Aviation Strategy

Issue No: 9 July 1998

Unions can cash in on equity for productivity deals

The unions appear to be revolting again. Union unrest is hitting several of the world major airlines - Air France, Philippine Airlines, Olympic Airways and Northwest being the most prominent.

At first sight this outbreak of industrial unrest could be regarded as a comeback for union intransigence and obstinacy. But each outbreak of union power must be seen in the context of each particular dispute. As ever, in some of these disputes union intransigence has contributed significantly to the perilous situation the airline finds itself - but in other cases unions are merely responding to last-ditch measures imposed by inept managements:

• At Philippine Airlines, where most of the pilots have been dismissed, the fundamental problems appear to be due primarily to over-expansion. Once downsizing became the only option, clashes between management and unions were inevitable (particularly as unions wrongly assumed that the government would intervene on their behalf).

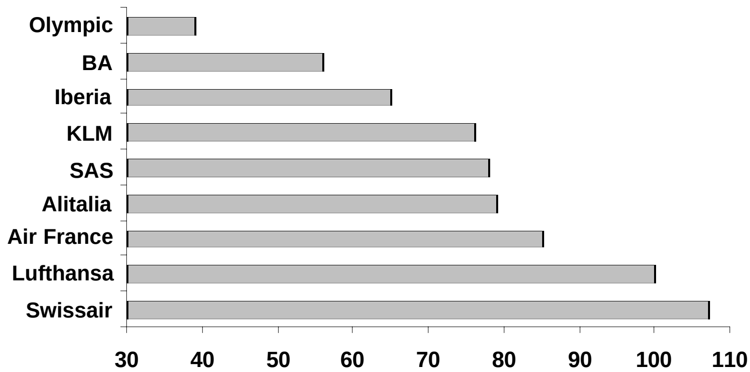
• The immediate cause of this year's union problems at Olympic was that the previous management in 1995 and 1996 conceded hugely over-generous pay awards, which the current management have no choice but to try and claw back.

• At Air France management desperately needs to cut labour costs in advance of part-privatisation later this year. In a country where union power has always been strong, Air France's pilots adopted the sensible tactic (from their point of view) of striking as the World Cup began.

• At Northwest unions threatened strikes after 22 months of mind-numbing negotiations with management. Unions demanded that wage concessions agreed in 1993 to help Northwest avoid bankruptcy be reversed now that the airline has effected a recovery. The dispute was settled in June.

As *Aviation Strategy* has pointed out before (see February 1998 issue), Europe is steadily eliminating the labour cost gap with the US. And as can be seen in the charts on pages 1-3, there is as much variation in US airlines' labour costs as there is among *(continued on page 2)*

INDEX OF EUROPEAN TOTAL LABOUR COSTS



Note: *Index based on estimated 1997 annual average labour costs (including social charges) per employee.* **Index:** *Lufthansa=100.*

Aviation Economics

James House, LG2,
22/24 Corsham Street
London N1 6DR

Tel: +44 (0) 171 490 5215
Fax: +44 (0) 171 490 5218

E-mail: info@aviationeconomics.com

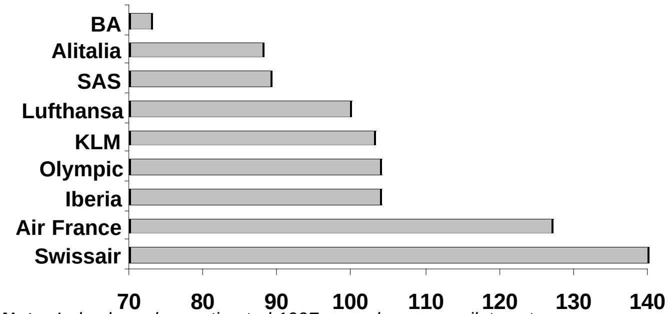
Europe's carriers. But as European airlines' non-labour costs - airport charges, en route fees, ground handling etc - are rising much faster than in the US, the pressure is on Air France, Alitalia and others to cut the one cost that should be completely within their control - labour.

An end to confrontation?

But, unlike the past, the need of Europe's airlines to cut labour costs does not mean that confrontation with unions is inevitable. There are encouraging signs that unions in Europe are much more mature about compromising when airlines are in a tricky situation.

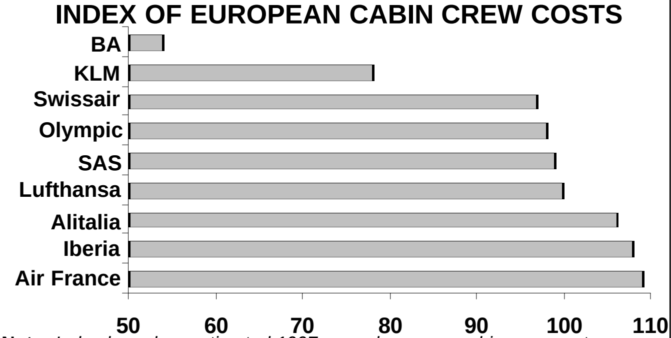
This does not mean that unions have abandoned their prime purpose: to protect the interests of their members. Unions are always prepared to change their tactics - being conciliatory when needed; taking on aggressive managements at other times. But now some unions appear to be going one step further than just varying tactics. The most enlightened unions appear to be recognising the long-term potential of share ownership in the airline they work in, in return for wage concessions. In short, unions see the chance not just to protect their members, but to make them very rich as well.

INDEX OF EUROPEAN PILOT COSTS



Note: *Index based on estimated 1997 annual average pilot costs (including social charges) per employee.* **Index:** *Lufthansa=100.*

INDEX OF EUROPEAN CABIN CREW COSTS



Note: *Index based on estimated 1997 annual average cabin crew costs (including social charges) per employee.* **Index:** *Lufthansa=100.*

Essentially airlines try to "lock-in" unions through equity hand-outs in return for substantial productivity concessions and wage freezes/reduction. But most equity for productivity deals occur when airlines are at their most vulnerable and have little choice but to cut labour costs or go under. Tinkering about on the edges of productivity improvement via shaving the odd percent or two off labour costs does little to save airlines in desperate situations - and unions know this full well.

A classic example is the outline Air France agreement with the pilots (the full deal is scheduled to be completed by the end of August), the main components are:

- Pilots will have their salaries frozen for up to seven years (there may be a review after three or four years, depending on the final negotiations). There will be no adjustments for inflation, so pilots' salaries will fall in real terms.
- In return the pilots will receive options for up to 15% worth of shares in Air France.

The devil is in the detail, which has yet to be defined, but Air France claims the wage freeze will achieve its target of reducing labour costs by FF500m ($83m) per year. At first glance, this seems a better deal for the airline than the pilots. Pilots are giving up hard cash, and in return will receive a stake in one of Europe's less stable airline. According to unofficial Air France calculations, the company's share price will have to rise by at least 4% per annum over the seven year period for the return to pilot shareholders to at least equal the value of the real salary reductions they have given up.

It seems a no-lose situation for Air France as it gets the benefit of the wage freeze whatever happens. Risk seems to have been passed on to the pilots, who are "gambling" that shares will appreciate by more than 4% per year for them to break-even.

But looked at another way, the risk is not all that great for the pilots. Even given a mini-recession, over a seven year period the stockmarket in France is highly likely to increase by at least 4% per annum. Of course Air France has had a chequered history, and could

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Editors:
Keith McMullan
Nick Moreno

Subscription enquiries:
Nick Moreno
Tel: +44 (0) 171 490 5215

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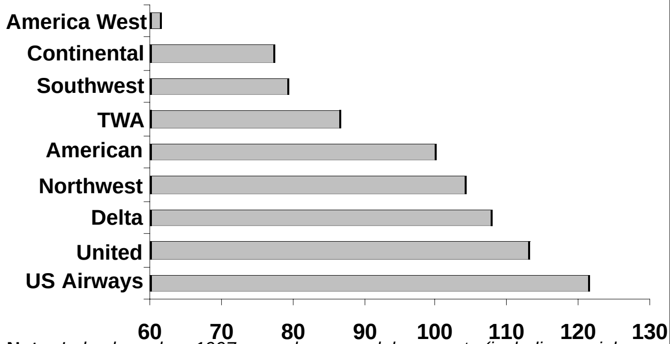
Aviation Economics
Registered No: 2967706 (England)

Registered Office:
James House, LG2
22/24 Corsham St
London N1 6DR
VAT No: 701780947

well underperform the general market over the next seven years. But, as the saying goes, past performance should be be held as a guide to future prospects. Much of Air France's past woes have stemmed from two factors - high labour costs and sub-standard, politically-appointed management. But things have changed - management has improved, and unions know that if they deliver on labour costs then the chances are that Air France will have a bright future.

So how well could the pilots do out of the deal? Since it was floated in the 1980s BA's shares have appreciated at an average 19% per year. By our (admittedly rough) calculations, if British Airway's pilots had been given 10% of the airline's stock when it was floated, each of those original pilots would be sitting on shares worth approximately a third of a million dollars (never mind the dividends they would have received).

INDEX OF US TOTAL LABOUR COSTS



Note: *Index based on 1997 annual average labour costs (including social charges) per employee.* **Index:** American=*100.* **Source**: *ESG.*

Will inter-alliance competition supersede hub competition?

The message coming from the US majors is: "Previously we competed via our hubs, but in the future the industry will see inter-alliance competition".

The airlines are concerned primarily with two audiences. Firstly they have to persuade the regulators that the effect of the proposed codesharing alliances between American/ US Airways, Delta/United and Northwest/ Continental is not to halve the number of competing hubs in the US but somehow to increase domestic competition. Secondly, they have to persuade the financiers and stockmarket analysts that these alliances will translate into greater profits. The two messages are not necessarily compatible.

In a recent presentation to investors US Airways developed an analysis aimed mainly at the latter audience. This is our interpretation of the argument.

Passengers develop loyalty to an airline based on many factors but principally on the breadth of the service provided (the number of destinations) and the depth of service (the frequency of service). For example, take the passenger based, inevitably, at Des Moines and wishing to travel to somewhere other than a US major's hub. He or she has seven logical hubs to connect over - Minneapolis and Detroit (Northwest hubs), Denver and Chicago (United hubs), Cincinnati and Atlanta (Delta hubs) and Dallas (American hub). And as United's hubs provide the best access to the most destinations - despite the proximity of Northwest's hub at Minneapolis and TWA's St. Louis base - United takes about 33% of the originating traffic from Des Moines, with TWA in second place with 19%, and Northwest and American both capturing 11%.

What then are the implications of this type of travel pattern for the new US alliances?

OHIO VALLEY-ORIGINATING TRAFFIC SHARES, 1997

Airline		Alliance shares	
United	19.9%	UA/DL	35.7%
Delta	15.8%	AA/US	22.0%
American	13.8%	NW/CO	15.2%
Southwest	9.4%	Others	27.1%
US Airways	8.2%	**TOTAL**	**100.0%**
Northwest	8.1%		
Continental	7.1%		
TWA	4.1%		
Others	13.6%		
TOTAL	**100.0%**		

Note: *Superset/US Airways.*

In the case of US Airways/American the major impact will be fleet in two regions - the Ohio Valley, which accounts for $6.6bn of total annual originating revenue and the east, which accounts for $20.6bn of total annual revenue.

For passengers originating in the Ohio Valley there is no reason for any one carrier to predominate - Northwest, American and United would be the strongest carriers on routes to the northwest and west; American and Southwest to the southwest; Delta, Continental and US Airways would take southeast traffic; and finally Delta and US Airways would capture northeast-bound passengers.

