

Outlook: this is not an industry tragedy

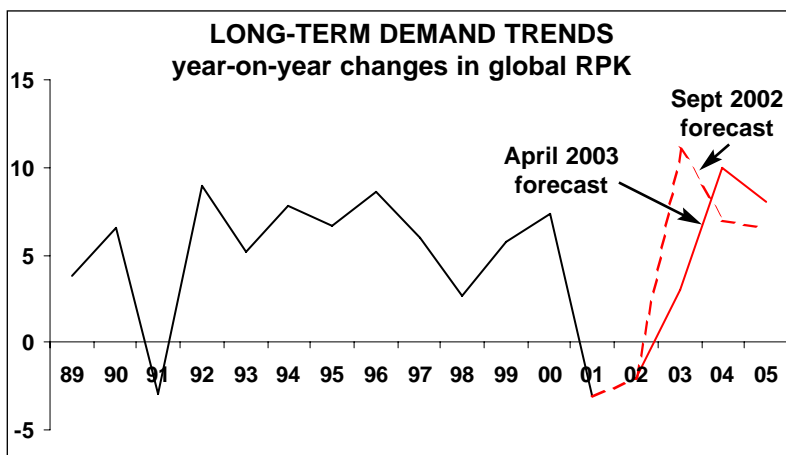
War in Iraq has caused passenger numbers to plummet again, forced serious capacity cut-backs, pushed United closer to Chapter 7 and American to Chapter 11, and undermined further the fragile finances of many of the European flag-carriers. There has been the usual clamour for state aid on both sides of the Atlantic. But to put things in perspective this is not a tragedy for the aviation industry.

Clearly our regular forecast needs updating. Last October we were looking at a global traffic recovery of nearly 12% (RPK traffic growth) for 2003, explicitly not factoring in the impact of an Iraqi war. Now we are hazarding a 3% growth rate taking into account the current slump in traffic but assuming a relatively quick resolution of the conflict and a resumption of traffic growth in the second half of the year. We are also hoping that the SARS outbreak doesn't have a lasting effect on Asia/Pacific business. The upturn is now scheduled for 2004 - a predicted 11% growth rate. Why persist with this recovery scenario?

Firstly, we are irredeemable optimists. Secondly, it is still logical to assume a resumption of long-standing relationships between the level of economic activity and commercial air transport.

Aviation Economics' forecast assumes that traffic by the end of 2005 will return to close to the levels - up to 100% for non-US carriers and 90% for US carriers - that it would probably have been at had September 11 not happened. Even with a substantial rebound next year and good growth the following year, the average annual growth rate for the period 2000-05 will be just 2.7%.

To take another illustration: Robert Gordon, a renowned airline economist, has considered potential US revenue growth by reviewing historic GDP/airline revenue ratios. During 1989-2000 the average ratio of airline revenue to nominal GGP was 1.29%, ranging



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APRIL 2003 TRAFFIC FORECAST Year-on-year changes in global RPK

	US Dom	US Int'l	US Total	Euro Intra	Euro Int'l	Euro Total	Asian Dom	Asian Int'l	Asian Total	World Dom	World Int'l	World Total
2000	6%	7%	6%	2%	7%	7%	9%	11%	11%	5%	9%	7%
2001	-7%	-6%	-7%	1%	-1%	-1%	1%	0%	0%	-4%	-2%	-3%
2002	-2%	-3%	-2%	1%	-3%	-2%	2%	0%	1%	-1%	-2%	-2%
2003	2%	1%	2%	5%	3%	3%	6%	5%	5%	3%	3%	3%
2004	7%	12%	8%	6%	14%	13%	7%	13%	11%	7%	13%	11%
2005	5%	7%	6%	5%	10%	9%	7%	10%	9%	6%	9%	8%

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from a low 1.24% in 1992 to a peak of 1.33% in 2000. If the ratio is set at 1.14% for the period 2002-2009, reflecting a significant change in consumer behaviour, and the nominal GDP growth averages 5% (ie 3% real growth plus 2% inflation), then the theoretical growth in airline industry revenues works out at a startling 7% a year over this period.

The point is that it is very easy to lose sight of the strong long-term growth characteristics of air travel by focusing, quite naturally, on the disasters of the past two years. The strength of the recovery when it comes may well be a pleasant surprise.

Turning to the supply/demand outlook (for methodology see *Aviation Strategy*, October 2002), the record surplus of roughly 14% of supply continues throughout 2003 in contrast to our previous prediction that it would fall to 9%.

