

Aviation Strategy

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The dawn of a Golden Age?

Airline strategists have plenty to worry about at the moment - calculating the impact of the Asian downturn, estimating the effect of rising oil prices and forecasting when the next aviation recession will begin, to name but a few. Yet there is a small but growing voice within the industry that claims that the world's airlines are about to embark on a sustained 10-20 year period of rising demand and profits - in other words, we are about to enter a Golden Age for aviation.

It's a scenario that most people in the industry would find implausible, but the leading "super-optimist" is the legendary Julius Maldutis, aviation guru at Salomon Smith Barney.

His claim is that airline shares are set to embark on a sustained bull run over the next couple of decades, and that 20 years or so from now we will all look back and kick ourselves for not investing in airline shares in 1998, when they were so cheap.

The key to Maldutis's argument for a Golden Age is demand. He says that underlying demand for air travel will continue to rise well into the next century, and that traditional downturns in the aviation cycle will do little to alter that underlying trend.

So what, you may say - everybody knows that already. But super-optimists argue that airlines today are more able than they have ever been to take advantage of this rise in demand. Maldutis cites four underlying reasons why airlines will prosper as never before:

1) Airlines now employ very capable CEOs - many of them with no prior experience of the aviation industry. He says: "What this new breed of executive has done is very simple: they close loss-making routes. Unlike previous managements, they realise that earnings per share are more important than market share."

2) The next 10 to 20 years will see an aircraft supply shortage as manufacturers struggle to keep up with rising demand. The impact of noise legislation, carbon dioxide emission rules and concerns about the safety of ageing aircraft will mean demand will continue to exceed supply - and the effects will prove to be beneficial for airlines, it is claimed.

3) The printed airline ticket is obsolete. Maldutis believes the Internet will have a huge impact on the industry, eliminating the travel agent as an intermediary and allowing significant cost savings.

4) Related to this is the fact that the Internet, along with better yield management techniques, will allow airlines to sell more seats. Once airlines can predict with a high degree of accuracy how many seats are usually left unsold at any point in time before a flight departs, they can compare this with actual sales and price remaining tickets accordingly. And the Internet will allow the last few seats on any flight to be sold for a few dollars just hours before the aircraft departs. Historically, the industry has not sustained load factors above 70% for any length of time. Maldutis says: "We are the only industry in the world that consistently throws away at least 30% of our stock unused, but that will change." (continued on page 2)

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But just how valid are these arguments for the dawn of a Golden Age? The long-term increase in demand for air travel is well documented. Even after the Asian shock, most forecasts see between a 4%-6% average annual growth in RPKs over the next 20 or so years, stimulated by world GDP growth, the growing interdependence of economies, fewer political barriers to travel, increasing leisure time etc. But does this necessarily translate into a 20-year boom for airlines?

Maldutis is undoubtedly correct in his assertion that a new breed of executive, with an emphasis on profit, not market share, is having a major impact. However, most examples of this are found in the US. Truly commercial - and ruthless - CEOs are few and far between in Europe and Asia, although this will change.

His point about an aircraft shortage is much more contentious, particularly as some analysts believe that airlines have already over-ordered (see *Aviation Strategy* March

1998, pages 4-5). Maldutis's counter-argument is that worries about supply are behind the exclusive deals signed by some US majors with manufacturers - even though playing off one manufacturer against the other would appear to be a better option for airlines.

On the impact of the Internet, *Aviation Strategy* agrees with Maldutis that the Internet will make intermediaries obsolete, or at best peripheral. Already, business travel agents are trying desperately to add value to clients through a range of extra services - but still more and more corporations are setting up specialised travel departments and booking direct (which means they can capture FFP benefits as well).

However, whether airlines can raise load factors over 70% long-term remains to be seen. But the Internet will help. A hint of the potential is given by Southwest's weekly Internet sale, which can offer seats on a Las Vegas-Seattle flight for just \$57.

Overall, it is far too early to say whether Maldutis's predictions will prove to be right or wrong. And for every Maldutis there is a correspondingly pessimistic analyst, such as Chris Avery of Paribas who claims that: "The Asian flu is contagious and will spread, with a weakening outlook for global aviation."

But, if for argument's sake we assume that Maldutis and the super-optimists are right, should airline strategists sit back and wait for the profits to roll in?

Of course not. The lesson from history is clear - size or current status is absolutely no guarantee of corporate longevity, as former investors in Pan Am, People Express, Dan-Air etc, know only too well. The table on the left shows that compared with just 10 years ago, there has been significant change in the world's largest airlines by region (although interestingly the top three has stayed the same in all three regions).

What really matters is competitive advantage and, more importantly, the ability for an airline to adapt to new circumstances when required. What is certain is that when the table on the left is updated in 10 or 20 years' time, some current household airline names - those who cannot gain new competitive advantages - will not be on it. Which ones they will be is, of course, unknown.

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THE WORLD'S LARGEST AIRLINES BY FLEET SIZE, 1988 & 1998

1988 FLEET		1998 FLEET	
North America			
1) American	481	1) American	649
2) United	410	2) United	601
3) Delta	389	3) Delta	567
4) Continental	364	4) Northwest	413
5) Northwest	307	5) US Air	394
6) Eastern	262	6) Continental	337
7) US Air	231	7) Southwest	259
8) TWA	212	8) TWA	211
9) Piedmont	201	9) Air Canada	155
10) Pan Am	134	10) America West	105
Total	2,991		3,691
Europe			
1) British Airways	167	1) British Airways	270
2) Lufthansa	130	2) Lufthansa	225
3) Air France	114	3) Air France	213
4) SAS	85	4) Alitalia	140
5) Iberia	83	5) SAS	138
6) Alitalia	65	6) Iberia	114
7) Swissair	59	7) KLM	88
8) KLM	46	8) THY	65
9) Air Inter	42	9) Swissair	63
10) Dan Air	36	10) Finnair	55
Total	827		1,371
Asia			
1) JAL	91	1) JAL	138
2) ANA	85	2) ANA	136
3) Korean Air	49	3) Korean Air	119
4) JAS	44	4) Malaysia AL	98
5) Air China	40	5) Singapore AL	84
Total	309		575

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Leasing out the Asian surplus

The aircraft market is in a curious state of imbalance, with excess supply in Asia and very tight demand conditions in Europe and North America. How will this situation be resolved?

Deferral of deliveries for 1998 and 1999 is apparently very difficult, and production slot swap negotiations - such as those between MAS and Delta - do not seem to be productive. The attitude of the manufacturers is nonchalant; Airbus and Boeing give the impression that the current Asian crisis is a minor blip on a long-term upward curve.

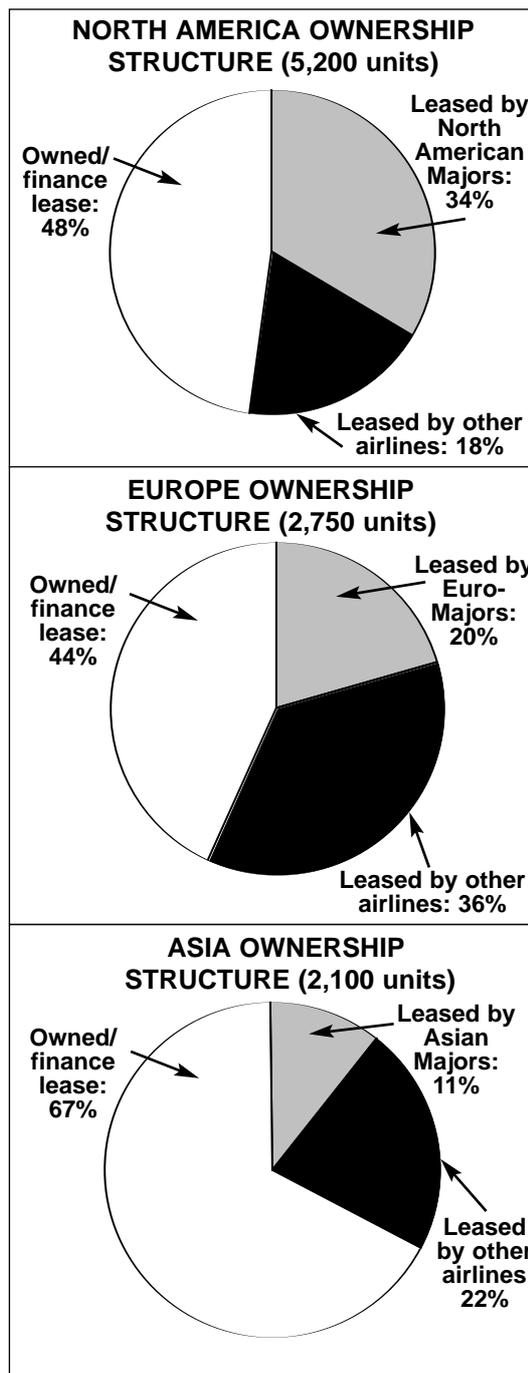
Most Asian carriers have announced plans for selling aircraft. Some airlines - MAS and Asiana for example - may be willing to sell their entire fleets. Thai International intends to convert its additional committed aircraft deliveries in 1998 to operating leases, and dispose of at least 17 aircraft. Cathay Pacific is attempting to sell its 747-200 fleet.

Yet anecdotal evidence suggests that the Asian carriers, confronted by a wholly new situation, are not moving fast enough in disposing of their assets. And any delay means a further decline in their asset values, and a dent in cash flow.

A further complication for Asian airlines is that stockmarket analysts have started to factor in fleet values in their assessments of underlying value of airline shares. Peter Tang of Jardine Fleming in Hong Kong, for example, argues that because earnings forecasts have become so impossible to calculate, much more attention has to be paid to balance sheet ratios. Hence the adjusted net asset value (75% of the theoretical second hand value of the fleet plus investments minus net debt) of Cathay Pacific works out at HK\$7.30 a share as at mid-March compared with the actual price of HK\$6.50.