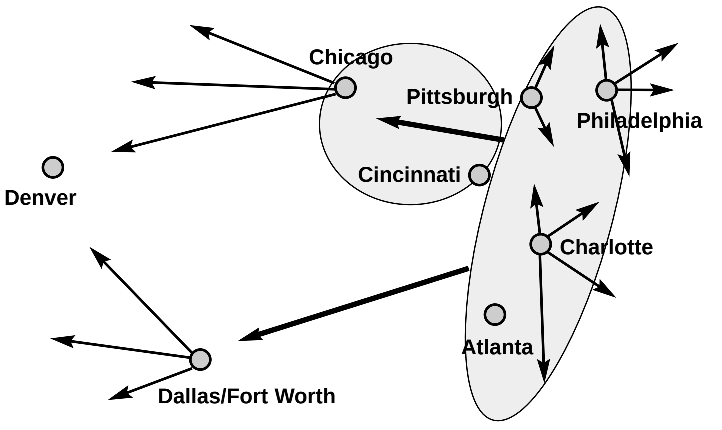
And the traffic data confirms the diversity - United, Delta and American are not too far apart in terms of traffic shares. But the effect of the proposed alliance is to create a superpower in the region - UA/DL which would be two and half times the size of the nearest competitor. The AA/US alliance, however, creates an entity that should have the size and, more importantly, the connecting potential to compete effectively with UA/DL.

Of course, to succeed in this market AA/US will have to steal traffic away from UA/DL, and this will also be the aim of NW/CO.

The east of the US is US Airways' home territory and in the intra-east market, worth about $8.8bn/year in revenues, it has a dominant position, accounting for 36% of the traffic. Adding American doesn't make too much of a difference, boosting the AA/US share to 40%. Similarly, because United and Northwest have tiny presences in the intra-east coast market the UA/DL and NW/CO shares are not much bigger than previously.

US Airways is not the first choice for transcontinental travel from the east - a $11.8bn market. Delta with its Atlanta hub and American at Dallas are bigger players in this market. Consequently, US Airways' share of the total east-originating market is depressed, although it is still the largest single player. It would, however, be outranked by the UA/DL alliance in the market. But AA/US would claim a 36% traffic share against UA/DL's 31%.

AA/US ALLIANCE OHIO VALLEY AND EAST COAST IMPACT



Source: *Superset/US Airways*

INTRA-EAST-ORIGINATING TRAFFIC SHARES, 1997

Airline		Alliance shares	
US Airways	35.9%	AA/US	40.3%
Delta	26.6%	UA/DL	27.6%
Continental	8.8%	NW/CO	9.3%
American	4.4%	Others	22.8%
Southwest	2.7%	**TOTAL**	**100.0%**
TWA	1.1%		
United	1.0%		
Northwest	0.5%		
Others	19.0%		
TOTAL	**100.0%**		

EAST-REST OF US TRAFFIC SHARES, 1997

Airline		Alliance shares	
Delta	21.7%	UA/DL	35.5%
American	15.4%	AA/US	30.6%
US Airways	15.2%	NW/CO	18.0%
United	13.8%	Others	32.1%
Continental	9.5%	**TOTAL**	**100.0%**
Northwest	8.5%		
TWA	4.5%		
Southwest	3.3%		
Others	8.1%		
TOTAL	**100.0%**		

TOTAL EAST TRAFFIC SHARES, 1997

Airline		Alliance shares	
US Airways	26.1%	DL/UA	31.3%
Delta	24.3%	AA/US	35.7%
American	9.6%	NW/CO	13.4%
Continental	9.1%	Others	19.6%
United	7.0%	**TOTAL**	**100.0%**
Northwest	4.3%		
Southwest	3.0%		
TWA	2.7%		
Others	13.9%		
TOTAL	**100.0%**		

Source: *Superset/US Airways.*

The implications of this analysis are then:
• Once one alliance between two US majors was formed it became impossible for the other not to follow suit;
• The alliances may create new competitive dynamics by changing the balance of power in regional markets, though for the overall market alliances remain a zero-sum game;
• The airlines' claims that consumers will benefit because the alliances will be able to offer a wider range of destinations and schedules still does not sound convincing - surely this implies a degree of schedule and capacity (and fare?) co-ordination which should be unacceptable to the antitrust authorities; and
• Whether or not one buys the message that airlines are now competing via alliances rather than hubs, the prime tool for capturing passengers will remain the new joint Frequent Flyer Programmes, which were originally introduced as a means of persuading passengers to accept semi-circuitous routings over hubs rather than direct service.

Route suggestions for new entrants

Back in 1993 the UK CAA helpfully identified continental European routes that it thought could or should have new entrant competition. Now in its latest report on progress in the liberalised European market it has updated the analysis.

The CAA originally identified some 33 routes with potential for new entry, but new entrants stubbornly refused to take up the suggestions. Virgin Express moved onto Brussels-Milan, Brussels-Madrid and Rome-Madrid, Lauda-air entered Milan-Barcelona while Finnair/Maersk and KLM have begun two intra-Scandinavian services.

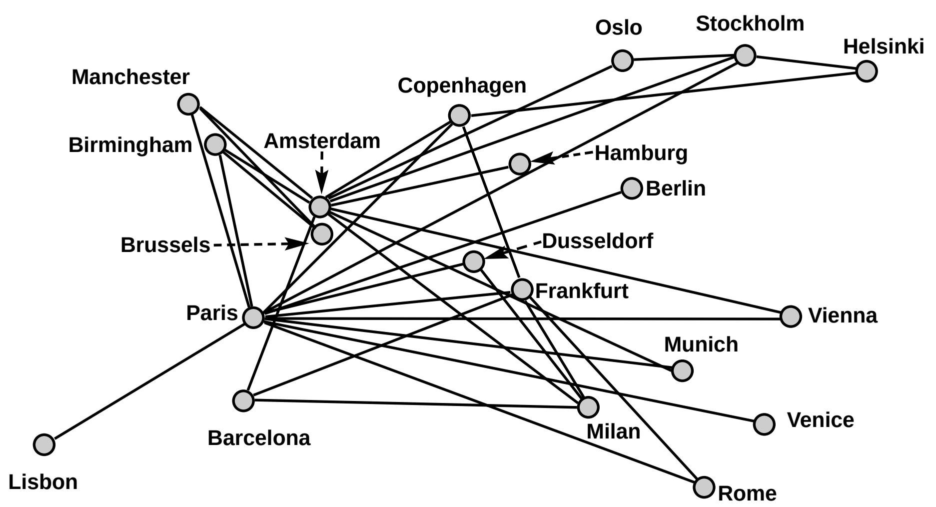
We have taken the CAA's new list of 31 routes - assessed on criteria such as attainable passengers per flight, possible market share, etc - and presented them as a route diagram.

There would appear to be four main bases which would sustain a new entrant operation - Paris, Amsterdam, Frankfurt and Milan (in the previous study Brussels too would have been one of these bases). Few new entrants have the resources to break into these hubs at present.

One might have thought that BA would have the opportunity to use TAT/Air Liberté to compete on more intra-European routes from Paris. But then DBA attempted to break through into the Frankfurt market, and it was soon forced to withdraw.

CAP 685. The single European aviation market: the first five years.
UK CAA, June 1988

POTENTIAL NEW ENTRANT ROUTES



Source: *UK CAA.*

Airfreight growth continues, but yields keep falling

Despite the Asian crisis, 1997 was a record year for airfreight. According to US-based cargo specialists MergeGlobal, 25.1m metric tonnes of airfreight was carried in 1997 - 8% up on 1996.

And the airfreight market will continue expanding, according to MergeGlobal's 1998 forecast (see table, below). It will reach 34.6m metric tonnes in 2002, although the annual average growth will slow to 6.6% in 1997-2002 compared with 9.8% in 1992-1997. Growth will vary widely in individual markets (see chart, right), but even the slowest-growing markets - such as from Europe to North America - will still see demand increase by at least 4% per year over 1998-2002.

Yet rising airfreight demand will be accompanied by the continuation of another key trend in the industry - falling yields. Inflation-adjusted freight yields have been falling since the 1970s, primarily due to three reasons:

1) The structural increase in world trade (particularly from Asia to Europe and the US) has led to an increase in the average haul length; in turn this results in a reduction in yield per tonne-kilometre.

2) The introduction of widebody aircraft in the 1960s created large amounts of belly space for freight. Airlines often price this space incrementally, as they (wrongly) perceive belly space as having little or no marginal cost.

3) Deregulation has reduced controls on airfreight pricing.

And yields will keep falling. David Hoppin, principal of MergeGlobal, says: "Average yields will fall in 1998 and beyond as the Asian crisis puts inbound Asian yields under severe pressure, and also affects pricing in non-Asian markets as passenger air-

AIRFREIGHT MARKET (000s metric tonnes)

	1992	1993	1994	1995	1996	1997	1998F	1999F	2000F	2001F	2002F
US domestic	4,921	5,232	5,802	6,090	6,386	6,939	7,347	7,849	8,293	8,762	9,249
NAFTA	276	273	346	405	453	533	569	608	652	698	745
North America-Cent. America & Carib.	149	149	156	146	155	181	200	220	239	260	283
CAC-North America	167	171	186	198	221	244	262	280	301	323	347
North America-South America	230	237	273	299	296	349	382	399	429	465	500
South America-North America	280	305	332	353	388	432	460	487	518	546	578
North America-Southeast Asia	109	127	146	176	211	237	244	266	287	308	332
Southeast Asia-North America	139	164	204	223	245	299	342	371	399	431	466
Intra-Europe	756	774	894	978	1,100	1,137	1,202	1,267	1,336	1,407	1,477
North America-Europe	783	753	819	915	972	1,033	1,098	1,160	1,229	1,298	1,368
Europe-North America	639	723	894	949	988	1,118	1,170	1,215	1,263	1,312	1,361
Europe-South Asia	48	52	66	94	100	110	122	136	150	165	181
South Asia-Europe	116	122	127	135	163	172	187	204	222	241	263
Europe-North Asia	320	380	496	559	583	608	613	659	709	761	812
North Asia-Europe	487	461	528	613	712	741	824	891	956	1,039	1,124
Europe-Southeast Asia	118	146	190	224	234	242	244	263	281	308	322
Southeast Asia-Europe	143	156	186	218	257	269	314	343	371	403	439
Europe-South Pacific	50	51	68	76	81	87	91	95	101	103	107
South Pacific-Europe	35	34	36	39	46	48	52	55	59	62	66
Europe-Latin America	182	219	273	293	313	344	370	393	418	449	477
Latin America-Europe	214	223	239	255	320	324	348	369	392	417	444
Europe-Africa	273	288	333	396	418	445	465	487	513	543	577
Africa-Europe	101	113	136	146	150	155	166	178	191	204	219
Europe-Middle East	172	179	206	229	244	259	273	293	314	334	352
Middle East-Europe	222	241	223	188	271	281	300	319	339	360	383
Intra-Asia	1,189	1,307	1,681	2,064	2,314	2,444	2,598	2,812	3,048	3,297	3,571
Other regions	3,580	4,020	4,560	5,040	5,580	6,070	6,460	6,880	7,390	7,900	8,560
TOTAL	**15.7m**	**16.9m**	**19.4m**	**21.3m**	**23.2m**	**25.1m**	**26.7m**	**28.5m**	**30.4m**	**32.4m**	**34.6m**

Source: *MergeGlobal 1998 World Air Freight Industry Analysis and Forecast.*

lines shift aircraft (and belly capacity) to more attractive regions."

Industry trends

As well as falling yields, several other trends are apparent in the airfreight industry, according to MergeGlobal:

• Integrator expansion

The integrators face problems with falling yields on their core document business. This has persuaded the large US integrators - UPS and FedEx - to expand into international markets such as Europe and Asia. However, once integrators build up a regional network it takes a while for express volume to build up on international routes. Therefore the integrators often seek so-called filler traffic - airport-to-airport freight - which tends to depress yields.

• Increasing freighter aircraft costs

Airlines face increasing costs as they upgrade fleets in order to comply with Chapter 3 noise rules. Theoretically, this should encourage airlines to push up airfreight prices. However, when airlines renew fleets of non-compliant narrowbodies they are sometimes tempted to trade-up to converted widebodies, thus increasing capacity. This is likely to decrease freight prices still further.