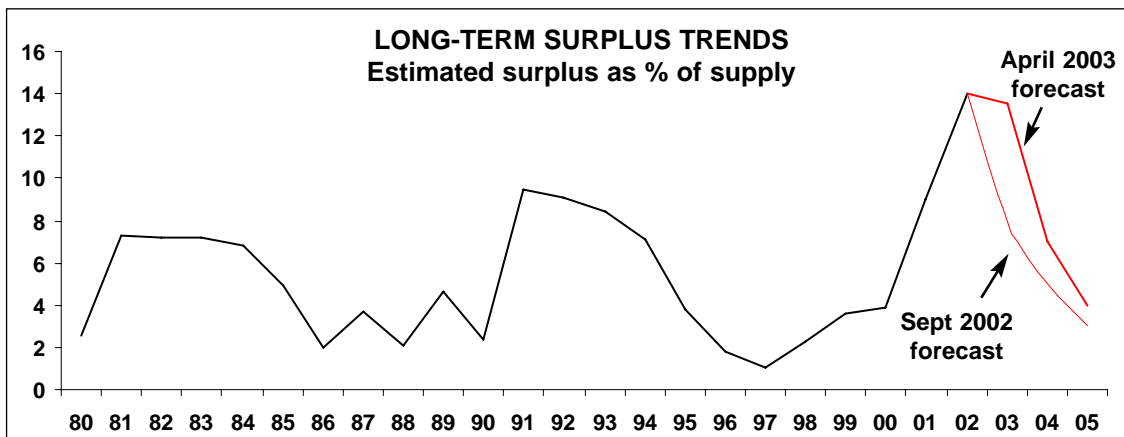
Nevertheless, here too, things are not as terrible as they seem. That 14% surplus equates to about 2,200 jet units. Of these, according to *Aviation Economics'* calculations, at least half will never return to commercial service because they are either

Chapter 2 types or Chapter 3 types over 25 years of age. On the supply side we are allowing for new jet aircraft output from Airbus, Boeing, Bombardier and Embraer of 800-plus units a year over the next years.

Even so, a combination of supply adjustment, through the defacto scrapping of uncommercial types, and the anticipated demand rebound means that a return to a "normal" surplus of 4% is achieved by the end of 2005 (see graph below).

So far we have described the industry outlook in physical supply/demand terms. The financial picture is changing more dramatically. The fall in average yields is probably permanent. It is based on unit cost reduction resulting from distribution innovation, higher labour and aircraft productivity instigated by the LCCs, and will be reinforced by remodelling of hub network systems and the continuing expulsion of state-directed airlines from the marketplace. Aircraft prices, both new and second-hand, have not simply fallen in the familiar cyclical pattern, but have been substantially reduced to a new base level.

This is the brave new aviation world.



British Airways: the devilish detail of FS&S

In the cyclical downturns of the last two decades, British Airways has reacted impressively swiftly and decisively to changing market dynamics. Perhaps equally importantly it has told the markets what it has had to do, why and when. In each case the actions it took allowed it to minimise the effects of the downturn and to recover faster than many of its rivals. In this current downturn, however deep it is likely to turn out, it is very likely that it will prove that BA has reacted with equal alacrity and equal results far ahead of its rivals.

In March, BA held its annual investor day at Heathrow for buy- and sell-side analysts. During the day the company provided an update on the success of the strategy it had promulgated at the previous year's event, entitled Future Size and Shape (FS&S), in the wake of the events of September 11 - see *Aviation Strategy*, March and December 2002.

One of the main financial planks of this strategy is to return to a positive Cash Value Added (CVA) return. Because many people outside or indeed within BA do not understand the arcane elements of value added analysis, the management translate the financial targets to an operating margin target of 10%. Last year the CFO, John Rushton, showed how the strategy would allow the company to return towards this 10% margin target. Inherent within the assumptions was that the market would recover and they had pencilled in a 2.5% margin improvement from this. This year the company provided an update of the plan (see page 4) showing that in the intervening period market decline had removed a further 5+ percentage points from the margin. As a result the company has instituted further major cost cutting measures beyond its

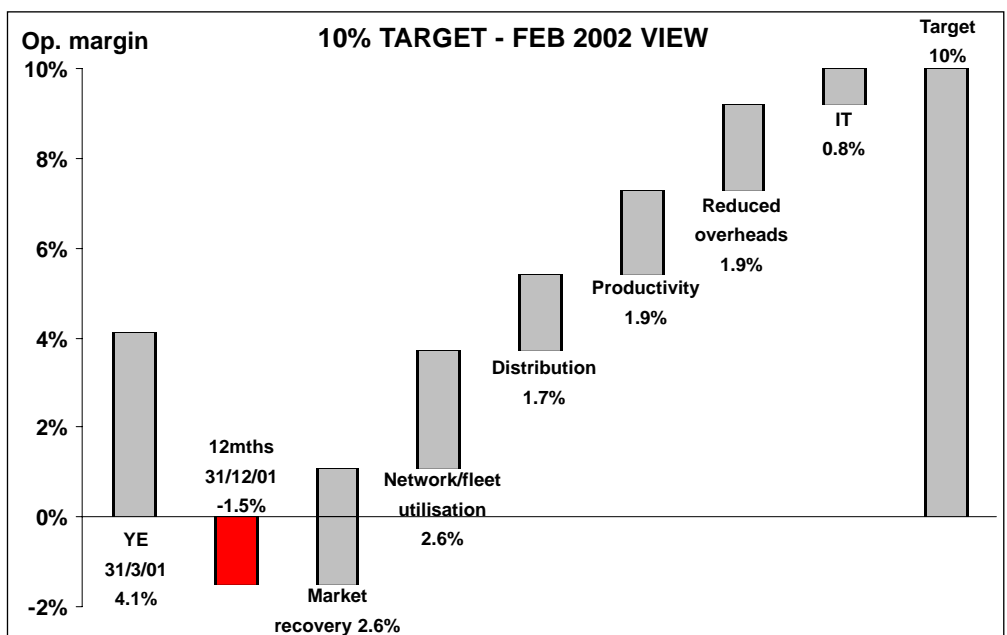
FS&S plans.

