30,884.0	75.5	8.91	8.11	11,194	5,711.0	4,098.0	71.8	61,321
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
Iberia														
Jul-Sep 97	TWELVE MONTH FIGURES													
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														
KLM														
Jul-Sep 97	1,842	1,592	250	438	18,798.0	15,736.0	83.7	9.80	8.47		3,231.0	2,587.0	80.1	34,928
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
Lufthansa* **														
Jul-Sep 97	3,721	3,418	303	321*	33,739.0	26,410.0	78.3	11.03	10.13	12,807	5,787.0	4,298.0	74.3	58,178
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
SAS														
Jul-Sep 97	1,244	1,093	151	83*	8,084.0	5,598.0	69.2	15.39	13.52	5,325				24,168
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
Swissair**														
Jul-Sep 97	SIX MONTH FIGURES													
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														

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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