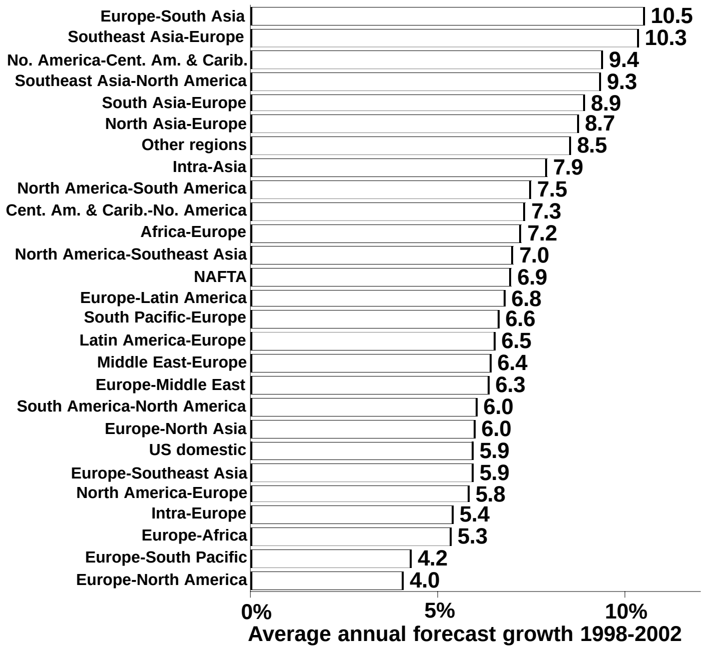
• Rising demand for new freighter aircraft

As intercontinental airfreight demand has increased, the supply of high-quality used aircraft (primarily 747-200s converted from passenger aircraft) has tightened, leading to higher aircraft prices, claims MergeGlobal. Although the Asian crisis may temporarily send prices downwards, in the long-term demand will exceed the supply of high-quality converted passenger aircraft. But once the total unit costs of a converted aircraft exceeds that of a new aircraft, airlines may turn instead to ordering new freighters.

• Falling profits?

As yields continue to fall and costs rise, profits will be squeezed. Operators will therefore have to become more creative strategically if they want to maintain profit levels. For example, KLM is developing customised logistics products and Lufthansa Cargo is planning to redefine airport-to-airport services in terms of delivery times rather than flight numbers. But will strategies such as speciality cargoes, smaller shipments or time-defined prices really be able to offset the structural trends to higher costs and lower yields?

FASTEST-GROWING AIRFREIGHT MARKETS



Source: *MergeGlobal 1998 world air freight analysis and forecast.*

Airfreight in the new millennium

Despite rising demand for airfreight, traffic growth simply does not translate automatically into profits for cargo airlines. If airlines cannot keep costs down or improve yields, there may be a shake-out in the industry. Hoppin says: "Some of the recent entrants into the freighter business will probably become disillusioned and either revert to a pure belly strategy, or exit the industry entirely. The survivors are likely to be those airlines with strong home markets and well-functioning cargo sales organisations. And those carriers that effectively combine frequent, low-cost belly lift with strategically-deployed freighters will enjoy a significant competitive advantage".

Alitalia - a miraculous turnaround?

Just 18 months ago Alitalia was one of the European basket-cases, technically bankrupt, riven with labour disputes and embroiled in arguments with the European Commission over its L2,750bn ($1.5bn) state aid application. Now, having returned to profitability in 1997, it has completed a successful rights issue - which will reduce state ownership to 51% - and has a market capitalisation twice that of its prospective European partner, KLM. Is this a miraculous turnaround?

Alitalia management and IRI (Instituto per la Ricostruzione Industriale, the state holding company) have moved with remarkable rapidity in part-privatising the airline. As part of the restructuring plan agreed with the EC, IRI announced that it would be recapitalising the airline early this year, and on May 18th it succeeded in placing a rights issue with institutional investors.

ALITALIA'S TURNED-AROUND P&L (Lira bn)

	1996	1997	1998 forecast	Chnge 97/96	Chnge 98/96
Revenues					
Passenger	6,230	6,530	6,995	300	465
Cargo	710	795	859	85	64
Other revenue	1,118	1,257	1,272	139	15
	8,058	**8,582**	**9,126**	**524**	**544**
Costs					
Commission/sales	1,157	1,304	1,397	147	240
Fuel	825	825	728	0	-97
Maintenance etc	610	782	880	172	270
Staff	2,084	2,056	2,022	-28	-62
Rentals	692	663	650	-29	-42
Depreciation	467	449	450	-18	-17
Other costs	2,326	2,483	2,632	157	306
	8,161	**8,562**	**8,759**	**401**	**598**
Operating profit	**-103**	**20**	**367**	**123**	**470**
Other income	171	325	200	154	29
Net fin. charges	-334	-144	-80	190	254
Pre-tax profit	**-266**	**201**	**487**	**467**	**753**
Extraordinary items	-920	362	0	1,282	920
Taxes etc	-18	-126	-98	108	80
Net profit	**-1,204**	**437**	**389**	**1,641**	**1,593**

Note: *1998 forecast by Chevreux De Virieu*

The issue had a rather complicated structure but in essence IRI sold about 14% of the airline's stock to institutional investors, increasing the free float in the airline from 15% to 29%. IRI's share is dropping from 85% to 51%, the minimum under current Italian law. The remaining 20% of the carrier's stock was allocated to staff. Moreover, Pietro Ciucci, CEO of the IRI Group, announced in May that Alitalia would be fully privatised by the end of 1998.

As of June 23rd Alitalia's stock price was L6,000 on the Milan exchange, implying a market capitalisation of L9,420bn ($5.2bn). This compares with a $3bn stockmarket valuation for KLM or $11bn for BA. KLM is trading on a prospective p/e of 8.5/1, BA on 11/1 Alitalia on 24/1.

There may be a technical reason for Alitalia's high rating - Italian fund portfolios traditionally include all shares in the MIB30 (the 30 largest quoted companies). As Alitalia now falls into that category, they have been active in making purchases. Also, p/e ratios in Italy tend to be higher relative to the UK or US because accounts traditionally have been compiled in order to minimise tax liability rather than satisfy equity markets, so there is a motivation to suppress reported profitability. Investors compensate for this when purchasing stock.

Basically though, Alitalia's valuation remains puzzling as it has only been profitable for one year in the 1990s. It is worth taking a slightly more detailed look at the changes in Alitalia's P&L between 1996 and 1997 when Alitalia's bottom line improved by L1,641bn ($912m) to a net profit of L437bn ($243m) - see table, left.

On the operating level, however, the improvement was just L401bn, largely resulting from lower per gallon fuel prices. The operating margin was a sad 0.2%. Net financial charges were down by L190bn, the result of debt write-down following the injection of the final tranches of the L2,750bn in state aid from IRI. The giant change though was in extraordinary items where there was a positive turnaround of L1,282bn. This came about because in 1996 there were extraordinary costs of L920bn, mostly relating to the employee stock plan and redundancies, while in 1997 there was an extraordinary gain of L362bn, relating to profits from the sale of its shares in Aeroporti di Roma (ADR), Galileo and Malev.

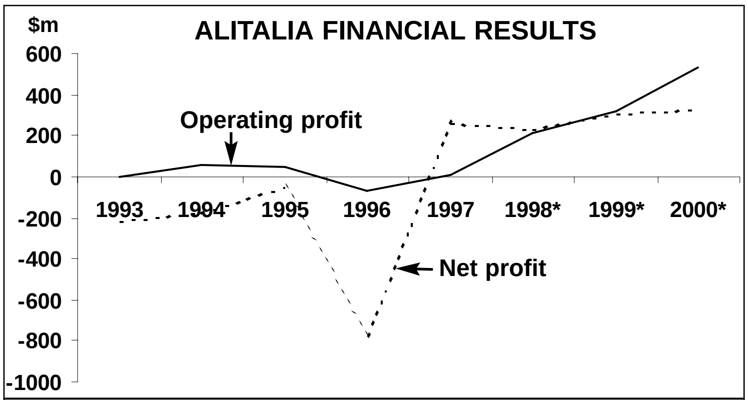
For this year Chevreux de Virieu is forecasting a substantial improvement in operating profit to L367bn ($204m) - a 4% margin - with net profit slightly higher at L390bn. So how robust is Alitalia's turnaround strategy?

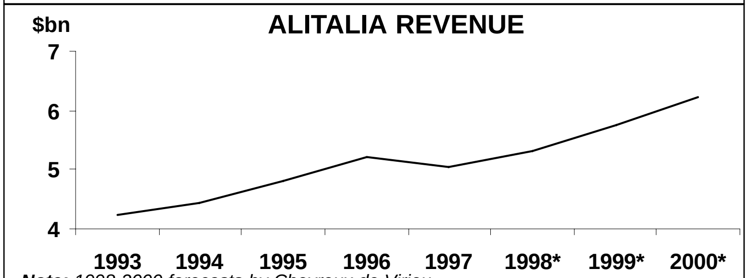
Alitalia's turnaround has followed three basic stages - labour, fleet, markets.

Teamwork

Alitalia's recent achievement in harmonising union relations and lowering labour cost is remarkable given the strength of the unions there and the restraint of having to change laws in order to reduce entry-level salaries or modify agreed working hours. The solution was Alitalia TEAM, created in 1996 to absorb the domestic airline Avianova and act as low-cost subsidiary. At the end of 1997 some 1,500 flight and cabin crew members had been transferred to TEAM, leaving 4,600 at the parent company. 56 aircraft are now operating under the TEAM logo, including MD-80s, A321s and 767s.

With union agreement (at eight of the company's nine unions), the plan is to relocate all of Alitalia's employees to TEAM by the year 2000. Through increased productivity Alitalia expects to reduce its unit labour costs by about 10% between now and 2001, having already brought them down by 20% since 1994 when they were the highest in the European industry. Total savings are forecast to be L1,500bn ($833m). If all goes according to plan Alitalia should be competitive on labour costs with the best of the Euro-majors by the turn of the century.





Note: 1998-2000 forecasts by Chevreux de Virieu.

ALITALIA'S RELATIVE TRAFFIC PERFORMANCE

	ASK	RPK	Pax load
	(% change 97/96)		factor
Intra-Europe			
Alitalia	-2.8	0.9	62.1%
AEA average	5.9	10.2	63.4%
North Atlantic			
Alitalia	-3.4	-2.1	77.5%
AEA average	8.2	9.7	78.3%
South Atlantic			
Alitalia	-1.0	7.8	77.5%
AEA average	3.7	11.6	77.3%
Total			
All Alitalia	0.1	4.2	71.7%
AEA average	6.2	9.3	72.0%

Credit for the change in union relations must go to Domenico Cempella, who was brought in to replace Roberto Riverso as CEO in 1996. Cempella's understanding of the union mentality and his long-time association with Alitalia (he started as a check-in clerk in 1958) and ADR evidently was more effective than the technocratic approach of his predecessor who, having come from the information technology industry, was frustrated and bewildered by union intransigence and Roman politics.

The cost of union compliance is, however, somewhat disguised by the free share distribution to employees. These shares are worth almost $70,000 per employee on current valuation - about the same as the average annual salary for a steward or stewardess at the old airline. But then the value of stock can fall as well as rise.

According to Cempella, a cultural breakthrough was made in 1996 when Alitalia management started to think of liberalisation as an opportunity instead of - or at least as well as - a threat. The restrictions imposed by the EC as conditions for the state aid approval can now also be seen as partly contributing to Alitalia's turnaround. These included the requirement that until the end of 2001 capacity growth (in terms of seats and ASKs) remained well below the level of market growth.