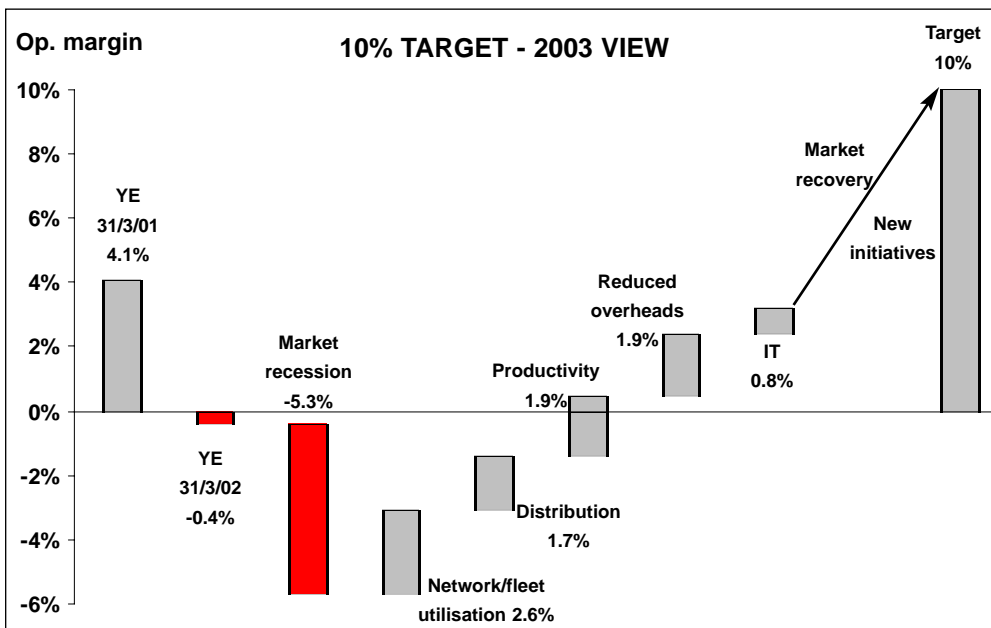
The new measures

These measures cover two main areas designed to shave a further £450m from the cost base:

1) Procurement

As with many of the established carriers, BA carries much historic baggage. But it is always somewhat of a surprise to find new instances which one would have thought the management would have addressed before. Last year the company was able to dismiss a large number of people from engineering functions because their main job was unnecessarily to rewrite manufacturers' manuals into BA-speak. This year they discover that they have another department dedicated to rewriting the pilots' aircraft operating manuals. However, a far more important step is finally to develop a proper state-of-the-art procurement strategy. Here the company has identified the potential to cut its non-fuel costs by 10% (or £300m). It is a good





oligopolistic suppliers such as airports and airframe manufacturers, where relationships need to be fully managed;

- to the 1000 or so commodity suppliers where the company can enforce product quality and price on a transaction only basis (and here already 80% of these supplier transactions are conducted electronically);
- to the 500 or so collaborative suppliers where the company can pass on to partners some of the under-utilised assets and inventory (such as contracting out the spares stock of A320 parts to Iberia or Concorde spares to Air France);
- to the 500 or so "opportunistic"

accountancy adage that the purchasing manager is the one who makes a company's margin. It holds good in an airline as well.

Up to now procurement at BA has been department based with no real overall control. Each department has almost gone its own merry way in acquiring the goods and services it needed. The new element is to centralise the function with a process-led organisational structure to cover all areas of goods and service acquisition: it does not matter whether it is a lettuce leaf or a tonne of kerosene, the same rules should apply. The aim is to have a far better control over the administration of price of goods acquired, the full assessment of demand control and the accurate specification of product need. Needless to say a large portion of this is designed to be electronic. This represents a step change in company behaviour.

The company had some 14,000 separate suppliers. It aims to reduce this number to 2,000. Since implementation the company has reduced the number of suppliers by 64%, improved buyer productivity by nearly 50% and reduced the average transaction cost by 40%. Within the procurement strategy is the understanding that suppliers fall into differing strategic categories, varying from:

- the 100 or so strategic and monopolistic or

suppliers from whom all is really important is the price. Already the company has held some 16 eAuctions on a spend of £18m with an implied saving of 25% - and this covering anything from stationery to crew hotac expenses.