For the leasing business, however, the Asian crisis presents an opportunity. It may be possible to purchase aircraft en masse from Asian carriers at prices which reflect

the distressed conditions of those carriers and then lease them out to Western airlines at close to peak rates. Or they could be



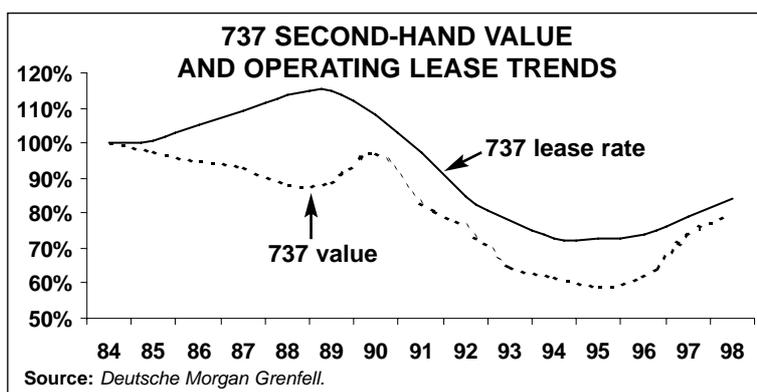
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leased back to the Asian carriers whose main concern at the moment is probably to secure an injection of dollars.

The pie charts on page 3 represent *Aviation Strategy's* estimate of the ownership/leasing structure of commercial aircraft fleets in the three main regions of the world. Whereas 52% of the North American fleet and 56% of the European fleet is on some form of operating lease (from a leasing company, a bank or even a manufacturer), this percentage reduces to just 33% for the Asian fleet.

Perhaps more significantly, jets leased to North American Majors accounted for some 34% of the regional total, compared with 20% for the Euro-Majors and just 11% for the Japanese and Southeast Asian Majors



Historically, the leading Asian carriers have not used the operating lease to any great extent for a number of reasons. First, cash-flow has been consistently strong, enabling outright purchases; second, fleet flexibility has not been priority in a largely regulated environment; third a high proportion of the Asian fleet consists of widebodies, which lessors generally have not supplied. This could now be about to change.

For the banks and leasing companies, however, there is a substantial risk involved in exploiting the Asian situation. It is probable that second-hand values for narrowbodies are at or close to their cyclical peak (see graph, left); values for widebodies are almost certainly past their peak and on a downward track.

Facilitating the dispersal of the Asian surplus means increasing the supply of second-hand aircraft in the West, which, despite currently strong market conditions, will inevitably put downward pressure on prices. A further danger is that too many lessors will start chasing opportunities in Asia. Less sophisticated players will enter this new market, creating a speculative bubble. In addition, it should not be forgotten that there is one other very weak sector of the aviation industry - US new entrants - which could also boost the supply of second-hand narrowbodies.

The search for new market opportunities

Europe's new entrant carriers are desperately seeking out new market opportunities before the new "light" versions of the Euro-Majors arrive on the scene.

The new entrants are at least proving that they are genuinely transnational carriers, not tied to their home bases. Ryanair, for instance, is expanding from London Stansted to secondary points in France, Italy and Norway. Part of the logic behind this growth must be to establish a broader network before it starts taking delivery of 25 737-800s next year.

EasyJet's growth strategy is now partly based on acquisition. Having failed to gain

control of Air Holland, easyJet switched its attention to Geneva-based charter airline TEA Switzerland, buying 40%, with an option for a further 50% in late March 1998. The idea is to quickly convert TEA Switzerland into a low-cost scheduled operator - an easyJet Switzerland - operating a fleet of four 737s.

This move, if successful, will position easyJet at the centre of the highest fare region in Europe, exploiting the gap left at Geneva by Swissair's centralisation of its operations at Zurich. Chairman Stelios Haji-Ioannou has stated that he intends to push for lower airport charges and renegotiate

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lower rentals with ILFC, the lessor of TEA's equipment. This tactic worked well for the new entrants in 1992-94 when they were in a buyers' market, but concessions will be harder to achieve now.

EasyJet is scheduled to take delivery of 12 new 737s in the period up to the end of next year. This will provide the capacity needed for a further geographical expansion, probably into the Greek market, operating on the main (and relatively unseasonal) Athens-Salonika route with additional, perhaps seasonal, operations to the islands now that this market has finally been opened up to competition.

Virgin Express is also considering relocation, but for rather different reasons. Before he resigned at the end of March to return to the US to run Mesa, chief executive Jonathon Ornstein complained bitterly about the level of local taxes, government interference and union power in Belgium.

Quoted in the Financial Times, he said: "The unions told us there's no future for low-cost airlines in Belgium. We're trying to decide whether we agree with them".

Moving from Brussels would be a very serious move for Virgin Express as it would mean breaking the codeshare/franchise agreement that it has with Sabena - and with that would go access to Heathrow slots.

Virgin's frustration does highlight one of the continuing anomalies in the European market: in the places that the low-cost entrants are most needed - Brussels, Rome, Madrid etc - their effective development is still being blocked by a combination of unions and flag-carriers. Perhaps the next stage of new entrant evolution will involve consolidation in order to obtain the presence to confront the incumbents. Also, the new entrants should be looking at ways of achieving economies of scale to help defray the additional costs of their new equipment.

The Americanization of Latin America

The order for 90 A320s/A319s and 89 options placed in March by a consortium of three Latin American carriers (LanChile, the TACA Group and TAM) is significant for a number of reasons.

First, it is the largest order ever placed by a Latin American entity. Second, it illustrates the new and innovative commercial approaches of Latin American airlines. Third, the exclusive choice of narrowbodies clearly shows where the priorities are - serving regional routes and by implication increasingly leaving the long-hauls to US Majors.

According to an analysis by AvMan the US-flag share of US-Latin America routes rose to 53.1% in 1997, up from 43% in 1990 while over the same period US citizen shares fell to 38% from 41.8%. There seems little reason for this trend to alter as US carriers have an in-built competitive advantage on this route:

- They are able to route traffic over their hubs, particularly Miami, to Latin America while the same opportunity does not arise on the southern continent;
- Quality of service and reliability of US carriers is generally perceived as superior;
- Some Latin carriers are precluded from increasing frequencies to the US because of FAA safety rulings;
- Economies of scale (and sometimes Latin American imports tariffs) mean that US unit costs tend to be lower;

- US FFPs are all-powerful;
- Extensive alliances have been signed between the US Majors and Latin American counterparts which mainly leave the latter with a regional feed role;
- The most effective way for Latin American carriers to maintain presence on US routes is through code-share alliances that are linked to Open Skies agreements, which eventually will lead to US dominance.

THE LARGEST MARKETS TO/FROM US				
(000s pax)	1990	1996	2001 forecast	Av. ann. growth 96-01
Mexico	8,449	10,688	16,445	9%
Bahamas	2,958	2,411	2,796	3%
Brazil	1,145	2,307	4,066	12%
Dom. Rep.	1,844	2,224	3,119	7%
Jamaica	1,862	2,122	2,839	6%
Venezuela	902	1,301	1,825	7%
Colombia	563	966	1,486	6%
Argentina	346	962	1,696	12%
Costa Rica	468	763	1,121	8%
Aruba	524	748	1,205	10%
Guatemala	411	707	1,088	9%
Peru	401	677	1,193	12%
Neth. Ant.	765	592	687	3%
El Salvador	318	581	936	10%
Chile	223	486	857	12%
Ecuador	334	485	681	7%
Panama	337	447	626	7%
Bolivia	87	164	264	10%
TOTAL	21,937	33,280	48,683	8%

Source: AvMan Inc.

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EU duty-free abolition: an opportunity, not a threat

Seven years after the EU announced that tax- and duty-free sales would be abolished, Europe's vocal duty-free lobby is still trying to overturn the decision. Their reasoning is simple - ever since abolition was delayed from 1992 to July 1st 1999, the European aviation industry has been harvesting a last-gasp bonanza. EU duty-free sales have leapt from \$3.9bn in 1991 to \$6.1bn in 1996, and the duty-free lobby does not want the gravy train to stop.

Yet the powerful duty-free lobby has often overstated its case, no more so than by claiming that 150,000 jobs will be lost as a result of the change - a figure that is clearly over-inflated. But the duty-free lobby continues to press its case, and has been given a glint of false hope by the vote by EU transport ministers in March 1998 to review the effects of abolition.

The problem is that there is absolutely no chance that duty-free abolition will be cancelled or postponed. All 15 EU finance ministers would have to agree, and the Danish and Dutch governments are determined that abolition will occur as planned. The only people who do not seem to realise this are those in the duty-free lobby. On the stock-markets the prices of quoted airport stocks - BAA, Vienna Airport, Copenhagen Airports and Aeroporti di Roma (which has just beaten BAA to the contract to run nine airports in South Africa) - have already been discount-

ed by the markets to take account for the July 1999 change, according to Guy Kekwick, London-based analyst for Goldman Sachs.

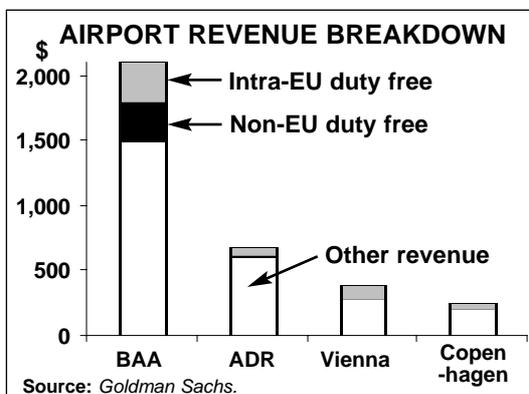
The debate is over

In any case, once the emotion is taken out of the issue the arguments in favour of abolishing EU duty-free sales are unanswerable. Duty-free sales are an unjustifiable anomaly, inconsistent with development of a European single market. They are an indefensible subsidy to airlines and airports, discriminating against those who either do not travel or go by train and car. And thousands of newsagents, off-licenses and tobacconists in the UK, for example, would dearly love to see the end of this subsidy too, but the UK duty-free lobby conveniently forgets this. And, finally, the EU is not alone in its actions - the move is likely to be copied by NAFTA and Mercosur.

Yet debate about the merits or otherwise of duty-free abolition is completely irrelevant, since abolition will take place regardless. What is much more important is how abolition will affect airlines and airports and, unless they are completely relying on the duty-free lobby to win through at the last minute, what plans they have developed over the last six years to replace the lost income.

Clearly airports will be hardest hit. In 1996 duty-free spend per passenger was \$4.82 on EU airlines, \$17.26 in EU airports, and (as a comparison) \$25.25 on EU ferries. But these average figures hide a large variation between individual airlines and airports (see charts, left and above right).