Asset rationalisation

The table on page 9 illustrates the effect of the EC-imposed constraint. In key sectors like intra-Europe and the North Atlantic Alitalia's 1997 traffic hardly moved or even declined, in sharp contrast to the boom conditions enjoyed by other European airlines - but because of capacity reductions, load factors were pushed up to close to the European average for the first time.

Higher load factors have created the conditions in which effective yield management can be implemented. Alitalia puts great emphasis on its new “True O&D” revenue system from Sabre Technologies. Following the introduction of the system in mid-1997 it started recording 7-10% annual increases in unit revenue (per ASK) on domestic routes and 10-12% increases on international services.

Whether these increases represent a one-off adjustment or whether Alitalia can continue to push up yields (obviously at a lower rate) is unclear. But Alitalia is obliged to focus on yield management as it is prohibited from adopting price leadership strategies by the EC until 2001. Also, as Alitalia refocuses its business from Rome to Milan, the scope for using yield management increases as the passenger mix should evolve from being predominantly VFR and leisure to business-related.

Over the past two years Alitalia has made a great effort to rationalise its fleet, which, like Iberia’s, used to have models from the three manufacturers in each possible aircraft type. 14 DC-9s and 14 A300s have been sold while orders for five MD-80s and 15 A320s were cancelled. Its short/medium haul fleet is still split between the MD-80s and the A320/321s, while the long hauls have operated with three types - the 747-200, 767ER and MD-11s.

The delivery schedule for the next three years is very modest, raising concerns about Alitalia running into capacity constraints. However, there is potential for further rationalisation of the current fleet. Utilisation of the narrowbodies has risen from 7.1 hours/day to 8.25 since 1995, but this is still modest by industry standards despite the relatively low average stage length. The long haul network remains diffuse: Alitalia operates to 38 points outside Europe but cannot offer daily service on the large majority of these routes. An objective assessment of route profitability would probably lead to route closures or consolidations.

ALITALIA FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/comments
747-200	8	0	
747-200F	2	0	
747-300ER	6	3	Delivery in 1999-2001
MD-80/82	90	0	
MD-11	8	0	
A320	2	19	Approximately 10 in 1999-2001
A321	18	4	Four in 1999-2000.
TOTAL	**134**	**26**	

Arrivederci Roma, buongiorno Milano

Alitalia’s expansion at Milan is critical to the airline’s success. It symbolises a move away from the political centre of Italian life to the commercial centre and will provide Alitalia will the chance to recapture the higher yielding traffic it loses to Swissair’s Zurich hub and Lufthansa’s Munich hub.

Northern Italy generates about 67% of total Italian international aviation revenues compared with 18% for the Rome region and 15% for the rest of the country. Alitalia itself admits that it captures only a third of the Northern Italian revenues (other sources have estimated Alitalia’s share to be even lower), but it now states that it will recapture the lost traffic when it builds its first genuine hub at Milan Malpensa.

The hub plan is to build a four-wave system of connecting short and long haul flights. This compares, for example, with seven waves at Zurich but there will be 44 movements per wave compared with 22 at Zurich. The new facilities at Malpensa are due to open at the end of this year, so presumably the Alitalia hub system should be fully operational by the summer of next year.

Alitalia is in the process of transferring 10% of its Rome services plus most of its operations at Linate airport - which is close to the centre of Milan - to Malpensa, which is 65km away and presently very poorly served by road and rail links. In a blatant piece of flag-carrier support the Italian authorities have decreed that all services with passengers flows of 2m passengers a year - i.e. all services apart from Milan-Rome - will have to move from Linate to Malpensa by the end of the year. Foreign airlines are not at all happy about this and several of the leading European airlines, including KLM, have made official complaints to the Commission.

This traffic policy conveniently also protects Alitalia's Rome-Milan shuttle, which remains at Linate as does Air One's competing service. However, it now becomes very difficult for Air One to link up its services with Swissair, a potential investor in the Italian new entrant.

Indeed, Alitalia's domestic dominance remains one of its key strengths. Although its share of domestic capacity has fallen from 95% of the total in 1995 to 75% today, a series of formal and informal alliances with the regional carriers - Minerva, Meridiana, Azzurra, etc (see *Aviation Strategy,* February 1998) - means that it still exercises extensive control over the domestic market (which with 18m passengers a year is the third biggest in Europe after France and Germany).

Alitalia has occasionally pushed its convivial relationship with Italian governments too far. Late last year it was threatened with a court case by the EC over allegations of unfair price-cutting and in 1996 it was fined by the Italian antitrust authority for abusing the slot allocation system at Milan and Rome and imposing illegal ticketing restrictions on travel agents. Other airlines complain about the extreme difficulty of obtaining route authorities. Although the first ever non-Alitalia scheduled intercontinental flight was made last December - Air Europe to Havana from Milan - a significant opening-up of international markets to Italian competitors is unlikely.

KLM alliance

The consummation of the alliance signed early this year with KLM depended on three factors:

- The now completed part-privatisation;
- The development of Malpensa and the transfer of Alitalia services there; and
- The signing of an open-skies agreement between Italy and the US.

The final condition relates to Northwest's ability to serve Malpensa (currently it does not fly to Italy and is precluded from doing so by the bilateral) and establish a multi-hub system on both sides of the Atlantic. Continental, which has a limited codeshare agreement with Alitalia and which is allied with Northwest, will presumably also fit into this picture.

Having two hubs in densely populated and wealthy but geographically dispersed hubs will enable Alitalia and KLM to maximise their intra-Europe/transatlantic connections, in the process stealing traffic from the other alliances. A joint shuttle between Amsterdam and Milan might be another attractive project.

KLM's expertise in hub-building should be of direct benefit to Alitalia, though it is interesting that in a recent interview with the *Wall Street Journal* Cempella emphasised a less tangible benefit of the new relationship with KLM: "A company like Alitalia - one that comes from decades of a monopoly - has no future if it doesn't start responding to a market that is totally global and liberalised, without protection or help. KLM is a company that is used to being competitive and has an aggressive corporate culture. We expect this to reflect on us as well."

Changing Alitalia's corporate culture is fundamental to a continuation of the airline's recovery. In Cempella the company appears to have found the man for the moment. But politico-industrial intrigue certainly hasn't disappeared from the Italian state-owned sector - witness the farcical management battles and strategy reversals at newly privatised Telecom Italia. A relapse to the old ways of doing business - which is always tempting if market conditions get tougher - would be a disaster for Alitalia.

Meridiana cuts costs at last - but can it remain independent?

Meridiana, Italy's largest independent airline, has been overshadowed by Alitalia for 35 years. Via a breakthrough productivity agreement with unions in 1997, Meridiana has finally begun to tackle high labour costs - but can the airline ever hope to remain independent *and* truly challenge Alitalia?

The Sardinia-based airline was founded (under the name Alisarda) by the Aga Khan in 1963, and grew steadily - if slowly - over the next three decades. Its name was changed to Meridiana in 1991 when management decided that the airline's future lay in pan-European routes. Today Meridiana's route network includes 15 domestic and 11 foreign destinations. In 1997 the airline carried 2.4m passengers domestically and 0.3m on international routes, achieving an overall load factor of 58%. 95% of revenue comes from scheduled passengers, and 80% of all passengers are business travellers.

The average age of Meridiana's fleet is more than 12 years, but that will improve when DC9-51s (which are at least 22 years' old) are replaced by second-hand MD-82s by the middle of 1999. However, Meridiana's long-term fleet strategy has yet to be finalised - the MD-82s will themselves have to be replaced in less than 10 years from now.

Labour costs and Alitalia

Historically, Meridiana has faced two challenges - high costs and the structure of the Italian aviation market, dominated as it is by Alitalia.

Steve Forte, Meridiana's vice president of marketing & sales, says: "In 1996 we realised that we were not competitive, so we started cost-cutting programmes. But we always ended back at the same problem - the cost of labour, which accounted for 35-40% of total costs. Our pilots and flight attendants were the highest paid in the world for the number of hours they worked."

The airline therefore decided to launch a low-cost subsidiary, Meridiana Express, to which all Meridiana routes were to be transferred. Although management insists that Meridiana Express was not designed to put pressure on unions, the low-cost subsidiary was a key factor is persuading unions to agree to substantive negotiations with the airline.

The end result was a productivity deal signed in March 1997. This comprised three components:
1) Unions agreed to increase worker productivity. According to Meridiana, since the deal average pilot hours have risen by 15% and flight attendant hours by 7%. Overall staff employed fell by 2% to 1,148 in 1997. In addition, the unions agreed that the starting salaries of new employees would be 30% less than salaries of senior employees.
2) Existing shareholders agreed to give unions equity worth 16.8% of Meridiana. This will be carried out via an issue of new shares (diluting existing shareholders), to be completed by June 1999. A union official will also join the airline's board.
3) Management agreed to liquidate Meridiana Express.

The results of the productivity deal have been immediate: ASKs per employee rose 11.8% in 1997 compared with 1996. Yet after 30+ years of doing virtually nothing to control labour costs, Meridiana cannot claim to have solved this problem overnight. The airline still needs to drive productivity up further, although given the relatively high price (16.8% of the company) that was paid to secure the 1997 agreement, further large gains will be difficult - or expensive - to achieve. But it may be possible, particularly now that the airline claims there is a "real feeling of co-operation between management and unions".

But assuming that Meridiana can keep driving labour costs down, the structural problems that it faces in its domestic market will be somewhat harder to overcome. Italian law used to determine precisely how domestic markets were divided between Alitalia and others, and directly specified

MERIDIANA FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/comments
MD-82	10	7	4 in 1998, 3 in 1999. All will be leased second-hand aircraft
DC9-51	6	0	All to be replaced by MD-82s by June 1999
BAe 146-200	4	0	
TOTAL	**20**	**6**	

the limited amount of competition that could take place. Forte says: "Meridiana has had to grow by niches as the best markets have historically been handed to Alitalia. In effect Meridiana lived off the crumbs of the Italian market."

Indeed the effects of domestic deregulation are yet to be seen fully in Italy, and it is still so difficult for new entrants to survive that many go for the easy option and ally with Alitalia (see *Aviation Strategy,* February 1998)

At first sight, Meridiana's current strategy also appears to be "if you can't beat them, join them". The airline has been building ties with Alitalia over the last year and a half. It now codeshares on Bologna-Palermo (operated by Alitalia) and on Milan Malpensa-Rome, Pisa-Catania and Turin-Catania (operated by Meridiana).

According to Meridiana there is room for greater co-operation, but Forte says that Meridiana does not intend to have a submisssive role with Alitalia, or anybody. Meridiana claims it has already turned down a franchise role for BA.

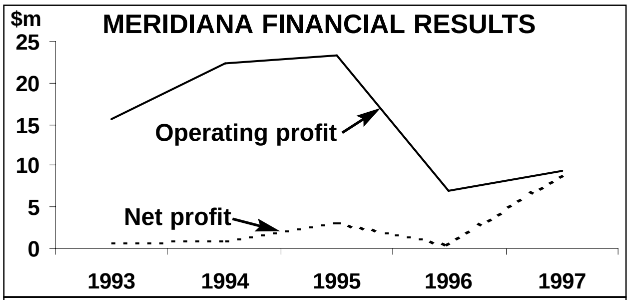
But whether codesharing with Alitalia will lead to a long-lasting alliance, or is mainly a short-term expediency, remains to be seen. Forte says: "In the future we may need a strategic partner, although no equity would be involved.

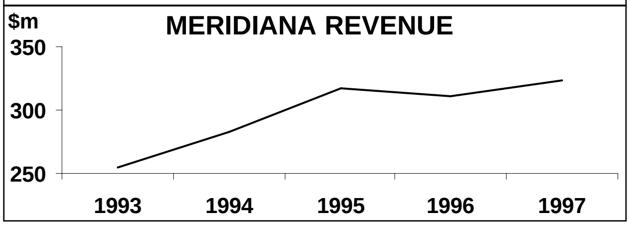
"We have already talked with Swissair, Lufthansa, BA and Air France, but either we or they were not interested. In particular we thought that a partnership with KLM looked interesting, but they allied with Alitalia instead."