2) Customer Enabled BA (ceBA)

The second initiative is designed to remove a further £100m from the cost base over the next few years. This also derives from technological changes - and in this case the success the company has seen in its electronic booking system - and the inherent proposal in the FS&S programme to simplify processes.

The company stated that the aim is to "simplify contact with customers and drive out complexity, enabling customers to 'self-serve' when they choose to do so". The complexity in the industry especially among the full-service carriers is awesome. For historic reasons there are millions of fare-types, BA has 26 selling classes, identifies 15 types of passenger and at least ten ways to pay. As a result it needs to train staff to a very high degree to act as translators to carry out transactions for passengers: and the answers the passengers get are not always consistent. As always, complexity slows change.

BA appears to have been astounded by the success in the new booking engine it introduced last year (see graph, below).

The strategy in this area is another key lesson derived from the LCCs: a) simplify (KISS), b) enable self-service where possible, c) enhance service.

The company has set its targets. It aims to have all tickets electronic by the end of 2004. At the moment only 26% of tickets issued are paperless - although not all routes yet allow the facility and the proportion is nearer 40% on eligible routes. The benefits of eTicketing are well known - the most important being the lack of need to fly bits of paper round the world to match up with payment dockets, let alone the need for ticket printers, ticket readers, the paper itself, and the staff-handling necessary. It also allows a much quicker audit trail and greater accuracy of data capture. BA also aims to have 50% of passengers using self-service check-in by March 2005, up from a current 10-20%; 80% of passenger trip transactions available as self-service (and 100% of the frequent flier transactions). It also plans to cut the number of fare types by 50%, standardising restrictions and rates.

As part of the process to enhance the customer's control of the travel process, it is further developing its online service, beyond the simplification it introduced last year. The new add-ons to the booking engine will provide a much clearer indication at the time of booking of what the product is, what the restrictions may be (and how it compares with the low cost offering). It will also proactively remind the passenger with a pre-travel checklist a few days before departure, allow the customer to check in online and (eventually) print his own boarding pass.

For BA, it sees this as a radical further simplification of the business with the aim of an

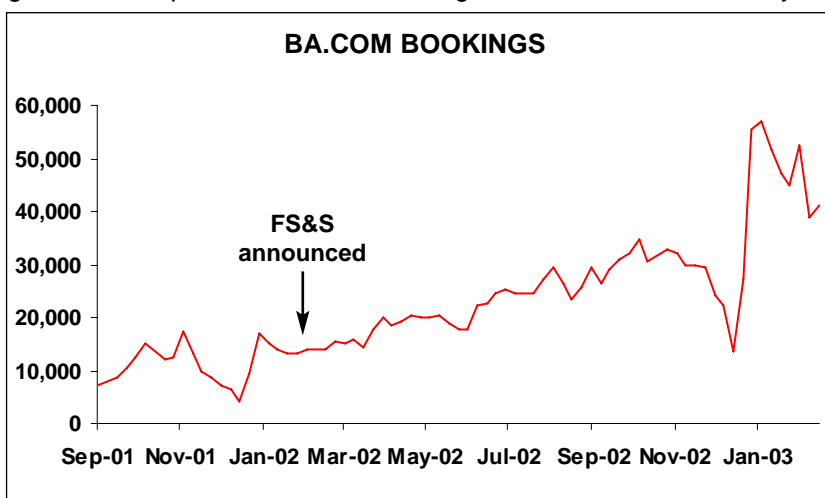
annualised £100m in savings within two years.

Success of FS&S implementation

BA appears to be well on track to achieve the management-planned changes under the "new" strategy.

The new short haul booking engine is working - almost better than expected. In April last year only 20% of short haul economy bookings were made online through ba.com, with 54% of bookings through the trade. By January this year, it had shifted to 46% through the trade and 41% directly online. Short haul load factors have improved each month since February 2002.

BA has de-hubbed Gatwick, and is well on schedule for the fleet simplification and repositioning, (see table, page 6). With the long haul and short haul fleet renewal plans now virtually over, there are almost no new aircraft to be delivered over the next few years. As a result capital expenditure is well down - and the company has cut capex further than originally expected - and cash flow rising. Whereas in the immediate aftermath of September 11 the company was throwing away some £2m per day, it has been cash flow positive at the operating line and should be net cash generative in the year just ended. Against the backdrop of weak demand BA has achieved £1bn (US\$1.6bn) in cost savings in the P&L account. Last year



BA TARGET ACHIEVEMENT

	Target end Mar '03	Achieved Dec '02	Cum. target end Mar '04
Staff reductions(mpe)	10,000	9,619	13,000
Annualised cost savings achieved			
Staff	£350m	£335m	£450m
Distribution costs	£45m	£55m	£100m
Procurement/IT	£55m	£52m	£100m
Disposals	£500m	£570m	£900m

the company had announced plans for disposals of some £900m by March 2004. By December last year it had achieved £570m of this.