The most basic way airports can replace EU duty-free income is to raise take-off and landing fees - or at least that is what the duty-free lobby is threatening. The UK-based Duty-Free Confederation claims that as a result a typical family will pay an extra



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\$92 per package holiday to a European destination. This is scaremongering, but regulators have allowed Copenhagen Airports to increase landing fees by up to 15% in both 1999 and 2000, and BAA also has permission to raise fees.

Some airports claim they will have to raise fees because otherwise they would not be able to finance much-needed improvements to airport infrastructure. That argument is simply not valid. Why should airlines be billed in advance for airport investment? If airports do not have a viable enough business case to raise the money on the financial markets, then airlines should not suffer as a result.

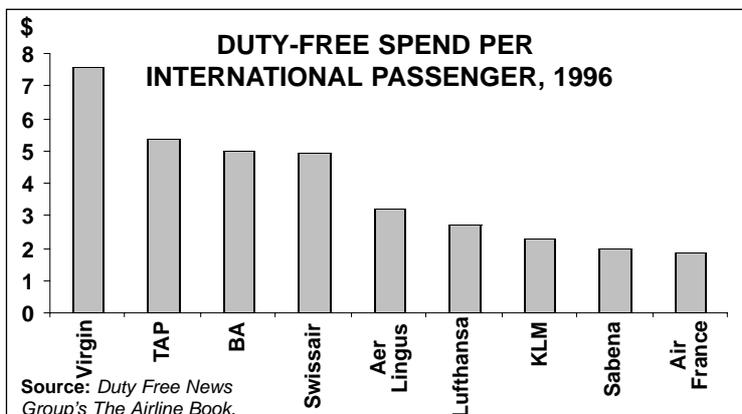
How much landing and take-off fees will be raised at individual airports next year will depend on how much compensatory income comes from the retail side. As Guy Kekwick points out, BAA - and to a lesser extent Copenhagen Airports - has "shifted the focus of their business away from the regulated landing, passenger and handling fees to the more interesting and dynamic retail side of the business".

It is ironic that the more commercial airports will have most to lose, since they have a greater amount of duty-free sales, but on the other hand these airports are the best placed to replace lost revenue with duty-paid sales. This is a point of debate the duty-free lobby is quick to downplay, but the fact remains that the potential for duty-paid sales at the more commercial airports is huge.

Tax-paid airport shopping has been very successful in the US, and as well as the traditional captive market of air travellers there is no reason why European airports cannot develop retail well enough to attract non-flying shoppers within a local catchment area.

A change in mindset

To do this, however, airports have to change their mindset - from being national or local government-owned utilities to being commercial, transnational companies. That may mean bringing in expert retail advice from outside - a considerable strategic shift for the majority of European airports that are still controlled by national/local government.



As for airlines, with far lower exposure to duty-free sales, they have less to lose - unless airports increase landing fees disproportionately. KLM UK (formerly Air UK) has already dropped on-board duty-free sales (from April 1st), but it claimed that the 1999 abolition was a minor factor in its decision - the deciding factor was that passengers preferred the better range of duty-free goods available at Schiphol.

However, unlike airports, airlines have much less scope to increase duty-paid sales. Today much of the non-alcohol/tobacco sales on airlines are, quite frankly, cheap and tacky. Airlines therefore have two choices: if duty-free only contributes a very small amount of revenue it can be stopped altogether (as with KLM UK); or else airlines will have to come up with new ranges of goods that passengers will actually want to buy in-flight rather than at airports.

Here again, outside retail expertise may have to be brought in but, as with airports, a little bit of creativity may prove to be very profitable. For example, there is potential for airlines to link in-flight sales to FFPs via mail-orders catalogues, perhaps via a link with a major high street brand. Airlines must consider duty-paid sales not as marginal revenue, but rather as a whole new market to be explored.

In fact, creativity and imagination is the key to airlines and airports replacing the revenue they will lose from duty-free sales. And that is more likely to come from those in the aviation industry that see the abolition of duty-free sales as an opportunity, rather than an absolute loss.

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Transcontinental competition: the battle for Boston

For anyone who assumes that the US domestic market has reached stability, with airlines now concentrating on pushing up load factors and improving yield, there is a salutary lesson in observing what is happening on key transcontinental routes.

Transcontinental (coast to coast) routes are among the most lucrative in the US, and in an attempt to win control of them leading airlines have again become embroiled in battles for market share - with short term commercial logic being sacrificed for longer term strategic gain.

Most major US airlines offer services that can be defined as transcontinental, but American and United offer the most non-stop flights between the largest cities on each coast. Both airlines have developed points of strength on each coast and on particular routes.

San Francisco is United's transcontinental anchor, as it is also the airline's largest transpacific gateway. United also maintains a strong position in Los Angeles, but has never been able to take the lead away from American in the largest transcontinental market - between LA and New York Kennedy.

Now, however, the transcontinental battle appears to be shifting onto the Boston to California routes. American and United each offer multiple daily nonstop flights between Boston and Los Angeles, but until recently United was the only airline offering nonstop service from Boston to San Francisco, and American was the only carrier offering non-stop service, twice daily, between Boston and San Jose (Silicon Valley).

Then in October 1997 American announced that it would enter the Boston to San Francisco market with three daily 757 nonstop flights. Almost immediately, United announced that it would begin flying between San Jose and Boston with A320s which, United claimed, would give it "the strongest coast-to-coast service between Boston and the San Francisco/San Jose bay

area". United's new flight leaves from San Jose at 9:30pm and arrives at Boston early the next morning. The rationale for choosing a night flight was almost certainly to utilise an otherwise idle aircraft and hence minimise start-up costs on this route.

American responded to United's move by adding one more daily 757 flight from San Jose to Boston. American's new flight is timed to leave San Jose for Boston at the same exact time as United's flight at 9:30 pm, so removing United's one advantage in this market. Again, the investment cost would have been minimal, as the aircraft would otherwise have been idle overnight.

A battle to oblivion?

But can the Boston-San Jose market of just 250 local passengers each day, each way, and little flow traffic feed possibly support 3½ daily nonstop flights?

United, refusing to let American have the last word, announced in early January that it would "strengthen its position as the industry's largest carrier from Boston to California and other west coast destinations" by offering the only nonstop service between Boston and San Diego (operated with A320s).

American has not yet announced any additional service from Boston to California. United's ability to respond with the A319 and A320s gives them a short-term advantage versus American, which has to use the larger and more expensive 757. However, soon American will begin receiving new generation 737-800s, allowing it to respond more efficiently in long-haul, low demand markets.

It is clear that the battle for Boston is not yet over, and American and United's fast-paced skirmish for this transcontinental market indicates the importance that the major airlines still attach to market share in key markets. In the US scheduling actions can send powerful messages to competitors - and elicit powerful responses.

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Southwest: now appearing in the East

After saturating many of its traditional markets in the western half of the US, Southwest has turned its full attention to the East coast. It is gearing up for major expansion at Baltimore and in New England, where it will clash head-on with US Airways' MetroJet this summer. Will the pioneer of low-cost travel emerge as the winner as always before?

Despite its rapid growth and the tough challenges posed by the East coast environment, Southwest has continued to report record earnings and the best profit margins in the industry. It has now been profitable for 25 consecutive years.

It has achieved such consistency by avoiding the mistakes made by others - notably over-ambitious expansion. It took 12 years to grow its fleet to 50 aircraft and did not venture out of its traditional southwestern and West coast territory until the early 1990s. Chicago was added in 1991 and Baltimore in 1993. Florida followed in January 1996 - its strongest eastward push so far - and Providence (Rhode Island) in October 1996.

In contrast to the earlier years, Southwest has grown rapidly in the 1990s. Its strategy is to expand capacity by about 10% annually. However, it does not over-extend itself as, typically, most of the new capacity is used to boost frequencies and only one or two new destinations are added each year.

This and the strong profits have enabled Southwest to maintain a healthy balance sheet. At the end of 1997, it had \$623.3m in cash, plus an available and unused bank credit facility of \$475m, and very little debt. Until very recently, it was the only one of the major carriers with investment-grade credit ratings.

Southwest takes care not to provoke larger competitors. It uses secondary airports or older terminals that bigger carriers snub. The beauty of this strategy is that it gets the traffic because people are willing to drive 40-50 miles to get cheap fares, yet it does not directly confront the largest airlines at their hubs.

This has enabled Southwest to quietly grow into the nation's fifth largest carrier in terms of domestic passengers, now serving 51 cities in 25 states with 2,300-plus daily flights.

The DoT's new draft guidelines on competitive practices, leaked to the press in mid-March, note that while the high-cost carriers appear to be using unfair tactics to stifle or drive out weaker low-cost competitors, they prefer to co-exist with companies like Southwest that have enough wherewithal to battle for market share.

Southwest certainly showed its strength in the war that broke out in California after United launched its Shuttle in late 1994 - the first time that the low-cost carrier had ever been so directly and highly visibly challenged in one of its core markets.

After initially losing market share, Southwest emerged as the winner when the Shuttle, unable to reach its cost targets, retreated from many competitive markets and became essentially a feeder for United at the San Francisco and Los Angeles hubs.

However, occasional mistakes made by Southwest over the past three years, which caused its profits to dip in some quarters, have showed that it is not invincible.

First, it over-extended itself with growth in 1994 and had problems integrating Morris Air.

Second, it responded to the sudden surge in low-cost competition three years ago by launching extensive and highly damaging fare sales.

Third, in the summer of 1996 it inexplicably went into a market-share expansion

SOUTHWEST'S FLEET PLANS			
	Current fleet	Orders (options)	Delivery schedule/comments
737-200	47	0	
737-300	186	0	
737-500	25	0	
737-700	4	125 (62)	21 this year
TOTAL	262	125 (62)	

Note: Southwest also plans to purchase/lease four ex-Western Pacific 737-300s in April.

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mode, again sacrificing the yield through heavy discounting.

The market share expansion strategy was quickly abandoned in early 1997, when the impact on earnings became evident, and Southwest actually implemented some marginal fare increases. This led to substantial quarterly profit surges throughout last year and restored confidence in the predictability of the company's future earnings.

In the second half of 1997 Southwest also benefited from the stabilisation of the West coast fare environment. Its fourth quarter net earnings nearly tripled as its average fare rose by 18.4% (to \$74), yield improved by 14.5% and unit costs fell by 1.7%.