In the short-term Meridiana is likely to be boosted by the opportunties presented at Milan's Malpensa 2000 airport. Meridiana will also be looking to win ground handling business at the airport through its 51%-owned subsidiary Aviation Services.

The future?

Meridiana's core problem is that it is still tiny compared with the might of Alitalia. Although fleet standardisation and labour cost reduction are important steps (if a decade or two too late), increasingly Meridiana faces the same choice that every other Italian airline has to face - whether to become part of the extended Alitalia family, or to find a strategic partner elsewhere in Europe. Remaining independent and small is not a viable option as real competition to Alitalia *and* Meridiana increases. Codesharing with Alitalia may well be a





delaying tactic while the search for a partner continues, but as the airline has found out there is - so far - little interest from Europe's majors.

This may appear a strange oversight by the likes of BA, Swissair, Lufthansa and others, as Meridiana is building up a reasonable network within and out of Italy.

The problem for potential outside partners may be that Meridiana is impossible to categorise. While it is the size of a leading regional or expanding new entrant carrier, it has the cost structure of a reforming flag-carrier. It promotes itself as a high quality business-orientated airline, yet its base of operations remains at Olbia in Sardinia. Moreover, a widespread perception, which may be false, is that it is guaranteed ready funds from its super-rich owner (although it has managed to report small net profits throughout the 1990s). Even after unions receive their stake, the Aga Khan will still control 82% of Meridiana's shares. And the Aga Khan (a member of the EC's "Comite des Sages") takes a close and very detailed interest in the direction of the airline.

So it is difficult to see how Meridiana could fit in with any of the European majors whose prime aim would be to find a potentially strong, lower cost competitor to Alitalia in the Italian market. It is even less likely that Meridiana could ally with one of the northern European new entrants (Virgin Express is planning a major expansion in Italy), again because of costs but also because of Meridiana's emphasis on full service.

Therfore the most pragmatic strategy for Meridiana may be to extend its alliance with the flag-carrier, especially if Alitalia sticks to its recovery strategy.

Impossible to squash the Frontier spirit

The combined effect of WestPac's shutdown and United's modified behaviour has been to improve Frontier's prospects dramatically. With the help of a fresh equity infusion, the Denver-based carrier now looks set to restore profitability through modest growth, cost-cutting and new marketing initiatives. But given the dismal survival record of US start-ups, can Frontier succeed?

The airline that we are talking about here is actually Frontier Mark II - the original carrier ran into financial difficulty and went bankrupt in 1986, after an unsuccessful rescue attempt by People Express (which was subsequently taken over by Texas Air). The new Frontier, which was set up by the president and other top executives of the old company, began 737 operations in July 1994 from its predecessor's base at Denver.

Like many of the other 1993-95 crop of low-cost carriers that took to the air when the barriers to entry were at their lowest ever, Frontier had a shaky start because it was very thinly capitalised and initially chose the wrong markets. It started operations on very thin and weak routes, trying to feed to United at Denver, but United did not need another feeder there and losses accumulated.

In October 1995 Frontier raised $7.3m in a common stock offering and changed its route strategy. The carrier decided to enter many of United's largest markets out of Denver, offering typically 30% lower fares but relatively low frequencies, so as not to provoke its large competitor.

Frontier had already begun service in some bigger markets that had been abandoned by Continental. The new strategy meant the addition of Chicago/Midway and Phoenix, followed by the West coast (Los Angeles and San Francisco) and Salt Lake City and Minneapolis/St. Paul in the autumn of 1995. Numerous small markets in North Dakota and elsewhere were abandoned in 1995 and 1996.

As a result, Frontier made its first quarterly profit in January-March 1996, as load factors surged by 15-24 points from the previous year's pitifully low-40s. The turnaround was consolidated with a $1.3m net profit in the June 1996 quarter.

Frontier was lucky in that it managed to raise $2.7m additional capital through a private placement in April 1996, just before the industry sector was hit by the ValuJet crash and grounding. This enabled it to order more aircraft and enter three new major markets - St. Louis, San Diego and Seattle/Tacoma - in the spring of 1996.

The carrier escaped the worst of the "ValuJet effect", in part because of its operations in the West (where the travelling public's perception of low-cost carriers is different than on the East coast) and probably also because of its old-established name and relatively low profile.

The Denver area had become a little crowded after WestPac began low-fare operations from nearby Colorado Springs in April 1995. But Frontier's slow growth and position at a premier hub gave it a solid image. It was regarded as one of the most likely survivors in the post-ValuJet era.

But instead of consolidating recovery, Frontier plunged back into losses in the second half of 1996, and since then it has yet to report a profitable quarter. The initial losses were blamed on a "massive abuse of power" by United, including alleged capacity-dumping, below-cost pricing and other "strong arm" tactics at Denver, which began in the summer of 1996. The competitive pressures continued in 1997 when United rubbed salt into the wound by bringing the Shuttle to some of the Denver markets.

The next ordeal for Frontier began about a year ago when WestPac, in search of larger markets, decided to move its operations from Colorado Springs to DIA. This immediately led to an agreement to merge Frontier and WestPac through a $41m stock swap deal and codesharing, which began on August 1 1997. But the merger talks failed at the end of September and WestPac filed for Chapter 11 on October 4, and

FRONTIER FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/comments
737-200	7	0	
737-300	7	0	"Aggressively seeking" three more 737s (300 series or advanced 200s with hushkits) for introduction by year-end. 8-9 more 737s would ideally be acquired in 1999-2000.
TOTAL	**14**	**0**	

Frontier then had to compete head-on with a bankrupt carrier.

Frontier president Sam Addoms noted that the market had been "supersaturated with excess capacity" at deep-discount prices in the wake of WestPac's operational shift to Denver. As a result, Frontier incurred a staggering $11.5m net loss in the December quarter.

The airline reported a reduced $2.1m net loss for the March quarter, down from $3.3m a year earlier. The improvement was attributed to "a return to normality in the Denver marketplace" following WestPac's shutdown in early February. The bulk of the loss was incurred in January, while the month of March actually produced a small profit.

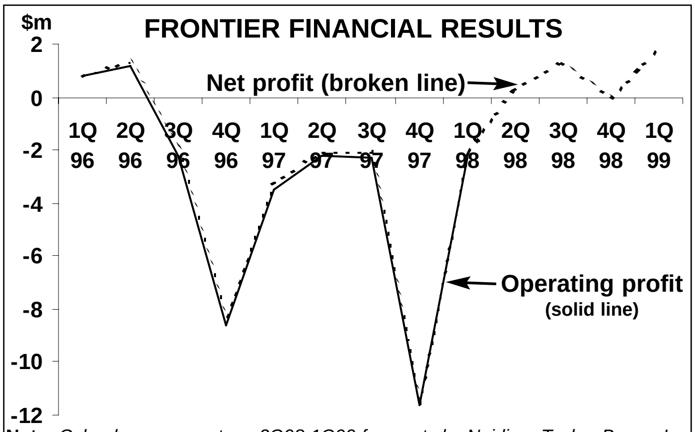
Frontier's prospects have also improved because of Washington's determination to crack down on predatory behaviour by the major carriers. This and WestPac's demise were instrumental in securing an equity infusion in April, which gave Frontier adequate cash reserves for growth.

In the middle of the WestPac battles last autumn, Frontier ventured into the East coast markets with services to Boston, Baltimore/Washington and New York LaGuardia, so it is now a transcontinental carrier, as well as the second largest operator at Denver. About to celebrate its fourth anniversary on July 5th, Frontier is now regarded as an "old-timer" in the low-cost carrier circles. But what strategy will it employ to make the most of the fresh start it has just secured?

David and Goliath battles

Frontier competes head-to-head with United in virtually all of its markets - the only exceptions are two secondary routes from Denver plus Chicago, where the two serve different airports. So getting the competitive and predation issues resolved is vital for the small carrier's survival.

The airline made formal complaints to both the DoT and DoJ in early 1997, charging United with capacity-dumping and predatory pricing. The most heinous of the alleged crimes took place in the Phoenix and Las Vegas markets, where the Shuttle took over United's existing services, boosted frequencies and slashed fares. For example, the Shuttle boosted Denver-Las Vegas capacity by 32% and cut the one-way fare, already barely profitable at $59, to $49. As a result, Frontier had to pull out of the Las Vegas



Note: *Calendar year quarters. 2Q98-1Q99 forecasts by Neidiger Tucker Bruner Inc.*

market (which had little connecting traffic), and the fare is now $100.

Frontier's complaints were actually instrumental in spurring the regulators into action. The DoJ consolidated the various airlines' complaints and is now processing the material raised in the hearings. In April the DoT came up with proposals for rules to prevent predatory behaviour, which are currently in the commenting period. The DoJ has the power to fine United, though Frontier is merely seeking a level playing field.

The good news on this front is that, as the DoT predicted, the mere threat of new rules and serious investigations has made carriers like United clean up their act. Frontier says that United has been noticeably less aggressive in its pricing in recent months. It now hopes that the regulators will also tackle issues like exclusive corporate contracts and bias in CRS systems.

A merger between Frontier and WestPac would have made great economic sense, giving two small carriers critical mass to compete effectively against United. But the two carriers with the same low-fare philosophy were totally incompatible.

One problem was that the codesharing involved Frontier having to reschedule its flights to "undesirable" off-peak times to mesh with WestPac's. The volume of traffic "would have been good for a couple", but the two were clearly not meant to be a pair. Their differences ranged from corporate culture to marketing, while WestPac's financial difficulties were also a stumbling block.

Frontier's problems began in earnest on November 16, when the codesharing ended and WestPac had completed its move to DIA. About two-thirds of Frontier's capacity competed with WestPac's. Although Frontier had been able to reschedule its flights to more optimal times, the excess capacity in the markets led to November and December load factors plummeting by 7-8 points. In an effort to raise cash, the bankrupt carrier also launched numerous deep-discount fare sales, which Frontier had to match to stay competitive.

To add insult to injury, after it ceased operations WestPac made a deal with United enabling the major to accommodate all of the 60,000-70,000 WestPac ticketholders. The relations between the two companies had deteriorated further when in late November Frontier made an unsolicited bid for WestPac, countering another offer favoured by the management.

But WestPac's disappearance had an immediate favourable impact on Frontier's load factors and average fares, and by May the situation had returned to near normal. In April, when the company disclosed that the March load factor exceeded 60%, analysts started talking about return to profitability in the June quarter.

New funding and expansion

The brightened prospects enabled Frontier to attract a $14.2m equity investment in April from Wellesley, Massachusetts-based B III Capital Partners, which purchased 4.6m newly issued shares and received warrants to acquire additional shares. The purchase was for investment purposes only, though B III also got the right to designate two board members.

This was a major vote of confidence in Frontier's prospects, significant at a time when start-ups generally are still finding new finance hard to come by. Frontier reckons that the publicity generated when its name was frequently mentioned in the context of the Washington hearings and its increased visibility on the East coast also helped.

The proceeds enabled Frontier to rebuild its balance sheet, which was seriously weakened by the battles with WestPac. It had only $2.9m in unrestricted cash at the end of 1997, compared with $8.6m a year earlier. The new investment was needed because Frontier had received only $5m of the $15m loan that Connecticut-based Wexford Management had earlier indicated that it could provide (talks on the additional funding were terminated by mutual agreement in February).

Frontier's fleet is currently made up of seven 737-300s, four of which were added in the past year, and seven smaller 737-200s. All are on operating lease from various lessors. The carrier is "aggressively seeking" three more 737s, which it would like to introduce by the end of the year.