However, it had planned to sell more aircraft than the two widebodies it achieved - at this time of the cycle the market for widebodies is of course fairly narrow. As a result, capacity this year will be a little higher than originally planned. Net debt peaked at £6.6bn in December 2001. This has been reduced by £1.4bn since then. In addition, the company has renegotiated its debt profile, locking in fixed low interest costs with the result that now 60% of its debt is fixed against 75% variable previously. Current liquidity stands at some £2bn - which gives it a lot of leeway.

Planned staff reductions are well on track with a 9,600 reduction in staffing levels by January this year. This has been achieved with minimal cost: the company has a relatively high natural turnover of staff and 43% of the fall out up to now has come from natural wastage and a further 16% from staff taking unpaid leave - with only 15% of the reduction through voluntary severance or early retirement.

BA FLEET DEVELOPMENTS

	Summer '04 target	Achieved
Capacity	-9%	-7%
Gatwick capacity	-52%	-56%
Destinations	-15%	-11%
No of aircraft	-49	-29
Aircraft subtypes	-40%	-36%
Shorthaul utilisation	+10%	+8%

However, the market dynamics have tumbled since the inception of the FS&S programme - not just due to war worries. The economies on both sides of the Atlantic are somewhat subdued and with the bear markets on Wall Street and Throgmorton Street, terrorist worries, corporate belt tightening and bankruptcy filings in the US, business traffic is well down and yields are

under severe pressure. This has been exacerbated through the winter by very deep discounts appearing in the market - particularly on the transatlantic. As a result, the company is not expecting any revenue growth this year at best and certainly not until there is a turn in the economic and stock market cycles. The only saving grace - until the outbreak of war anyway - was the success on short haul economy: where up to the winter season there was a positive performance in short haul non-premium unit revenues.

Meanwhile, following the break out of the long-awaited and feared hostilities in the Gulf, BA has cut spring capacity by some 4% - and announced cuts of some 6% on the Atlantic. It has announced an acceleration of its manpower reduction targets - bringing forward the target date for the 13,000 reductions to September this year from March 2004.

Outlook

BA started its downsizing programme before the events of September 11 - it at least recognised the need for action, even if that action had to be dramatically enhanced after the terrorist attacks. It is lucky that in comparison with its European rivals it has the flexibility to cut staff in the way it can: but on past practice and current showing it is no luck that the management reacts quickly and firmly. Although the tough times have become tougher with the outbreak of war, BA is now better placed than many others to survive.

KLM: under pressure from LCCs, still seeking European partner

KLM's high cost base, small catchment area and a reliance on transfer traffic makes an alliance with a European major a strategic imperative for the Dutch flag carrier, but - with worrying regularity - proposed partners appear to melt away before anything concrete is agreed. And all the time the threat of the low cost carriers (LCCs) gets greater, even more so now that KLM had to sell its own LCC attempt for a pittance. KLM, founded in 1919, is the oldest airline in the world still flying under its original name - but in what form will it reach its 100th anniversary?

KLM has a 100-plus strong fleet, currently all of which are Boeing or MD aircraft (see table, page 9), making KLM the only European flag-carrier not to use Airbuses, though this is soon to change. The airline is undergoing a complete renewal of its long-haul fleet, starting with 10 777-200ERs and three 747-400ER freighters, which are replacing 747-300s and MD11s by the end of 2005. The 777s are coming on 12-year leases from ILFC, from whom KLM already leases several aircraft. In November 2002 KLM also confirmed an order for six A330-200s, with "rights to purchase" (as opposed to options, which impose more financial obligations) for another 18. This is the second part of the long-haul renewal process, and these aircraft will arrive in 2005-2010, helping to replace eight MD11s and 12 767-300ERs over the period. KLM will place a third order at some point, for either more 777s or A330s.

Despite its size, however, KLM is a vulnerable airline, weighed down by two strategic disadvantages. First, its natural catchment area is small compared to its key rivals - BA, Lufthansa and Air France - and second, Schiphol, its home base and hub, is a high cost facility, burdened by high landing fees and slow turnaround times.