Unique low-cost formula

Southwest has the industry's highest profit margins because its passenger yield, at 12.84 cents per RPM in 1997, is comparable to the yields of the larger carriers (except US Airways), yet its unit costs, at 7.40 cents per ASM, are 15-20% below those of American, United, Delta, Northwest, Continental and TWA.

Many start-up carriers have copied Southwest's basic short-haul, point-to-point, high-frequency, low fare strategy, but have failed miserably. No-one has been able to emulate Southwest's business model: low unit costs, a no-frills but otherwise exceptional service and a highly motivated work force.

Southwest's product is basic: no first class, no meals, no assigned seats. The emphasis is on a friendly and professional service that caters for both leisure and business travellers.

The airline attracts substantial volumes of business travellers because of its focus on things that matter most to that segment: high frequencies and punctuality. For the past five years, it has come top of the DoT's on-time performance, baggage handling and customer satisfaction rankings.

It has achieved that consistency by being extremely strict about everything that may affect efficiency and reliability. For example, it is spearheading the current industry-wide crackdown on multiple or excessively large carry-on luggage items.

There have never been any negative perceptions about Southwest's safety because it is a large, well-established and conventional operator (doing its own maintenance, among other things), has never had an accident and operates one of the youngest fleets in the industry (average age just 8.3 years).

Southwest's unit costs are so low because of the efficiencies offered by a uniform, modern 737 fleet, rapid 20-minute turnarounds and favourable labour contracts. It also saves money by operating from cheaper secondary airports and offering a no-frills product.

The carrier has benefited enormously from a 10-year contract signed with the pilots in November 1994. The deal froze salaries for the first five years and granted 3% annual rises in the subsequent three years, in return for stock options.

One of the things that really sets Southwest apart from its rivals is the way it treats its employees. The company goes to great lengths to attract the right-quality staff, train them well and then motivate them to outperform their counterparts at other carriers.

Public recognition of Southwest's unique corporate culture came when Fortune magazine recently declared it to be "the best company to work for in America". In a previous 1993 survey, Southwest was voted the best for job security, opportunities (among the youngest companies) and "where fun is a way of life".

The corporate culture is maintained through a personality cult. Fortune said of chairman, president and CEO Herb Kelleher: "He spends his business life making sure his employees believe in him and in the operation he has muscled into the top tier of a savagely competitive industry."

Workers are also motivated through a profit-sharing programme, which has been in place since 1974 and has received a total of \$353m in contributions. This year the company will pay out \$91m (based on last year's profits), which will represent about 11% of eligible salaries.

Blazing success in Florida

Southwest's Florida operation was an immediate success, with high load factors

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and stronger than anticipated revenues, so frequencies were built up rapidly during 1996, the initial year of operation. By mid-January 1997, when also Jacksonville had been added to the network, Southwest's operation included 90 daily flights from four Florida cities.

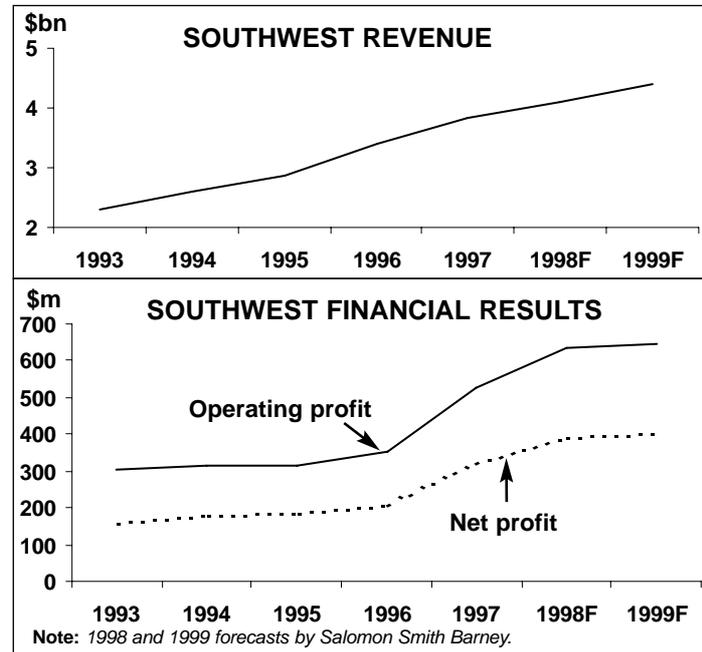
The carrier quickly became a dominant force in intra-Florida markets, which had previously been served mainly by commuter operators charging high fares. Its shuttle-type service offering advance purchase fares as low as \$29-\$32 has diverted huge volumes of traffic off the roads.

For example, passenger numbers on the 200-mile Ft. Lauderdale-Tampa sector were 2.5 times higher in 1996 than a year earlier, with Southwest capturing an 87% market share or 424,000 passengers.

The strategy of serving Florida with relatively low frequencies from numerous Midwest and East coast cities has also worked well. With advance purchase and walk-up fares as low as \$89 and \$159 respectively, Southwest has generated much new traffic. Passenger numbers from cities such as Baltimore, Providence and New Orleans typically doubled or even tripled in 1996.

The Florida operation, which was already profitable last year, has clearly been Southwest's most successful regional growth effort so far. This month (April) will again see some frequency increases. However, future expansion potential may be limited because there are signs that the markets could become oversaturated. America West is now challenging Southwest on the Ft. Lauderdale-Columbus sector. Kiwi is back after its Chapter 11 reorganisation. Delta Express, which so far has competed head-on with Southwest in only a few markets, is again in an expansion mode.

But the most direct assault will come from US Airways, which will target its new low-cost subsidiary MetroJet specifically on the Northeast and Midwest to Florida markets. This summer it will enter the Baltimore-Ft. Lauderdale and Baltimore-Tampa routes, with 3-4 daily nonstop flights, connections from three other Southwest points (Cleveland, Providence and Manchester) and



fares that slightly undercut those of Southwest.

Northeast expansion

Southwest's current Northeast focus is a critical part of its long term strategy and reflects the success of the Baltimore and Providence experiments, but US Airways' moves have obviously added a new sense of urgency.

US Airways announced on February 4 that MetroJet will focus on Baltimore when it begins operations on June 1, linking that city with Cleveland, Providence, Ft. Lauderdale and Manchester (New Hampshire) with high-frequency, low-fare services utilising five 737-200s. Tampa will follow on July 6 and more destinations will be announced on a monthly basis. The operation could utilise about 20 aircraft by the end of this year.

Over the past five years, Southwest has built up hub operations at Baltimore at a fairly leisurely pace. It has inflicted some damage on US Airways, which has lost traffic on routes such as Washington-Boston and Washington-Cleveland as travellers have been willing to drive to Baltimore to get low fares.

Baltimore expansion is logical also because the airport is not capacity-con-

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strained. But Southwest waited until hearing US Airways' plans for MetroJet before announcing major expansion there.

It now intends to add 10 gates at Baltimore by the year 2000, to increase its gates to 16. This will mean a trebling in capacity, from the current 50 to as many as 160 daily flights. It also plans to open a crew base there this year.

By comparison, MetroJet will initially utilise only three gates at Baltimore, though it has better immediate growth potential as US Airways currently has 22 gates at that airport.

Like the Florida markets, Providence has shown exceptional traffic growth since Southwest arrived 18 months ago. It has proved itself as an attractive alternative to Boston's congested Logan International airport.

The Providence-Baltimore route, where Southwest introduced a virtual shuttle service with unrestricted one-way fares of \$59 (compared with US Airways' \$289 on Washington-Boston), grew to more than 500,000 passengers in 1997, up from just 57,100 in 1996. The carrier is now constructing additional gates for expansion.

In mid-March Southwest announced that it would add Manchester to its network on June 7, offering a high-frequency service to Baltimore, one or two daily flights to Chicago/Midway, Nashville and Orlando, and direct connecting service to 25 other cities.

Like Providence, Manchester was chosen because of its low air traffic congestion and its potential to draw traffic from Boston suburbs. But its location (45 miles north of Boston) also offers a new catchment area,

enabling the carrier to further penetrate northern New England.

The stage is now set for a mighty clash between Southwest and MetroJet in numerous East coast markets this summer. The Baltimore-Manchester confrontation will be particularly interesting, because the two will enter that market within a week of one another. Southwest has set its fares one dollar higher than MetroJet's but will have the edge with eight daily frequencies compared with MetroJet's three.

US Airways' wisdom in taking on Southwest so aggressively is questionable, because it will not be able to get MetroJet's costs anywhere near Southwest's levels. Its strong East coast position will help MetroJet succeed in at least some markets, but it will not beat back Southwest.

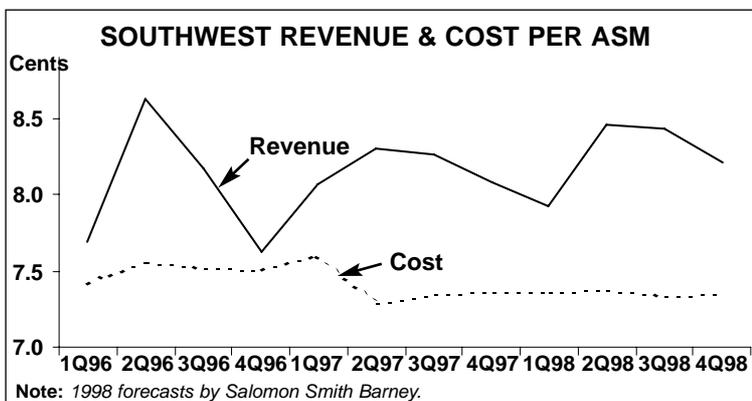
Coast-to-coast operations

Over the years Southwest has been quietly introducing some long-haul services. This process has intensified as a result of the East coast expansion, the opportunity to develop Nashville (Tennessee) as a focus city and the availability of longer-range 737s.

Southwest began to expand rapidly at Nashville when American closed its hub there in 1995. In April 1997 it linked Nashville with Oakland and Los Angeles and began offering one-stop coast-to-coast services for the first time (to Florida, Baltimore and Providence). Nashville also acts as a connecting point for some flights from northern cities to Florida.

In April the carrier is introducing new long-haul services that bypass Nashville, linking Baltimore with Houston and New Orleans and Kansas City with Portland and Orlando. The latter will facilitate another direct one-stop coast-to-coast service, Portland-Orlando, with a 25-minute stop in Kansas City.