In recent years growth has been constrained by the lack of aircraft. This was in part due to inadequate funding but, over the past year, mainly due to lack of aircraft availability. A good opportunity was lost when WestPac's aircraft became available, but Frontier could not take them straight away. It has been a tight year for 737s, but the company believes that the situation is easing up.

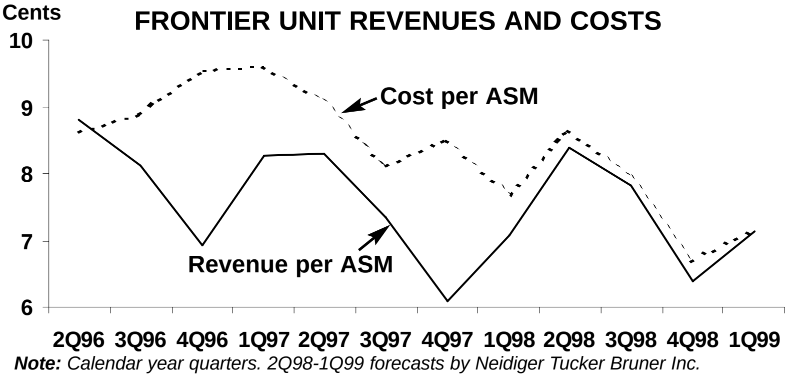
Frontier would like to obtain another 8-9 737s in 1999 and 2000, which would facilitate continued growth but at a modest, manageable rate. This would take it to the 25-aircraft mark that analysts believe might be the optimum size for the company, giving it sufficient economies of scale but not provoking United.

Much of the recent focus of route restructuring and expansion has been to target the higher-yield business travel market. The longer-range 737-300s delivered last year were used to expand service to the East coast: Boston in September, Baltimore in November and LaGuardia in December. In November Frontier also added frequencies in its best existing business markets - Los Angeles, Salt Lake City and Phoenix - but terminated service to St. Louis and San Diego.

But this month (July) Frontier will restore service to San Diego, bringing to 15 the number of cities served from Denver, and boost frequencies to four cities in the West. The three additional aircraft, if obtained, will be used to boost flights to the East coast and to possibly add two new destinations.

Access to slot-controlled LaGuardia was gained when Washington intervened to open up New York's premier domestic gateway to some low-cost services. However, Frontier was authorised to operate only three daily flights, when at least five or six would be necessary to attract sufficient business traffic.

FRONTIER UNIT REVENUES AND COSTS



Note: *Calendar year quarters. 2Q98-1Q99 forecasts by Neidiger Tucker Bruner Inc.*

But Frontier still operates only two daily flights into LaGuardia. The official explanation is its aircraft shortage, but the carrier now admits that the market has taken longer to "mature" than the Boston and Baltimore routes. The difficulty and cost of advertising effectively in the New York area is one reason. Frontier says that the market is "coming along very nicely". Analysts are not totally convinced but, as one put it, LaGuardia is "certainly better than flying to Fargo, North Dakota".

Also on the positive side, the East coast services are attracting a growing volume of connecting traffic to the West coast. About 20% of Frontier's total traffic is now connecting. With additional aircraft, the company would like to schedule flights so that every incoming flight at DIA connects with five outgoing flights (the number is currently about three).

Successful cost-cutting

While battling it out with United and WestPac, Frontier managed to reduce its costs substantially - a major factor enabling profitability to be restored now that the competitive situation has stabilised. Its unit costs fell by 20% to 7.68 cents per ASM in the March quarter (from 9.61 cents a year earlier). This was attributed to the operating efficiencies of the growing late-model 737-300 fleet, coupled with economies of scale.

The airline has lined up another $5.1m or 3% annual cost savings through three actions taken this year. First, in April it reduced its travel agent commission rate from 10% to the industry standard 8%, saving about $2.3m annually. Second, in June it renegotiated its insurance premiums, saving about $1.8m annually.

Third, effective September 1 1998, Frontier will insource its "under the wing" ramp services (baggage and cargo loading, water provisioning etc) at Denver, in an effort to reduce costs and improve quality of work. This requires an investment in the region of $1m, which the company could not previously afford, but the move is also expected to generate $1m annual cost savings.

Going up-market

The past year has seen a concerted effort by low-cost carriers in the US to focus on the higher-yield passenger segment. Most notably, AirTran has introduced a no-frills business class and an FFP, while others have joined CRS systems and begun paying commissions to travel agents.

Frontier has actually been doing many of those things virtually since its inception. Its schedules and fares are displayed in all four of the major CRSs. It participates in Continental's OnePass FFP. It offers ticketless reservations, assigned seating and limited meal service. And the desire to capture more business traffic has led to various new product and marketing initiatives.

Frontier is at present intensively studying the introduction of a first-class section on its fleet. This is a very difficult issue to decide. On the one hand, a dedicated cabin section could really help attract high-yield passengers, given that low-cost carriers like Frontier can also offer those seats at much lower fare mark-ups ($25 in AirTran's case) than the high-cost majors can. But there would be a penalty in terms of lost seats in coach class (or unacceptably low seat pitch) and costs would rise.

There are plans to sign up marketing/codeshare partners, both international and domestic, at DIA and elsewhere. At present Frontier has only one (minor) codeshare partner, Aspen Mountain Air.

Prospects

After two years of net losses totalling $31.3m, Frontier looks likely to report a small profit of somewhere between $250,000 and $500,000 for the quarter ended June 30. This would actually be less than half of what some analysts had predicted in April, because the May load factor (59.6%) was a little lower than expected.

A more stable competitive environment and continued low fuel prices should ensure that Frontier will be able to fully capitalise on the peak summer season. If it finds the three additional 737s by year-end, the prospects for the peak skiing season (March quarter) also look promising. Two Denver-based stockbroking companies, Cohig & Associates Inc. and Neidiger Tucker Bruner Inc., predict net earnings in the $3m-$3.4m range for the financial year ending March 31, 1999.

Making any longer-term predictions seems rather futile, given the instability that has characterised the new-entrant airline sector in the US. ValuJet was the darling of Wall Street before its spectacular downfall. Next, WestPac was regarded as the most likely survivor, but it failed too. Perhaps Frontier's greatest strength now is its sound business plan and gradual growth strategy.

By Heini Nuutinen

Smarter strategies for new entrants

As the aviation industry enters the last phase of the current cycle, the dynamics of competition will change. In this article Louis Gialloreto of McGill University looks at how the strategies of new entrant airlines may alter during the next few years.

Traditionally, there have been two types of new entrant into the deregulated aviation market (see diagram, right) - the traditional low cost, no-frills airline (Type 2) and the low cost, full- to semi-frills type carrier (Type 3).

In the last two deregulated cycles the US domestic industry has produced a number of each type of new entrant, although very few have been sustainable propositions long-term. Even Southwest cannot be held up as a successful new entrant in this period since it started life eight years prior to US deregulation.

Nevertheless, the experience of the US reveals certain generic access strategies for new entrants. These include:

• Offering low frills, the lowest costs and fares, and having dominant capacity in city pair markets.

• Offering low costs, mid-level fares (below majors but above some Type 2s) and a level of service profile that allows brand differentiation with niche share in multiple city pair markets.

• Offering mid-costs, mid- to full-fares (at par with majors) and an above market service/brand profile, with a small share of limited dense/high yield markets.

These various strategies are applied by new entrants in well defined market city-pairs, with four key permutations of density and yield (see diagram). But the problem is that these generic strategies are often applied incorrectly, leading to inevitable new entrant failure.

Survival questions

While different stages of the deregulated cycle will always offer differing levels of encouragement to new entrants, one key question remains: will the level of survivability increase - i.e. will we get smarter new entrants in the future?

The problem is that very few new entrants devise a sustainable avowed strategy and then stick to it over time. Despite the example of Southwest, all too often others move away from their initial strategy as a soon as some limited success is achieved. For example, new aircraft are often used to add limited capacity in a new city pair market, as opposed to using aircraft to increase capacity/frequency in an already served city pair.

At Southwest the choice would be clear, but all too many others would be tempted to add destinations in order to reinforce early success in an existing market. The old People Express, Greyhound in Canada and many others have fallen victim to this mistake.

When deciding on a strategy to stick to, new entrants must ask themselves two questions: when is low cost low enough to compete, and what market share is enough market share in a city pair? The answer to the first question is clear - the only *long-term* sustainable strategy is to have the lowest cost of any player in the city pair market. And the worse the economic situation the truer the dictum.

As for premium services, it seems that with few exceptions the majors (Type 1s) are able to play a deregulated war of attrition fast and hard enough to reduce, if not eliminate, the new entrants' chance of establishing and leveraging a premium brand reputation. This being the case, the only sustainable proposition in deregulated markets is an airline that has high volume, the lowest costs (and standard fares) and a high market share of a city pair combination.

How low can you go?

So just how low is low enough? Currently, Southwest's cost per ASM is 6.9 cents, while United is at 9.5 cents and American is at 10.5 cents. Can a viable airline be run at less than 6.9-7.0 cents/ASM? American Trans Air, a former charter carrier, has recently embarked on a frontal attack strategy on majors on key city pairs and claims a cost/ASM of 6.1 cents.

How successful will American Trans Air be? The theory the airline seems to be relying on is that the majors will not be too competitively destructive in their core markets and so, within reason, will tolerate a small niche player in dense city pairs.

Also, the major airlines are trying hard to maximise the leverage of frequent business travellers (9% of US air travellers account for 44% of total revenue), and thus they do leave some of the low value traffic for others.

Wounded ducks and regulation

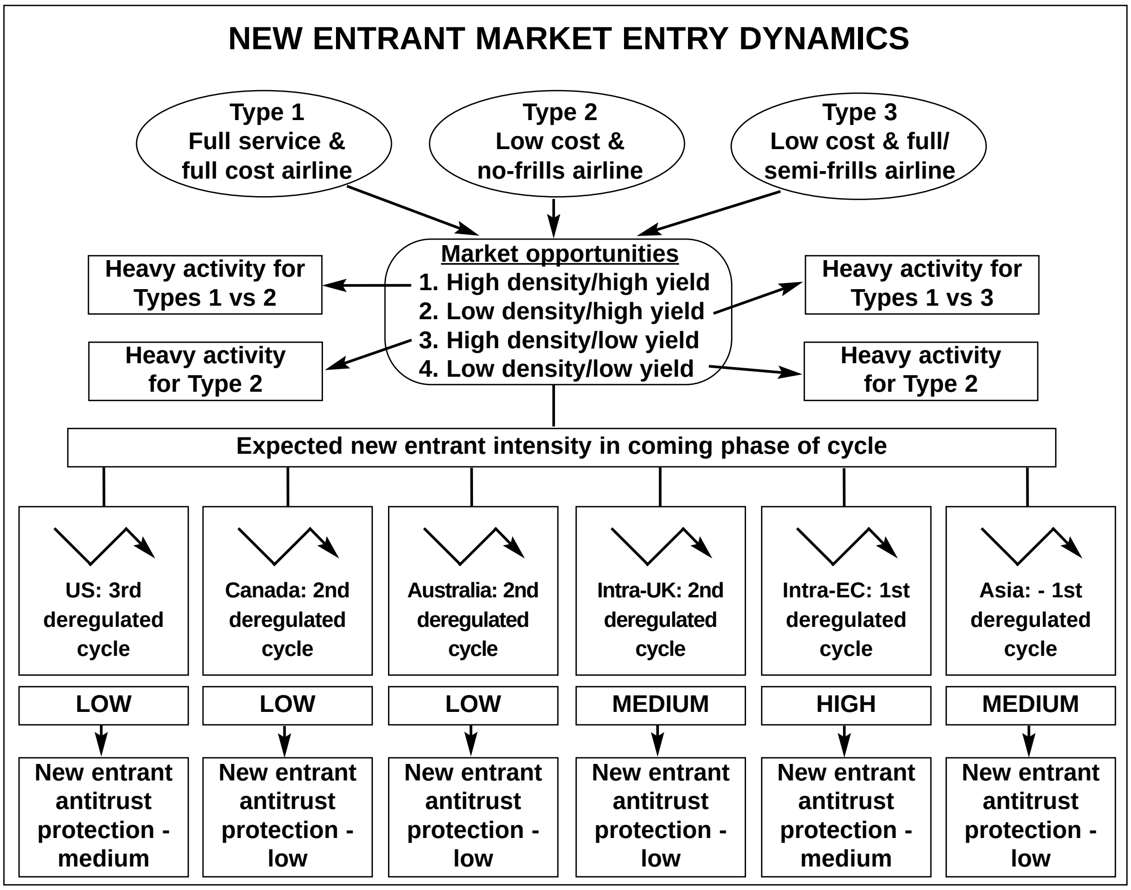
A failing major airline has always caused major headaches for the other majors, as this provides market access opportunities for new entrants. This upturn, however, there have been fewer wounded ducks to replace in general. While Asia and the European markets are full of wounded ducks waiting to fall, North America has far fewer than the last time around the aviation cycle.