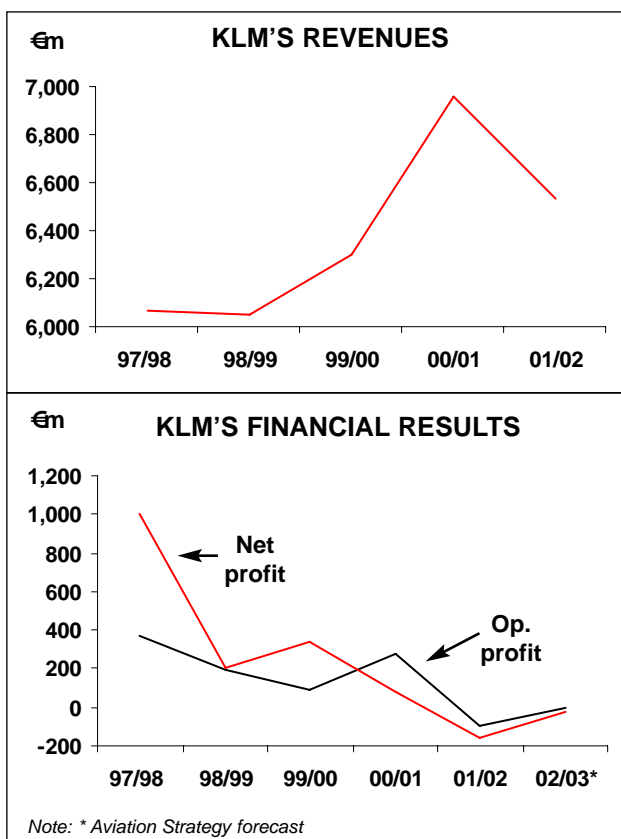
Not surprisingly, the two factors combine to ensure that Schiphol is not as profitable for its flag carrier as the hubs of its three main competitors (see *Aviation Strategy*, September 2002). Even with transfer passengers, Schiphol trails in fourth place behind its major hub rivals in terms of total passengers served (with 39.5m passing through Schiphol in 2001, as opposed to 48m at Paris

CDG, 48.6m at Frankfurt and 60.7m at Heathrow). Moreover, expansion plans at Schiphol always face fierce environmental opposition.

By KLM's own calculations, its 737 cost per seat is 40% higher than its European LCC competitors, so although revenue per seat is approximately 20% higher at KLM than the LCCs, its margin is comparatively much worse than its rivals. There is a general push towards replacing unprofitable short-haul routes with high-speed train routes as soon as possible, and KLM has a joint venture with Dutch Railways - called the "High Speed Alliance" - that will offer a three-hour train service between Schiphol and Paris from 2006.

Until recently, however, KLM had coped well with its structural disadvantages, and the group racked up substantial profits in the late 1990s (see chart, page 8). Then came September 11 and KLM reacted by reducing FTE employees by 1,200, cutting back the working week for three months and easing back capacity by around 10%, which came on top of a planned 5% reduction in capacity that had been agreed even before September 2001. KLM also sought temporary alliances and partnerships wherever it could, including a codesharing deal with Continental, and handed over some transatlantic operations to Northwest. Nevertheless, KLM estimated that September 11 knocked approximately \$55m off its bottom line.

By the second quarter of 2002 KLM's traffic had recovered to pre-September 11 levels, yet there were few signs of breaking back into profit. After posting a €63m operating loss for the third quarter of 2002/03 (October-December 2002), compared with a €76m loss in the corresponding period of 2001/02, KLM warned that it was likely to make a loss for the full year, primarily due to poorer-than-expected RPKs and yields. That has resulted in further trimming of capacity, as well as further cost cutting. The airline now says it is unlikely to make an operating profit in 2002/03 (KLM's fourth quarter is traditionally its weakest, and full year results will be released in May), which



had been its expectation earlier in 2002. In 2001/02 KLM posted a € 94m operating loss and a € 156m net loss. Of the operating result, passenger operations (KLM and its various airline subsidiaries) accounted for a substantial € 208m loss. That passenger operating loss compares with a € 32m loss in the 2000/01 financial year and a € 72m profit in 1999/2000

KLM's 2002/03 net result will also be hit by the substantial compensation it has to pay Alitalia following the Dutch airline's unilateral termination of an alliance between the two in April 2000. An arbitration court ruled that Alitalia had to pay KLM € 100m to compensate for KLM's investment in Milan Malpensa airport, while KLM had to pay Alitalia €250m (plus interest) for breaking the alliance agreement. KLM suggested that it gave Alitalia services in kind, instead of cash, if it joined the SkyTeam alliance, but Alitalia responded that it would prefer the cash. The final total that KLM has to pay is just short of €200m, and it is expected that this will come out of the 2002/03 results.

KLM's cash balance was €951m at December 31 2002, similar to the figure 12 months before that, but this will be almost €200m lower when the

full year results are announced, thanks to the Alitalia payment. And as at December 31 KLM carried almost €4.5bn of long-term debt, which gave it a worrisome net debt/equity ratio of 135%.

The low cost threat

Although KLM's current financial situation is challenging, the long-term situation looks worse when the nature of the threat from the LCCs is considered. The biggest LCC challenge comes from easyJet, which has a significant presence at Schiphol. In its 2003 summer schedule it operates 44 flights a day to/from Schiphol and Barcelona, Belfast, Edinburgh, Geneva, Glasgow, Liverpool, Gatwick, Luton and Nice. Ryanair too is a threat, with a mini-hub at Charleroi in Belgium and routes from the UK to Groningen and Eindhoven. It is also establishing a base at Neiderrhein (near Dusseldorf), which will also capture traffic from the Netherlands, whose border is 45km away.