Southwest's unrestricted fares on the long haul sectors are typically around half of what competitors charge, and as a result it gets the traffic. However, because the services involve a stop, the larger airlines generally do not bother to match the low fares. In 1997 connecting traffic accounted for just over 20% of Southwest's total passengers.



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The longer haul services are partly aimed at keeping unit costs low - Southwest estimated last year that the Nashville-California flights cost it only about four cents per ASM (excluding any meals). The new 737-700 offers further cost savings and will enable longer sectors to be flown.

However, at present Southwest regards long-haul services essentially as an experiment, giving it more flexibility to respond to an economic downturn or new opportunities. It will not fundamentally depart from its proven short haul strategy.

Fleet and growth plans

In November 1993 Southwest became the launch customer for the 737-700, which will become its main workhorse and cater for growth well into the next century. The 737-700 fleet will also significantly help it retain its unit cost advantage over competitors.

Following the original order, in January 1998 Southwest came back to exercise options on 47, order an additional 12 and option another 42 aircraft, which brought the total 737 order to 191 aircraft (see table, page 9). Deliveries of the firm orders are currently scheduled to run through the year 2004.

The first of the 737-700s entered commercial service in mid-January and so far four have been delivered. Southwest's current 262-strong fleet also includes 186 300-series, 47 200-series and 25 500-series 737s.

But the happy occasion of introducing the 737-700 has been overshadowed by the problems caused by delivery delays and continued uncertainty about whether Boeing will be able to meet the delivery schedule for the remainder of this year (21 more aircraft were due in 1998, including three in March).

Southwest received several million dollars from Boeing as compensation, but it had to delay some of its growth plans. The company recently estimated that its capacity would only increase by 6-7% in 1998 but then resume the customary 10% annual growth in 1999.

The situation has been somewhat alleviated by Southwest's ability to purchase and lease four 737-300s formerly operated by Western Pacific, which will enable it to go ahead with the new services planned for April.

In mid-March Southwest was sticking to its earlier plan to announce another focus city this year, with service possibly beginning in early 1999, but it is not clear whether the revised aircraft delivery schedule will allow that.

While Southwest will probably also want to wait and see how the competitive situation develops with MetroJet, there continues to be speculation that the next new focus city will be in the New York region.

The high costs and the air and ground congestion that characterise the area have put it off so far, but the more Southwest expands in the East, the bigger the New York gap will seem. It is known to be considering secondary airports such as Islip on Long Island and Hartford in Connecticut (both already served by Delta Express), as well as Allentown in Pennsylvania.

New cost challenges

Southwest's success in New England has proved wrong earlier speculation that its costs would rise due to severe winter weather, congestion and other challenges posed by the Northeast environment. But the airline does face new cost pressures on other fronts.

First, as a domestic short haul carrier, Southwest will bear an increased burden under the new tax legislation, which will reduce the old 10% ticket tax to 7.5% and increase the new \$1 per-passenger flight segment fee to \$3 by 2002. The latter is estimated to cost short haul low-cost carriers in the US an additional \$500m over five years.

Second, while going long haul may help the tax problem and reduce aircraft operating costs, Southwest's traditional cost advantages (derived from lower labour and ground service costs) will be smaller on longer flight sectors, while catering costs would rise.

Third, now that airline workers everywhere are demanding hefty pay rises, Southwest can no longer take good labour deals for granted. Its flight attendants, after rejecting the company's initial offer, secured a new six-year contract in December that grants them 4%-10% pay rises depending on seniority.

By Heini Nuutinen

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Iberia - a worthwhile gamble for investors?

Following a return to profitability in 1996, Iberia is set for full privatisation by mid-1999. Should potential investors regard recent restructuring as the foundations of a truly competitive European airline, or should they be wary about investing in an airline with a troubled past and which faces major challenges over the next few years?

At first glance, Iberia's financial performance is encouraging. Following a sea of red ink in the early 1990s, which almost led to bankruptcy, the group returned to profit in 1996 (see graph, right), and posted a provisional net profit, before taxes, of Ptas 18.4bn (\$126m) in 1997. Iberia, the airline, accounted for Ptas 14.4bn (\$98m) of this group total, almost double what the airline had forecast a year earlier. And group net profits are set to almost double in 1998, according to Iberia.

But investors must weigh these profits against Iberia's troubled record over the last seven or eight years. A key concern is whether the strategic errors that led to the need for two huge injections of cash from the government will ever be repeated.

The first cash injection - Ptas 120bn (\$1.2bn) of state aid in 1992 - was largely wasted on

Iberia's Latin America adventure. Iberia had wanted its partners - Aerolineas Argentinas, Ladeco and Viasa - to renew fleets and develop feed onto European routes, but even with Iberia's help these airlines struggled and further cash had to be invested. In total, during 1992-94 Iberia pumped more than Ptas 290bn (\$2.8bn) into its Latin America partners via loans and capital injection.

Inevitably, Iberia experienced severe balance sheet weakening and it was forced to apply for a further Ptas 130bn of state aid in 1995. Iberia made some ridiculous excuses: recession, the depreciation of the peseta and industry liberalisation, but the prime reason why Iberia had to be bailed out - the failure of its Latin America strategy - was due entirely to Iberia itself.

In January 1996 the European Commission finally agreed to Ptas 87bn (\$687m) of aid, although this was not classified as state aid but rather as the actions of a "rational investor" - i.e. it was an investment made under market conditions.

From past to future

So does Iberia now possess a coherent, logical strategy that will lead to profits year after year, or will Iberia be as profligate with its cash as it was in the early 1990s? Although the group's turnaround began in 1994, the real impetus for change came when the EC allowed the latest rescue package to go ahead. The EC was clear on how the money should be spent - Ptas 37bn for reducing the labour force and Ptas 50bn for repaying debt. Crucially, the EC only agreed to the Ptas 87bn injection and further "aid" of Ptas 20bn in the first quarter of 1997 if certain measures were taken and specific productivity and economic targets were met (although as yet this last tranche has not been allowed by the EC).

While the EC did not force Iberia to sell its Latin American stakes, divestment was the only way that Iberia could make its cash flow forecasts good enough to prove to the EC that there would be a "market rate of return" on the Ptas 87bn injection.

Iberia subsequently reduced its stake in Aerolineas to 10%, although Iberia is still respon-

IBERIA GROUP FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule/comments
727-200	28	0	To be replaced by A320s
737-300	9	0	Operated by Viva Air
747-200	7	0	
757-200	8	16	Eight in 1999 and eight in 2000.
A300	6	0	To be replaced one-for-one by A320s
A319	0	9*	Four in 2000, five in 2001.
A320	22	26 (10)*	Two in 1998, eight in 1998, eight in 2000, eight in 2001 and 10 in 2002
A321	0	15 (16)*	Two in 1999, three in 2000, two in 2001, two in 2002 and 22 in 2003/2004
A340	6	2	Delivery in 1998
DC-8F	3	0	
DC-9-30	25	0	19 operated by Aviaco. To be replaced by A320s.
DC-10	4	0	
MD-87	24	0	
MD-88	13	0	Operated by Aviaco
ATR-72	10	0	Six operated by Binter, four by Air Nostrum
CN-235	8	0	Operated by Binter
Fokker 50	15	0	Operated by Air Nostrum
TOTAL	188	66 (26)	

Note: Iberia also owns an L-1011 and a 747-200 that are currently wet-leased to Air Atlanta. *MoU only at moment; likely to be turned into firm order in May. 50 of the 76 A320s ordered are "firm", and 26 are "options".

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sible for the management of the airline. Elsewhere, Iberia disposed of its stake in Ladeco and, when unions rejected its proposed restructuring plan for Viasa, Iberia acted tough and liquidated the airline (although sale of the assets has yet to be completed).

Latin American divestment aside, Iberia and the Spanish government were left in no doubt by the EC that the airline had to make major strategic changes, and the initial tool that the airline used was called CAP - the Competitive Adaption Plan.

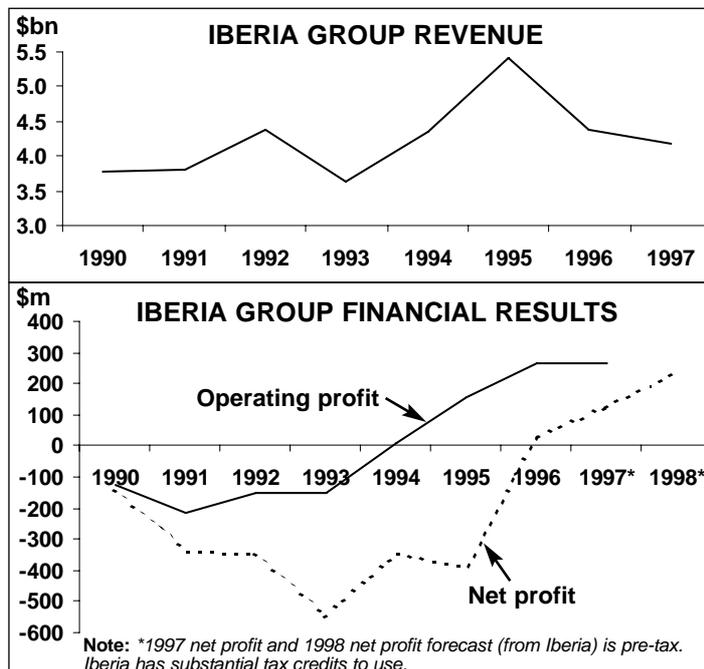
Cost-cutting was key. It began back in 1995 but gathered pace in 1996 when Xabier de Irala - who had a commercial background - became Iberia group chairman and CEO. By the end of 1997 the group workforce had been reduced by 4,500 via voluntary redundancy and early retirement. Wages were cut by almost \$50m in 1995-97, partly through the introduction of profit-related pay, cuts in rest days etc. In March 1996 a productivity deal was agreed with unions, incorporating changes to Iberia's flight schedule. By *Aviation Strategy's* calculations productivity has leapt ahead. ASKs per employees at Iberia airline grew 9.3% in 1995, 10.7% in 1996 and 8.8% in 1997.

Iberia is also cutting costs by finally beginning to revamp its overcomplicated fleet (see table, left). Fleet renewal will help solve another problem facing Iberia - a shortage of capacity. As load factors continue to rise (see chart, page 16) lack of capacity is costing market share.