Overall, the situation for new entrants can be summarised as follows: reduced market access opportunities in the second and third deregulated cycle markets but plenty of opportunity in Europe's first deregulated cycle and Asia's first substantive recession.

This brings us to the great potential equaliser between incumbent and new entrant, namely regulatory protection of new entrants. The US's Democratic administration has, throughout its term, signalled its willingness to block anti-competitive market action by majors against fledgling start-ups.

In Europe the EC is making similar noises, albeit in an uneven way, and in Asia - as the losses mount - new solutions are being sought in what are mostly regulated markets.

Can new entrants depend on protection from unfair competitive practices? On balance the answer would appear to be: not enough to bank on. As such, new entrants have to do a better job in finding and applying the right strategy for the markets they are entering. In short, they have to get smarter.



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
April 98	15.4	10.3	66.9	15.7	11.9	75.9	11.2	8.2	72.8	36.8	27.5	74.7	54.8	39.6	72.2
Ann. chng	6.9%	12.6%	3.4	11.8%	11.3%	-0.4	7.4%	6.4%	-0.7	10.3%	10.1%	-0.2	9.5%	10.7%	0.8
Jan-Apr 98	58.7	35.3	60.1	56.6	41.0	72.5	44.4	32.7	73.6	140.7	104.0	73.9	209.0	145.3	69.5
Ann. chng	7.7%	10.6%	1.6	9.6%	8.3%	-0.9	8.2%	6.0%	-1.6	9.6%	8.1%	-1.0	9.0%	8.4%	-0.4

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 %
1990	863.1	523.2	60.6	121.3	84.2	69.4	106.7	75.8	71.0	42.2	26.6	63.0	270.2	186.5	69.0
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	103.2*	82.7*	80.1*	92.0*	69.5*	75.5*	52.4*	34.7*	66.2*	331.2	246.5	74.4
April 98	79.0	57.3	72.5										28.3	20.3	71.7
Ann. chng	1.1%	5.1%	2.8										7.4%	7.1%	-0.2
Jan-Apr 98	313.0	213.6	68.2										110.6	78.0	70.5
Ann. chng	0.9%	1.5%	0.4%										6.7%	4.3%	-1.6%

Note: US Majors = American, Alaska, Am. West, Continental, Delta, NWA, Southwest, TWA, United, USAir. *Jan-Sep 97 only. **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 %
1990	1,270	795	62.6	1,527	1,062	69.5	2,797	1,857	66.4	5.8	5.0	9.4	8.9	7.8	7.0
1991	1,267	800	63.2	1,487	998	67.1	2,754	1,798	65.3	-0.3	0.6	-2.6	-6.1	-1.6	-3.2
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**	1,585	1,102	69.5	2,305	1,659	72.0	3,890	2,762	71.0	3.9	5.4	6.5	7.9	5.4	6.9
***1998**	1,621	1,133	69.9	2,398	1,728	72.1	4.018	2,861	71.2	2.2	2.8	4.1	4.2	3.3	3.6
***1999**	1,678	1,170	69.7	2,522	1,812	71.9	4,200	2,982	71.0	3.6	3.3	5.2	4.8	4.5	4.2
***2000**	1,757	1,217	69.2	2,686	1,917	71.4	4,443	3,133	70.5	4.7	4.0	6.5	5.8	5.8	5.1
***2001**	1,831	1,249	68.2	2,840	1,997	70.3	4,672	3,246	69.5	4.2	2.6	5.8	4.2	5.1	3.6
***2002**	1,852	1,244	67.2	2,916	2,023	69.4	4,768	3,267	68.5	1.1	-0.4	2.7	1.3	2.1	0.6

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

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	109	110	112	171	144	141	140	139	178	133	135	121	135
***1998**	121	115	113	113	113	184	149	154	151	151	198	144	144	128	144
***1999**	124	117	116	116	116	196	157	166	161	162	212	152	153	137	153

Note: * = Forecast; Real = inflation adjusted. **Source:** OECD Economic Outlook, Jan 1997. Real GDP forecast from The Economist poll of forecasts

COST INDICES (1990=100)

	Europe Unit revenue	Europe Unit op. cost	Europe Unit lab. cost	Europe Efficiency	Europe Av. lab. cost	Europe Unit fuel cost	US Unit revenue	US Unit op. cost	US Unit lab. cost	US Efficiency	US Av. lab. cost	US Unit fuel cost
1990	100	100	100	100	100	100	100	100	100	100	100	100
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**	110	107	85	161	136	84	107	96	102	124	126	71

Note: * = Provisional. European indices = weighted average of BA, Lufthansa and KLM. US indices = American, 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 costs per employee. Unit fuel cost = fuel expenditure and taxes per ATK.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100) US	UK	Germany	France	Japan		Exchange rates (against US$) UK	Germ.	France	Switz.	ECU	Japan	LIBOR 6 month Euro-$
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	116	122	114	108	**1997**	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
***1998**	125	119	123	116	109	**Jul 1998**	0.600	1.802	6.040	1.507	0.910	140.6	5.75%**

Note: * = Forecast, from The Economist. 1990-97 trends from OECD. ** = $ LIBOR BBA London interbank fixing six month rate.

BOEING FLEET FORECAST

AIRCRAFT ADDED AND REMOVED

Seat category*	1998 to 2002	2003 to 2007	2008 to 2012	2013 to 2017	Total
Single aisle					
50-90	418	279	439	442	**1,578**
91-120	571	550	608	398	**2,127**
121-170	1,374	914	1,418	1,545	**5,251**
171-240	512	659	895	1,110	**3,176**
Twin aisle					
Small	449	413	459	578	**1,899**
Intermediate	400	550	577	610	**2,137**
Large	174	163	249	251	**837**
Total pax. acft.	**3,898**	**3,528**	**4,645**	**4,934**	**17,005**
Freighter					
Small	4	9	24	32	**69**
Medium standard	12	10	13	23	**58**
Medium wide	36	20	31	45	**132**
Large	46	40	111	190	**387**
Total freighters	**98**	**79**	**179**	**290**	**646**
Total added	**3,996**	**3,607**	**4,824**	**5,224**	**17,651**
Total removed	**1,619**	**568**	**1,015**	**530**	**3,732**

AIRCRAFT AT YEAR-END

Seat category*	1997	2002	2007	2012	2017
Single aisle					
50-90	613	758	1,086	1,320	1,556
91-120	2,489	2,463	2,759	3,045	3,310
121-170	4,031	4,570	5,322	6,191	6,932
171-240	793	1,194	1,843	2,532	3,402
Twin aisle					
Small	1,194	1,597	1,987	2,368	2,759
Intermediate	885	1,098	1,511	2,045	2,675
Large	840	835	929	1,065	1,264
Total pax. acft.	**10,845**	**13,009**	**15,915**	**19,459**	**23,492**
Freighter					
Small	637	722	773	820	983
Medium standard	420	417	332	234	260
Medium wide	123	173	259	409	659
Large	254	335	416	582	804
Total freighters	**1,434**	**1,647**	**1,780**	**2,045**	**2,706**
Total fleet	**12,279**	**14,656**	**17,695**	**21,504**	**26,198**

Note: *Categories based on 36-/32-in mixed-class configuration (includes frieghter and combi aircraft in appropriate category).
Source: Boeing 1998 Current Market Outlook.

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Aero Int. (Reg.)	-					
Airbus	Jun 19	Iberia	31 A320s, 19 A321s		2Q99-04	+ 26 options for A320 family aircraft
Boeing	May 27	AB Airlines	6 737-700s			
Bombardier	Jun 23	Air Wisconsin	4 CRJ-200LRs	$84m	1Q99+	
	Jun 1	Maersk Air	1 CRJ-200LR	$21.3m	3Q99	From option
Embraer	-					
Fairchild Dornier	-					