KLM argues that since more than 50% of its traffic at Schiphol are transfer passengers; it is less vulnerable to the LCCs than other airlines. That's true, but KLM's heavy reliance on transfer traffic is in itself a weakness, since those sixth freedom passengers have lower yields than point-to-point traffic. And KLM's full service, high fare product is vulnerable to competition from the LCCs. KLM says that only a small percentage of its routes face LCC competition, but that figure is approximately 10-15%, and load factors on these routes have suffered against the LCCs.

In any case, KLM last year began simplifying fare structures (from 25 to 8) and reduced economy fares on 20 of its 66 European routes. Unfortunately, cutting fares without attacking the high costs KLM has to endure at Schiphol just erodes the airline's margins, but is a classic sign that KLM is worried by LCC competition.

KLM launched Buzz, its own LCC, in early 2000, when the plan was to exploit the LCC opportunity by using spare capacity at KLM uk. In November 2002 KLM emphasised that Buzz would be its LCC for the foreseeable future, offering more than 20 routes from low-cost Stansted (and, in 2003, from Bournemouth in southern England) to Germany, the Netherlands, Spain and France using BAe 146s and 737-300s. KLM also said that Buzz would have a fleet of up to 40 737s by 2005, confirming it as a strong third competitor to easyJet

and Ryanair.

However, in a few weeks there was an abrupt about-turn by KLM. It appears it decided that the scale of investment needed to keep Buzz competitive against encroaching LCCs was too much, particularly - according to KLM - against "a lot of new low-cost entrants in Germany with big pockets of money". Conveniently, the loss-making Buzz had been separated out from KLM uk in November 2002, and so in January 2003 KLM announced it was selling the airline to Ryanair for \$25.4m, although the net gain to KLM is just \$5m since Buzz has \$20m of cash. (However, the UK Office of Fair Trading has yet to approve the deal, and there are reports that Ryanair is trying to reduce the price since due diligence has allegedly revealed a worse situation at Buzz than anticipated.)

The sale acknowledged that KLM could not make Buzz into a real competitor to Ryanair and easyJet, but the abrupt turn in strategy also presents doubts about the competence of KLM's senior management - particularly since it was only at the end of 2002 that executives were so keen on the LCC opportunity. At that time Floric van Pallandt, the Transavia CEO, said that there was a "window of opportunity" for KLM, as he believed the LCC share of the intra-European market would rise to 25% by 2015. Leo Van Wijk, KLM President and CEO, was at the time highly critical of analysts that predicted KLM could not manage to run a LCC. Unfortunately for KLM, Van Wijk was wrong and those analysts were right. Embarrassingly for KLM, still present on KLM's website is an interesting and detailed presentation (dated October 20 2002) on the LCC sector, which explains the market opportunity for LCCs, particularly in Spain, Germany and France - markets that KLM admits it cannot serve using Schiphol as a LCC base due to its higher infrastructure costs.

Intriguingly, in its LCC analysis KLM claims that on a normalised leg length comparison, Buzz's cost per seat was 22% better than easyJet's, but 17% worse than Ryanair's. KLM says this is due to Ryanair's airport deals, higher crew productivity, economies of scale in overhead and marketing, and aircraft financing.

Now, the only low-cost capacity KLM has is through Basiq Air, a LCC offshoot of Transavia. Basiq Air was launched in late 2000 and concentrates on continental Europe. But if KLM couldn't get Buzz to work, what hope is there for the tiny

Basiq Air? Unless Basiq Air is expanded greatly, the only possible response KLM has to the LCCs is cheaper fares, which without attacking Schiphol's high cost base is a recipe for disaster in the long-term.

Transavia is not a LCC option for KLM, given its Schiphol base, and in 2003 Transavia is concentrating on serving leisure destinations through charter and scheduled services, rather than serving as a traffic feed. It is adopting some of the LCC sales & marketing tricks, such as going ticketless, and its sales are mainly through the Internet and via call centres. However, given that Transavia's new strategy was announced in October 2002, at the same time as KLM declared that Buzz would be built up as a real force in the LCC market, the commitment of KLM to Transavia's new strategy could be doubted.

The problems KLM faces are illustrated by the London-Amsterdam sector. Last year, KLM said it would concentrate on high yielding point-to-point traffic from central London to Amsterdam, leaving Buzz to serve the Stansted-Schiphol route, where "just" 30% of passengers transferred onto long-haul KLM flights at Amsterdam. But with Buzz gone, that 30% feed traffic has also gone (KLM exel operates out of Stansted, but not to Schiphol), and meanwhile the higher yielding point-to-point traffic from London to Schiphol faces competition from easyJet at Gatwick. Much of KLM's general feed traffic at Schiphol now comes from the merged KLM uk/KLM cityhopper.

There is one other possibility. There are plans for a start-up at Neiderrhein Airport using A320s in a JetBlue type operation. KLM might again try to break into the LCC sector by investing in this venture.