In the short-term, the airline is leasing aircraft, including 737s, 757s and 767s from Air Europa (see page 16), but capacity shortages will be eased more substantially once an MoU with Airbus for 50 A320-family aircraft (worth \$2.6bn) plus an option for 26 more (\$1.3bn), announced earlier in 1998, is firmed up in May. The first aircraft will be delivered this year, although many of them will replace 727s and DC-9s.

Iberia is likely to fund the Airbus deal via a mixture of operating and finance leases. Iberia is aiming for an equal share between ownership, finance leases and operating leases, but at present the majority of its fleet is owned outright. Financing options are being discussed with several banks, including the Luxembourg-based European Investment Bank, which is lending Iberia \$185m to buy two A340-300s.

Iberia has also ordered 16 757s, to be delivered by 2000, and it is examining options for renewing its long-haul fleet.



Other measures taken over the last two years have included a new business class product in Europe, more competitive fares (although Iberia's yield management is still poor compared with its rivals), and the introduction of an Iberia Plus loyalty card. In addition, Iberia will invest \$40m in upgrading onboard business and first-classes on long-haul by the end of this year.

Iberia's network (96 destinations in 46 countries) will be expanded by new long-haul routes in the spring to Johannesburg and Chicago. But Europe remains at the heart of Iberia's operations, and the 64 destinations served account for 73% of passenger revenue. Iberia is also increasing frequencies to certain European destinations, and new routes (e.g. Seville-Paris) are being planned.

The CAP was completed in 1996 and replaced by a Master Plan, which runs from 1997-1999. According to Xavier de Irala, the Master Plan has eight strategic targets: "to boost marketing; improve connections at Madrid; reduce costs; integrate subsidiaries into the group network; sign airline alliances in Latin America; retain minority shareholdings in Latin America airlines; defend Iberia's market share in handling; and equip the group with a differentiated management model."

In essence, the Master Plan boils down to yield improvement; cost-cutting/productivity gains and independence for company managements within the group umbrella (with the group planners concentrating on network and schedule

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management). Overall, Iberia appears to be progressing in the right direction, but does that make the airline a suitable case for privatisation?

Turning the corner?

Despite all the measures Iberia has undertaken, it could be argued that Iberia will be forever playing catch-up in the restructuring game. Iberia has begun cost-cutting measures later than just about all its major European rivals (Alitalia excepted), and the airline is now facing a range of new challenges which it will be hard-pressed to meet as well as keeping up its restructuring effort.

Perhaps the key challenge will be the impact of increasing competition in Spain (which is by far Iberia's most lucrative market in terms of operating margin). This is coming from the Euro-majors, domestic competitors (e.g. Spanair, Air Nostrum, Air Track, Air Europa) and external low-cost airlines such as Virgin Express, easyJet and Debonair. Yield on Iberia's Spanish operations fell an alarming 7.3% in 1996 alone (see chart, right).

Despite accusations of collusion between Iberia, Air Europa and Spanair, it will be difficult for Iberia to stem yield erosion. A deterioration in passenger mix and better Spanish rail links will not help, so Iberia's only real alternative domestically is to cut costs. But labour costs can only be cut so far, and Iberia has therefore taken the first tentative steps towards shifting routes from its cost base onto other, cheaper alternatives.

In January 1998 Iberia signed a franchise deal with Air Europa, its main domestic rival. Air Europa will transfer 11 of its 34 aircraft to Iberia this month (April), complete with crews. Iberia says the deal is necessary "to combat increasing foreign competition in the domestic market",

ATLANTIC PERFORMANCES, 1997			
	Capacity ASK bn	Load factor	RPK growth 97/96
South Atlantic			
Iberia	5.34	75.4%	5.2%
BA	3.65	71.8%	8.1%
Lufthansa	3.62	80.1%	23.3%
Alitalia	3.45	77.5%	7.8%
Air France	3.00	79.7%	9.6%
KLM	2.12	81.8%	14.7%
TAP	1.76	79.0%	8.2%
Swissair	1.39	76.8%	36.8%
Mid Atlantic			
Air France	12.60	79.0%	4.0%
KLM	9.47	78.1%	22.1%
Iberia	7.26	78.5%	14.1%
BA	6.05	75.4%	5.3%
Lufthansa	2.85	79.1%	0%
Alitalia	1.56	75.0%	20.3%
TAP	0.60	79.9%	22.1%

which is another way of saying that Air Europa's fleet will be cheaper to operate than Iberia's own.

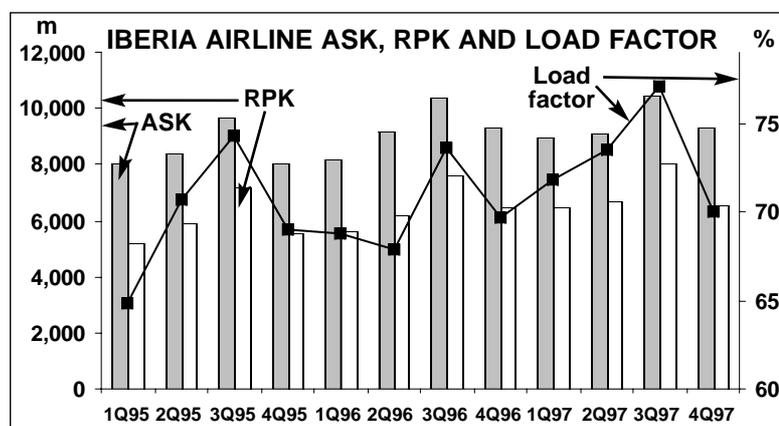
Unions at Iberia airline reacted traditionally - on March 26 they took the first of 39 one-day strikes in protest ostensibly about the proposed seniority of the 122 Air Europa pilots compared with Iberia pilots. Talks are continuing and Iberia is optimistic that a settlement will be reached, but the strike symbolises residual union resistance to change. Nevertheless, on balance it is fair to say that unions are adapting to the new commercial environment at Iberia, although somewhat slowly.

With unions apprehensive about the forthcoming privatisation, a Spanish version of Go is out of the question at present - so Iberia has signed a franchise deal with Air Nostrum. Since May 1997 the airline, which uses Fokker 50s, has co-ordinated its flights with Iberia's network, utilised Iberia's distribution system, and used Iberia livery. As the relationship develops, and as long as Iberia's unions do not object, Air Nostrum is likely to fly more low-density routes for Iberia - routes that Iberia cannot operate profitably but which are vital as they feed into Madrid or Barcelona. Further franchising deals are likely.

Competition is also impacting on Iberia's lucrative handling contracts. Although Iberia has a contract with AENA, the Spanish Airports Agency, from 1992-2000, competition is increasing now that AENA has awarded secondary handling licences at major airports.

Privatisation

The privatisation process starts in the summer, although full privatisation will probably not be completed until mid-1999. The process has three



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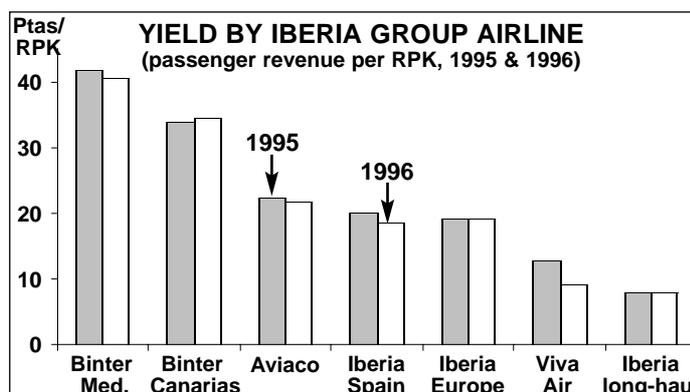
stages; in the first, "industrial partners" - i.e. airlines - will invest; in the second, Spanish institutional investors will take a stake; and in the third the remaining 60% of shares will be placed on the stock market. (Employees already own 8% of stock, and have a further 5% option.)

At least that is the plan. For political reasons, the Spanish government would prefer to see majority control of Iberia remain in the hands of Spanish investors, but the two most likely external investors - British Airways and American Airlines - may see things rather differently. They are pressing for large slices, and initially wanted 40% of Iberia each. SEPI (Sociedad Estatal de Participaciones Industriales), the state holding company that controls Iberia, instead suggested BA and American buy just 5% each. Talks are continuing, and the latest news is that SEPI has raised its offer to 10% each for BA and American. Whatever the percentage, a substantial BA/American stake in Iberia would be logical (at least it would be for BA and American). In April Iberia starts codesharing with American into North America, and American owns 10% of Aerolineas. Given American's penetration of Latin America, the addition of Iberia to the BA/American axis could create a powerful strategic triangle, linking Latin and North America, North America and Europe, and Europe and Latin America.

However, there remain major hurdles to BA and American achieving large stakes. Not only may the government be wary of a major Anglo-American stake in Iberia (although a BA investment would surely improve the attractiveness of Iberia to small investors), but it appears that Iberia's management may prefer a different route. Xabier de Irala has been reported as saying he would prefer an alliance with Air France, even though talks held between Iberia, Alitalia and Air France broke down last year. But whoever Iberia eventually allies with, it realises that it cannot afford to be left out of the mega-alliance process.

The real value in Iberia

Before potential investors start putting a price on Iberia, they should step back and consider what they are really buying. For all the troubles the airline has gone through, investors are buying into the future, not the past. Management has improved, unions are (slightly) more realistic and restructuring is working. That is not to say that the early years of a privatised Iberia will not be trou-



ble-free - the impact of competition on Iberia's core market, Spain, will be severe, and in the worst scenario, investors may even have to bail-out the airline yet again.

But investors must look long-term, and their decision should be guided by an analysis of the fundamental assets that Iberia possesses.

The first of these fundamental assets is Spain's geographical/cultural position. Even if its initial strategy was nothing short of disastrous, at least Iberia realised that Spain could sell itself as the European gateway to/from Latin America. Instead of direct stakes, Iberia is now refocussing on winning feed via codesharing. Iberia plans to increase capacity to Latin America by 50% in 1998-1999, from 276 flights per week to 420 (although its four aircraft based in Miami will be withdrawn once a codesharing deal with "another airline" is completed). But capacity is not everything (see table, above left), and Iberia's performance on Latin American routes remains unimpressive. Longer-term, Iberia could also develop routes into Africa, and perhaps Madrid could become the BA/American link into Africa.