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

Micro-trends

	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 96	4,171	3,691	480	282	64,766.3	45,799.1	70.7	6.44	5.70	20,806	9,726.6	5,265.6	54.1	91,476
Oct-Dec 96	3,967	3,751	216	284	62,503.6	42,194.2	67.5	6.35	6.00	19,528	9,366.1	4,969.5	53.1	91,476
Jan-Mar 97	4,006	3,782	224	152	62,059.4	41,676.0	67.2	6.46	6.09	19,363	9,283.2	4,848.4	52.2	86,246
Apr-Jun 97	4,292	3,812	480	302	64,026.0	45,012.1	70.3	6.70	5.95	20,697	9,482.2	5,241.2	55.3	87,248
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	4,223	3,798	425	290	62,405.4	41,846.6	67.1	6.77	6.09					
America West														
Jul-Sep 96	423	476	-53	-46	8,939.7	6,419.5	71.8	4.73	5.32	4,671	1,119.4	682.3	61.0	10,617
Oct-Dec 96	440	415	25	12	9,272.8	6,405.0	69.1	4.75	4.48	4,620	1,162.4	688.1	59.2	10,866
Jan-Mar 97	475	442	33	14	9,318.8	6,408.6	68.8	5.10	4.74	4,590	1,168.8	686.7	58.8	11,422
Apr-Jun 97	478	427	51	23	9,410.5	6,668.9	70.9	5.08	4.54	4,674	1,180.1	712.8	60.4	11,690
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				
Continental														
Jul-Sep 96	1,671	1,594	77	18	25,937.1	18,188.3	70.1	6.44	6.15	9,972	2,785.9	1,830.0	65.7	32,706
Oct-Dec 96	1,561	1,462	99	47	25,258.0	16,628.9	65.8	6.18	5.79	9,474	2,803.4	1,732.3	61.8	33,468
Jan-Mar 97	1,698	1,552	146	74	25,478.4	17,526.9	68.8	6.66	6.09	9,739	2,820.6	1,790.5	63.5	33,766
Apr-Jun 97	1,786	1,555	231	128	26,530.9	19,186.1	72.3	6.73	5.86	10,462	3,032.6	1,996.8	65.8	34,672
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				
Delta														
Jul-Sep 96	3,432	2,994	438	238	55,337.4	40,868.2	73.9	6.20	5.41	25,242	7,677.8	4,623.5	60.2	63,862
Oct-Dec 96	3,197	2,970	227	125	55,030.0	37,664.1	68.4	5.81	5.40	24,625	7,606.7	4,420.7	58.1	63,862
Jan-Mar 97	3,420	3,074	346	189	54,214.1	37,334.2	68.9	6.31	5.67	24,573	7,489.7	4,354.8	58.1	67,851
Apr-Jun 97	3,541	3,022	519	301	55,604.5	41,457.2	74.6	6.37	5.43	26,617	7,777.3	4,798.9	61.7	69,118
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	3,389	3,053	336	195	54,782.3	39,602.7	68.7							
Northwest														
Jul-Sep 96	2,735	2,266	469	254	40,461.0	31,077.4	76.8	6.76	5.60	14,368	6,445.2	4,045.4	62.8	46,994
Oct-Dec 96	2,340	2,265	75	26	37,216.7	26,054.6	70.0	6.29	6.09	12,723	5,965.7	3,566.9	59.8	47,631
Jan-Mar 97	2,376	2,241	135	65	37,102.1	26,702.1	72.0	6.40	6.04	12,661	5,800.7	3,471.3	59.8	47,628
Apr-Jun 97	2,558	2,267	291	136	38,985.3	29,195.9	74.9	6.56	5.82	13,780	6,175.7	3,817.3	61.8	48,025
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	2,272	156	71	38,260.1	27,038.2	70.7	6.35	5.94					
Southwest														
Jul-Sep 96	891	789	103	61	16,865.2	11,801.8	70.0	5.28	4.68	12,847	2,164.7	1,224.4	56.6	22,844
Oct-Dec 96	832	784	48	28	16,802.4	11,431.7	68.0	4.95	4.67	12,795	2,148.9	1,188.4	55.3	23,395
Jan-Mar 97	887	800	87	51	16,926.0	10,513.6	62.1	5.24	4.73	12,046	2,163.7	1,097.2	50.7	23,980
Apr-Jun 97	957	800	156	94	17,672.1	11,288.4	63.9	5.42	4.53	12,722	2,264.0	1,180.6	52.1	24,226
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				
TWA														
Jul-Sep 96	1,003	977	26	-14	18,426.5	12,919.5	70.1	5.44	5.30	6,381	2,550.6	1,476.5	57.9	26,332
Oct-Dec 96	803	1,036	-232	-263	16,020.4	10,050.2	62.7	5.01	6.47	5,517	2,201.5	1,195.1	54.3	26,578
Jan-Mar 97	762	862	-99	-72	13,772.4	9,129.6	66.3	5.53	6.26	5,345	1,898.2	1,054.3	55.5	25,662
Apr-Jun 97	844	839	6	-14	14,705.8	10,273.7	69.9	5.74	5.71	5,958	2,051.9	1,169.5	57.0	23,490
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					
United														
Jul-Sep 96	4,488	3,878	610	340	68,560.4	51,680.9	75.4	6.55	5.66	22,241	9,868.5	6,134.8	62.2	84,579
Oct-Dec 96	3,976	3,923	53	19	65,894.4	45,617.2	69.2	6.03	5.95	19,948	9,505.3	5,615.2	59.1	86,008
Jan-Mar 97	4,121	3,927	194	105	64,832.6	45,296.6	69.9	6.36	6.06	19,683	9,386.1	5,530.0	58.9	86,443
Apr-Jun 97	4,382	3,970	412	242	67,458.0	48,894.2	72.5	6.50	5.89	21,271	9,917.6	6,032.1	60.8	88,939
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					
US Airways														
Jul-Sep 96	2,073	1,941	131	68	23,632.6	16,522.7	69.9	8.77	8.21	14,329	3,297.6	1,806.1	54.8	42,192
Oct-Dec 96	2,052	2,003	49	27	23,684.1	16,146.1	68.2	8.66	8.46	14,412	3,182.8	1,755.7	55.2	43,144
Jan-Mar 97	2,101	1,925	176	153	23,397.6	16,009.3	68.4	8.98	8.23	13,773	3,141.2	1,734.3	55.2	42,225
Apr-Jun 97	2,213	1,957	256	206	24,014.0	17,707.1	73.7	9.22	8.15	15,533	3,234.0	1,911.0	59.1	42,320
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					
ANA														
Jul-Sep 96	4,060	3,846	214	75	36,248.3	23,421.2	64.6	11.20	10.61	20,104				15,914
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	3,090	3,160	-69	-40	41,442.7	26,945.8	65.0	7.46	7.62	24,721				15,996
Apr-Jun 97	SIX MONTH FIGURES													
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				
Cathay Pacific														
Jul-Sep 96	SIX MONTH FIGURES													
Oct-Dec 96	2,121	1,802	319	280	28,320.0	21,428.0	75.7	7.49	6.35	5,633	5,266.0	3,838.0	72.9	
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 97	2,037	1,858	179	138	28,172.0	20,044.0	71.2	7.23	6.60	5,208	5,074.0	3,613.0	71.2	
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				
Jan-Mar 98														
JAL														
Jul-Sep 96	5,406	5,269	137	24	54,783.8	38,491.2	70.3	9.87	9.62	15,046	8,254.3	5,406.0	65.5	19,046
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	4,797	4,882	-86	-138	61,639.1	43,455.6	70.5	7.78	7.92	18,890	8,868.0	6,225.0	70.2	19,046
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97	5,325	5,016	309	169	56,060.9	39,748.3	70.9	9.50	8.95	16,020	8,556.0	5,705.0	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	

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

Micro-trends

	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 schd. ASK Cents	Group costs per schd. ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
Korean Air														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	4,341	4,314	27	-249	54,071.5	38,136.6	70.5	8.03	7.98	23,741	10,953.3	8,253.2	75.3	17,139
Jan-Mar 97														
Apr-Jun 97														
Jul-Sep 97	TWELVE MONTH FIGURES													
Oct-Dec 97	4,574			-418										
Jan-Mar 98														
Malaysian														
Jul-Sep 96														
Oct-Dec 96	TWELVE MONTH FIGURES													
Jan-Mar 97	2,581	2,459	122	132	40,096.9	27,903.7	69.6	6.44	6.13	15,371	6,149.2	3,706.8	60.3	22,546
Apr-Jun 97														
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			
Singapore														
Jul-Sep 96	2,506	2,173	332	398	36,152.9	27,202.4	75.2	6.93	6.01	5,930	6,599.8	4,632.9	70.2	27,259
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	2,492	2,205	288	316	37,354.4	27,490.1	73.6	6.67	5.90	6,092	6,901.3	4,879.1	70.7	27,223
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97	2,549	2,171	379	402	38,125.4	28,216.7	74.0	6.69	5.69	6,135	7,231.0	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	
Thai Airways														
Jul-Sep 96	3,090	2,717	373	134	42,099.0	29,226.0	69.4	7.34	6.45	14,308	5,789.0	3,940.0	68.1	22,136
Oct-Dec 96	821	765	56	59	11,170.0	7,849.0	70.3	7.35	6.84		1,593.0			
Jan-Mar 97	824	777	47	25	11,369.0	8,128.0	71.5	7.25	6.83		1,621.0			
Apr-Jun 97	773	775	-2	11	11,352.0	7,583.0	66.8	6.81	6.83		1,620.0			
Jul-Sep 97	697	672	25	-1,050	11,462.0	7,668.0	66.9	6.08	5.86		1,639.0			
Oct-Dec 97	656	649	7	-661	12,144.0	7,715.0	63.5	5.40	5.34		1,712.0			
Jan-Mar 98														
Air France														
Jul-Sep 96														
Oct-Dec 96	TWELVE MONTH FIGURES													
Jan-Mar 97	8,780	8,563	217	75	77,333.0	58,586.0	75.8	11.35	11.07	16,733*		5,036.0		36,173
Apr-Jun 97	SIX MONTH FIGURES													
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										
Alitalia														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	5,283	5,238	45	789	50,960.4	34,131.5	68.9	10.37	10.28	23,138	8,167.7	5,674.0	69.5	16,507
Jan-Mar 97														
Apr-Jun 97														
Jul-Sep 97	TWELVE MONTH FIGURES													
Oct-Dec 97	5,083	4,878	205	161										
Jan-Mar 98														
BA														
Jul-Sep 96	3,560	3,068	493	427	37,693.0	29,179.0	77.4	9.44	8.14	10,432	5,299.0	3,851.0	72.7	59,160
Oct-Dec 96	3,301	3,087	215	154	35,976.0	25,417.0	70.6	9.18	8.58	9,075	5,056.0	3,494.0	69.1	58,911
Jan-Mar 97	3,179	3,130	49	113	36,211.0	25,416.0	70.2	8.78	8.64	9,070	5,057.0	3,456.0	68.3	60,188
Apr-Jun 97	3,624	3,395	229	260	39,697.0	28,756.0	72.4	9.13	8.55	10,613	5,589.0	3,875.0	69.3	60,083
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
Iberia														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	4,384	4,120	264	30	36,975.9	25,931.2	70.1	11.86	11.14	14,623	5,252.3	3,216.3	61.2	26,280
Jan-Mar 97														
Apr-Jun 97														
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														
KLM														
Jul-Sep 96	1,680	1,569	111	154	17,296.0	13,820.0	79.9	9.71	9.09		3,075.0	2,373.0	77.2	31,836
Oct-Dec 96	1,483	1,494	-11	-4	16,806.0	12,346.0	73.5	8.82	8.89		3,010.0	2,203.0	73.2	31,866
Jan-Mar 97	1,361	1,444	-83	-153	16,279.0	12,455.0	76.5	8.36	8.87		2,838.0	2,090.0	73.6	31,912
Apr-Jun 97	1,692	1,566	126	99	17,310.0	13,663.0	78.9	9.77	9.05		2,999.0	2,338.0	78.0	34,804
Jul-Sep 97	1,842	1,592	250	438	18,798.0	15,747.0	83.8	9.80	8.47		3,233.0	2,589.0	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		3,098.0	2,404.0	77.6	35,092
Jan-Mar 98	1,538	1,568	-30	528	17,598.0	13,240.0	75.2	8.74	8.91		2,981.0	2,250.0	75.5	34,953
Lufthansa* **														
Jul-Sep 96	3,813	3,612	201	210*	30,907.0	23,356.0	75.6	12.34	11.69	11,636	5,420.0	3,909.0	72.1	57,999
Oct-Dec 96	4,369	4,195	174	165*	28,991.0	20,320.0	70.1	15.07	14.47	7,886	5,230.0	3,762.0	71.9	57,999
Jan-Mar 97	3,198	3,198	-1	12*	28,099.0	19,726.0	70.2	11.38	11.38	9,186	4,985.0	3,477.0	69.7	57,291
Apr-Jun 97	3,654	3,463	192	220*	32,109.0	23,465.0	73.1	11.38	10.79	11,618	5,505.0	3,893.0	70.7	57,901
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	23,763.0	16,239.0	68.3	12.21	12.04	8,808	4,621.0	3,171.0	68.6	58,849
SAS														
Jul-Sep 96	1,297	1,180	117	41*	8,084.0	5,390.0	66.7	16.04	14.60	5,111				23,622
Oct-Dec 96	1,368	1,231	137	54*	7,678.0	4,688.0	61.1	17.82	16.03	4,948				25,530
Jan-Mar 97	1,133	1,108	24	-36*	7,443.0	4,335.0	58.2	15.22	14.89	4,515				23,440
Apr-Jun 97	1,379	1,151	228	178*	7,962.0	5,392.0	67.7	17.31	14.46	5,617				23,904
Jul-Sep 97	1,244	1,093	151	83*	8,084.0	5,598.0	69.2	15.39	13.52	5,227				24,168
Oct-Dec 97	1,334	1,204	130	63*	7,771.0	4,939.0	63.6	17.17	15.49	5,212				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
Swissair **														
Jul-Sep 96	SIX MONTH FIGURES													
Oct-Dec 96	1,285	1,348	-63	-355	16,372.6	11,074.0	64.4	7.85	8.23	4,857				10,202
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 97	1,787	1,724	63	76	17,464.4	11,880.7	68.0	10.23	9.87	7,643	3,340.6	2,291.9	68.6	10,163
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														

Note: Figures may not add up due to rounding.1 ASM = 1.6093 ASKs. *Pre-tax. **SAirLines. ***Excludes Condor from 1998 onwards.

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For further information please contact:

Keith McMullan
Managing Director, Aviation Economics
James House, LG2, 22/24 Corsham Street, London N1 6DR
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