The second fundamental asset underpinning Iberia is its domestic slot dominance. There is an acute slot shortage at Madrid and, to a lesser extent, Barcelona. Rivals have complained about Iberia's slot power but, as with BA, slot dominance takes a long time to diminish. What Iberia has yet to do, however, is use the Madrid and Barcelona slots it has to their fullest advantage, although it is now increasing connecting flights.

Measuring the value of Iberia's slots and its geographical position at the south-western corner of Europe is not easy, but that is essentially what investors are buying. The potential for better exploiting Iberia's fundamental assets is great - as BA and American may well be contemplating.

Aviation Strategy

Management

Virtually Yours ... British Airways?

The concept of the virtual company is often dismissed by strategists as being too abstract to be of use in real life. Here **Louis Gialloredo**, assistant professor of marketing at McGill University, examines the phenomenon and considers whether one airline - British Airways - is making serious moves towards becoming the industry's first virtual airline.

As the industry approaches the peak of the cycle, airlines inevitably start thinking about cost-cutting. In the last cycle many airlines carried out rather traditional slash and burn cost-cutting, but a relatively select few tried other more delicate methods - and one of these measures was the infamous outsourcing. Spinning off IT units, maintenance and engineering units, catering arms, charter subsidiaries and customer call centres, among others, became rather fashionable in the last cycle. But as soon as the industry hit a growth spurt these activities were reduced as airlines added resources in order to sustain market growth.

Yet some companies started taking outsourcing one step further; they moved towards becoming a virtual airline. In a virtual airline the ownership centre controls a brand and perhaps some key processes, but the rest of what an airline traditionally does is farmed out to subcontractors (i.e. pilots, flight attendants, call centres, aircraft ownership and maintenance). The theory is that an agglomeration of independent suppliers can provide contractually-guaranteed necessary service components more efficiently and to a higher average degree of quality than in-house resources can.

A poor track record

By and large the virtual airline concept was attempted most earnestly by new entrants (such as Greyhound in Canada), which were usually underfunded and rather naive about airline passenger service excellence. Despite low unit costs they were usually not able to attain either consistency and quality of service and/or solid initial funding, and so were never able to carve out enough market share to be considered as significant. Thus

there has been no major example of a successful virtual airline so far.

But it would be a mistake to regard past and current failure of the virtual airline concept as a definitive guide to future prospects. When the next downturn approaches, airlines will start to reconsider the potential of any cost-cutting measures they believe may be useful, and outsourcing and the virtual airline will be no exception.

But the virtual airline is about more than just the cutting of costs, and airline strategists should ask themselves some key questions:

- Does one have to own the aircraft or be able to service the aircraft in order to run an airline? *Clearly not*, evidence suggests.
- Does one have to own all of the staff to make a consistent brand standard of service? *This is increasingly not the case*.
- Does one have to have a singular monolithic brand to be a successful airline? *Clearly not; multibranding can work even better*.
- Do those who service those who fly the aircraft make more money than the aircraft owner/operators? *Absolutely yes*.
- Will the first significantly sized airline to evolve a recession-proofing programme that works over the life of a cycle win out? *Absolutely yes*.
- Has anyone developed such a programme? *Clearly not*.
- Is stand-alone organic growth the way to build a successful growth profile over time? *Clearly not anymore; a mix of organic and aligned growth is the best way*.
- Is there therefore an optimal structure and market approach that can encompass all of the airline management truths that seem to be self-evident to the trained observer? *Unknown*.

A virtual rebirth - BA?

When one considers these questions in depth then some interesting things emerge, particularly when a series of recent moves by British Airways is examined more closely. BA appears to be adopting a series of measures to clip costs *while at the same time* keeping service standards on

Aviation Strategy

Management

the up and up. These moves include outsourcing, a regional franchisee network and the current fleet renewal (where manufacturers were asked to be creative financially). But does this mean that BA is making a serious attempt to become the world's first virtual airline?

Let's start with the new BA branding scheme. This has been greeted with scepticism, but those who feel that way are failing to see beyond the paint. BA's brand evolution system provides two breakthroughs, the first of which is relatively infinite brand variation that can be linked to various geographic brand symbologies, as well as being flexible enough to encompass alliance with partner brands. BA has now gone beyond being solely British, which is made possible due to the positive global brand equity it has built up, as well the strength of sub-brands (Club, First, etc). The second breakthrough is that BA can continuously evolve this brand system without ever (in theory) having to come out with a totally brand new system.

The fact that BA no longer insists on "outside-the-tube" brand homogeneity does not mean that it doesn't insist on inside-the-skin product and sub-brand alignment. In fact, the core of any virtual firm is the brand line/service process combination.

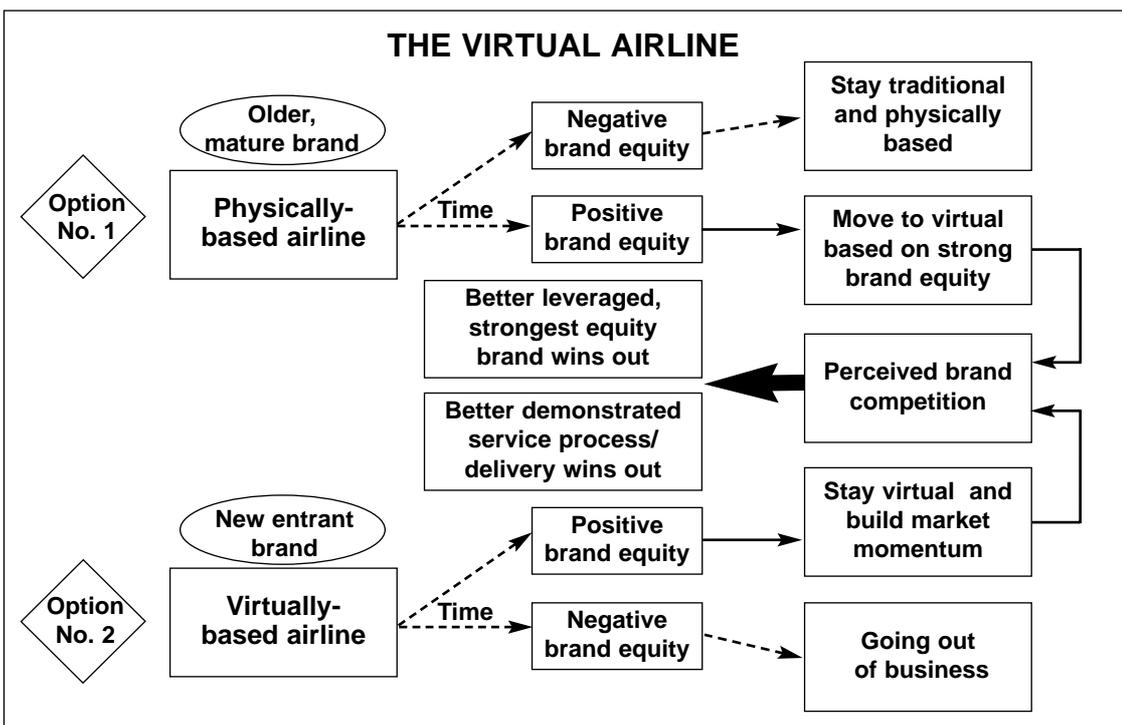
Another clue to BA's motives is given by its fleet renewal plan. The crux of the question is really whether BA needs to be directly involved in

any kind of aircraft ownership proposition, or whether a rented, arms-length relationship is just as effective. In fact, the premise that the residual value of aircraft anchors the balance sheet may become outdated if residual brand value and equity (i.e. goodwill) become the preponderant assets in a virtual set-up. We also know that the operator/owner does not necessarily yield the best returns; in other words manufacturers will have to get their heads around risk sharing and asset ownership that goes beyond just a lease deal and service arrangement.

Add to these moves all of the franchising, outsourcing and proposed alliance plans that BA has, and one can start to build a case that BA is in a race to become a virtual airline.

But could BA really be adopting a pioneer strategy that has gone mostly undetected by others? And, if so, two further questions arise - will BA succeed and what kind of competitive advantage could it gain? Only time and the impact of other virtual airlines (see diagram, below) will tell on the first question, but on the second, a perfectly executed virtualisation could recession-proof the costs of physical delivery of units of service.

It seems that strategists would be wise to analyse again the merits or otherwise of the virtual airline, because the concept just might be the forward leap that the airline industry is looking for.



Aviation Strategy

Macro-trends

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
Jan 98	14.7	7.7	52.5	14.0	9.4	67.1	11.4	8.2	71.9	35.8	25.6	71.6	52.9	34.7	65.6
Ann. chng	8.1%	10.9%	1.4	9.0%	8.6%	-0.2	8.1%	5.0%	-2.2	9.5%	8.0%	-1.0	9.1%	8.3%	-0.4
Jan-Jan 98	14.7	7.7	52.5	14.0	9.4	67.1	11.4	8.2	71.9	35.8	25.6	71.6	52.9	34.7	65.6
Ann. chng	8.1%	10.9%	1.4	9.0%	8.6%	-0.2	8.1%	5.0%	-2.2	9.5%	8.0%	-1.0	9.1%	8.3%	-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										331.2	246.5	74.4
Jan 98	79.6	49.7	62.4										29.0	19.9	68.8
Ann. chng	1.0%	0.0%	-0.6										6.5%	3.8%	-1.8
Jan-Jan 98	79.6	49.7	62.4										29.0	19.9	68.8
Ann. chng	1.0%	0.0%	-0.6										6.5%	3.8%	-1.8

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

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	113	108	107	107	111	146	134	128	128	126	150	123	127	116	132
*1997	117	112	110	109	112	151	142	141	140	139	172	132	135	121	135
*1998	120	115	113	113	113	162	148	154	150	151	191	143	144	128	144

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

Aviation Strategy

Macro-trends

COST INDICES (1990=100)

	Europe						US					
	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost
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)					Exchange rates (against US\$)						LIBOR 6 month Euro-\$	
	US	UK	Germany	France	Japan	UK	Germ.	France	Switz.	ECU	Japan		
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	114	107	1996	0.641	1.505	5.116	1.236	0.788	108.8	4.48%
*1997	122	117	123	115	109	1997	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
*1998	125	121	126	117	109	Mar 1998	0.593	1.823	6.111	1.489	0.917	128.8	5.72%**

Note: * = Forecast, from The Economist. 1990-96 trends from OECD. ** = \$ LIBOR BBA London interbank fixing six month rate.

TURBOPROP VALUES

	Mid-life value (\$000)		Mid-life value (\$000)		Mid-life value (\$000)		Mid-life value (\$000)
ATR 42-300	4,300	DHC Twin Otter 300	780	Emb-110P1	320	F.27-600	900
ATR 42-500	11,250	DHC Dash 7	1,650	Emb-110P2	380	F.50	4,950
ATR 72-200	7,750	DHC Dash 8-100	3,750	Emb-120/120 Adv	2,300	YS-11-200	250
BAe ATP	5,250	DHC Dash 8-200	9,500	Emb-120ER	3,600	YS-11-500	350
BAe 748-2A	450	DHC Dash 8-300	5,750	Do 228-200	850	Beech C99	400
BAe 748-2B	850	DHC Dash 8-400	16,700	Do 328-100	6,250	Beech 1900C/C1	1,200
Jetstream 31	750	Shorts 330-200	350	Metro 11/11A	280	Beech 1900D	3,950
Jetstream Super 31	750	Shorts 360/360 Adv	950	Metro 111	550	Saab 340A	2,500
Jetstream 41	1,500	Shorts 360-300	1,600	Metro 23	2,300	Saab 340B	4,600
DHC Twin Otter 100	260	CASA/IPTN 212-200	300	F.27-100/200	250	Saab 2000	12,000
DHC Twin Otter 200	450			F.27-400/400M/500	950		

Note: Values are for the oldest aircraft of this series, in clean "half-life" (i.e. mid way between D checks) condition. **Source:** MBA

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Engines	Delivery	Other information
Aero Int. (Reg.)	Mar 23	Park Express	5 RJ100s	\$130m		4Q98-4Q99	
Airbus	Mar 23	LanChile	20 A320 family				+ 20 options
	Mar 23	TACA Group	32 A320 family				+ 32 options
	Mar 23	TAM	38 A320 family				+ 37 options
	Mar 12	Swissair	9 A340-600s		Trent 500	2Q02+	
	Mar 12	Sabena	34 A320 family			1Q99+	
			2 A330-200s			3Q98+	
	Mar 5	United	20 A320 + 10 A319			00-01	
Boeing	Mar 18	Continental AL	15 737-900s			2Q01-2Q02	From options
	Mar 9	Ryanair	25 737-800s		CM-56-7		+ 20 options
Bombardier	Mar 20	Lufthansa CityLine	3 CRJ-100s			98-1Q99	From options
	Mar 10	Air Nostrum	5 CRJ-200ERs	\$108m		2Q99+	+ 5 options
	Mar 5	Atlantic Coast AL	5 CRJ-200ERs	\$104m		99	From options
	Mar 2	Maersk Air	2 CRJ-200LRs			1Q99	
Embraer	Feb 26	Business Express	20 ERJ-135s	\$810m (inc opts)		4Q99+	+ 40 options
	Feb 24	Skywest	20 Emb-120s			1Q98+	+ 40 options
	Jan 27	European Reg. AL	2 ERJ-145s	\$100m (inc opts)		4Q98+	+ 3 options
Fairchild Dornier	-	-	-	-	-	-	-
Raytheon	-	-	-	-	-	-	-

Note: All prices in US dollars. Only firm orders are included - i.e. MoUs and Lols are excluded. **Source:** Manufacturers.

Aviation Strategy

Micro-trends

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US\$m	US\$m	US\$m	US\$m	m	m	%	Cents	Cents	000s	m	m	%	
American*														
Apr-Jun 96	4,159	3,675	484	293	63,634.9	44,020.8	69.2	6.54	5.78	20,200	9,539.9	5,128.8	53.8	87,800
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	89,300
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	
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	90,000
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	90,500
Jul-Sep 97	4,377	3,868	509	323	65,093.0	46,943.3	72.1	6.72	5.94					91,900
Oct-Dec 97	4,228	3,871	357	208	63,308.3	42,715.7	67.5	6.68	6.11					
America West														
Apr-Jun 96	464	402	62	28	8,614.9	6,193.2	71.9	5.39	4.67	4,589	1,079.0	659.2	61.1	9,321
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	9,208
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	9,652
Jan-Mar 97	462	429	33	14	9,318.8	6,408.6	68.8	4.96	4.60	4,587	1,168.8	686.7	58.8	10,015
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	10,013
Jul-Sep 97	462	425	37	18	9,623.6	6,779.9	70.5	4.80	4.42	4,692				9,828
Oct-Dec 97	473	432	41	20	9,573.7	6,219.9	65.0	4.94	4.51	4,375				9,611
Continental														
Apr-Jun 96	1,639	1,410	229	167	24,384.1	16,941.1	69.5	6.72	5.78	9,799	2,647.0	1,723.7	65.1	31,891
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				35,700
Oct-Dec 97	1,839	1,707	132	73	28,278.6	19,400.1	68.6	6.50	6.04	10,188				
Delta														
Apr-Jun 96	3,359	3,064	295	161	53,909.9	38,877.5	72.1	6.23	5.68	24,896	7,460.1	4,439.4	59.5	60,289
Jul-Sep 96	3,432	2,994	438	238	55,337.4	40,868.2	73.9	6.20	5.41	25,260	7,677.8	4,623.5	60.2	60,888
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	61,872
Jan-Mar 97	3,420	3,074	346	189	54,214.1	37,334.2	68.9	6.31	5.67	24,599	7,489.7	4,354.8	58.1	62,141
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	63,441
Jul-Sep 97	3,552	3,121	431	254	57,424.7	42,783.2	74.5	6.19	5.43	26,506				63,708
Oct-Dec 97	3,433	3,101	332	190	56,177.4	38,854.9	69.2	6.11	5.52					65,454
Northwest														
Apr-Jun 96	2,540	2,166	375	203	37,754.2	28,261.7	74.9	6.73	5.74	13,555	6,033.6	3,722.2	61.7	46,184
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	13,862	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				47,996
Oct-Dec 97	2,491	2,264	227	105	38,465.5	27,791.0	72.2	6.48	5.89					
Southwest														
Apr-Jun 96	910	768	142	85	16,359.3	10,958.3	67.0	5.56	4.69	12,575	2,099.4	1,137.8	54.2	21,559
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				23,840
Oct-Dec 97	975	847	128	81	18,501.4	11,654.2	63.0	5.27	4.58	12,612				23,840
TWA														
Apr-Jun 96	966	904	62	25	16,205.7	11,316.6	69.8	5.96	5.58	6,046	2,239.5	1,310.4	58.5	25,194
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	5,525	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					24,200
Oct-Dec 97	813	812	1	-31	14,348.8	9,570.2	66.7	5.67	5.66					
United														
Apr-Jun 96	4,164	3,766	398	196	64,851.3	47,411.0	73.1	6.42	5.81	20,736	9,330.4	5,696.9	61.1	83,347
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	19,969	9,505.3	5,615.2	59.1	85,900
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				90,300
Oct-Dec 97	4,235	4,144	91	23	68,364.7	47,419.6	69.4	6.19	6.06	20,623				91,700
US Airways														
Apr-Jun 96	2,149	1,904	246	201	22,889.1	16,303.8	71.2	9.39	8.32	14,961	3,067.2	1,744.6	56.9	41,864
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	13,867	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				41,980
Oct-Dec 97	2,085	2,015	70	479	22,662.2	15,800.1	69.7	9.20	8.89	14,178				
ANA														
Apr-Jun 96	SIX MONTH FIGURES													
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													
Cathay Pacific														
Apr-Jun 96	1,960	1,775	185	213	25,985.0	18,757.0	72.2	7.54	6.83	5,352	4,752.0	3,234.0	68.1	
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				

Aviation Strategy

Micro-trends

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per schd. ASK	Group costs per schd. ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US\$m	US\$m	US\$m	US\$m	m	m	%	Cents	Cents	000s	m	m	%	
Korean Air														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 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
Oct-Dec 96														
Jan-Mar 97														
Apr-Jun 97	TWELVE MONTH FIGURES													
Jul-Sep 97	4,574			-418										
Oct-Dec 97														
Malaysian														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 96	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
Oct-Dec 96														
Jan-Mar 97														
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97			18											
Oct-Dec 97														
Singapore														
Apr-Jun 96	SIX MONTH FIGURES													
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														
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 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
Jul-Sep 97														
Oct-Dec 97	SIX MONTH FIGURES													
	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
Thai Airways														
Apr-Jun 96	TWELVE MONTH FIGURES													
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			
Air France														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 96	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
Oct-Dec 96														
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 97	5,224	4,850	374	297			76.1							
Jul-Sep 97														
Oct-Dec 97														
Alitalia														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 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
Oct-Dec 96														
Jan-Mar 97														
Apr-Jun 97	TWELVE MONTH FIGURES													
Jul-Sep 97	5,083	4,878	205	161										
Oct-Dec 97														
BA														
Apr-Jun 96	3,206	2,908	297	175	36,302.0	26,047.0	71.8	8.83	8.01	9,603	5,130.0	3,535.0	68.9	58,578
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
Iberia														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 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
Oct-Dec 96														
Jan-Mar 97														
Apr-Jun 97	TWELVE MONTH FIGURES													
Jul-Sep 97	4,168	3,900	268	126*	37,797.6	27,679.2	73.2	11.03	10.32	15,432				
Oct-Dec 97														
KLM														
Apr-Jun 96	1,441	1,394	47	159	15,980.0	11,729.0	73.4	9.02	8.72		2,892.0	2,045.0	70.7	31,398
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	8.86	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
Lufthansa														
Apr-Jun 96	3,641	3,539	103	111*	29,675.0	20,227.0	68.2	12.27	11.93	10,612	5,293.0	3,603.0	68.1	57,999
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	2,684 ^P	2,332 ^P	352 ^P	295 ^P	30,209.0	21,691.0	71.8 ^P	8.88 ^P	7.72	10,839	5,457.0	3,919.0	71.8	
SAS														
Apr-Jun 96	1,372	1,174	198	129*	7,585.0	5,046.0	66.5	18.09	15.48	5,198				22,883
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		4,551			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
Swissair**														
Apr-Jun 96	2,257	2,128	130	-42	16,439.3	10,155.0	61.8	13.73	12.94	6,502	3,035.5	1,994.2	65.7	10,202
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														
Oct-Dec 97														

Note: Figures may not add up due to rounding. *Pre-tax. **SAirLines. ^PProvisional figures only.

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