Alliance woes

That's why KLM is redoubling its exhaustive efforts to join a major European alliance. According to Leo van Wijk, KLM is searching for "alignment

KLM'S FLEET			
	Fleet	Orders	Options
A330		6	18
737-300	15		
737-400	14		
737-800	13		
737-900	4		
747-200B	2		
747-200B Combi	4		
747-200F	2		
747-300 Combi	3		
747-400	5		
747-400 Combi	17		
747-400LRF		3	
767-300ER	12		
777-200ER		10	
MD11	10		
Total	101	19	18

with a strong European partner in a strong global alliance...while protecting KLM's position at Schiphol as our main hub".

Despite its disastrous flirtation with Alitalia (see *Aviation Strategy*, July/August 2002), SkyTeam appears the most likely destination for KLM, although oneworld too is in the frame, and speculation shifts week by week. The only certainty appears to be that Star is not an option for KLM, given the Dutch airline's fierce competition with Lufthansa in the catchment markets of the Rhine region.

A SkyTeam tie-up for KLM would fit in nicely with Northwest's codesharing alliance with Delta and Continental (Northwest's close ally), and Northwest's wish to join SkyTeam. More importantly, KLM would bring its north European network to SkyTeam, and, in return, ensure strong feed to KLM from Alitalia in the south and from Air France's network (particularly Air France's transatlantic routes). The problem here is Air France's hub at CDG, which many analysts see as being far too close to Schiphol for real benefits to flow to and from KLM. As the two airlines are Europe's kings of transfer traffic, the Air France suggestion is to prioritise CDG as the SkyTeam long-haul hub in Europe, relegating Schiphol to being a hub for intra-North European flights only.

That's a big change in emphasis for KLM, and the political and indeed strategic risk in doing this may be too much for KLM's current management. A substantial equity deal or merger with Air France would be a different story, but short of that, any alliance could break down and it would be difficult, if not impossible, for KLM to rebuild a long-haul

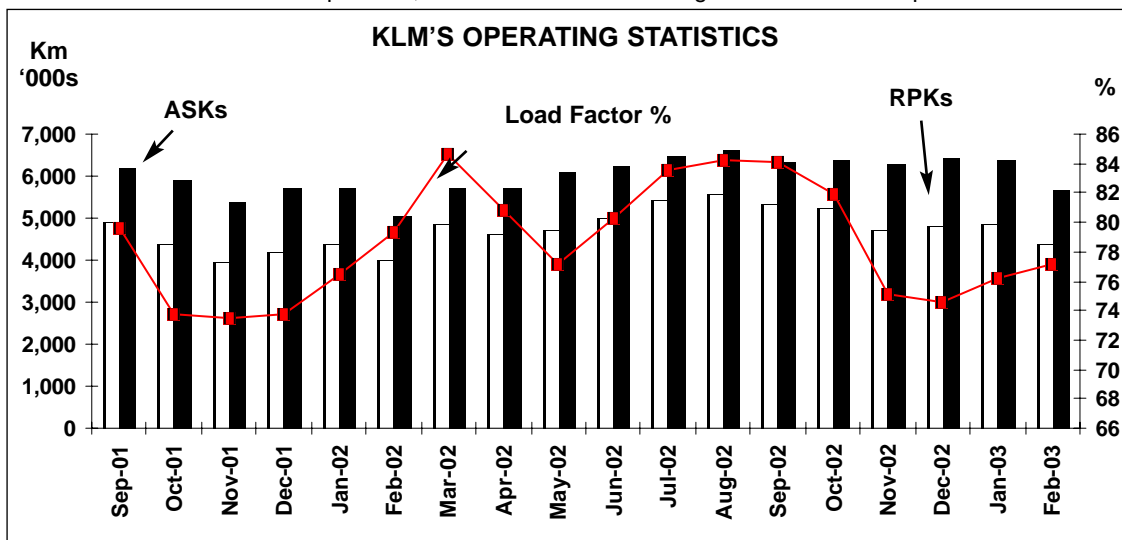
network that had been "handed" over to SkyTeam in the meantime.

The remaining option for KLM is BA/oneworld. Only last month BA and KLM declared (yet again) that they were not reviving merger talks, but that there are ongoing discussions about KLM joining oneworld. The fit between Heathrow and Schiphol would be slightly better than CDG and Schiphol, but transatlantic concerns mean that Brussels' regulators would be more concerned about a BA/KLM tie-up than AF/KLM. If the price of a BA/KLM deal was an abandonment of Wings, this would be difficult and costly to do given the integration of KLM and Northwest's transatlantic operations. In the last full reporting year (2001/02) the North Atlantic routes account for approximately 28% of KLM's RPKs, the single largest sector, followed by Asia/Pacific (23%), Central/South Atlantic (15%) and intra-Europe (14%). For the KLM group as a whole, Europe contributed 37% of operating revenue and North Atlantic 17%.

Where next for KLM?

Now that KLM has learnt the hard way that the LCC market is competitive and brutal, what will it do next? With revenue under pressure from the LCCs, until (and after) KLM joins one of the global alliances the need to reduce costs is paramount. Rob Ruijter, KLM Managing Director and Chief Financial Officer, calls it "strategic cost management", and the stated aim is to increase the ROCE to 9%. That's a tough target - and some would say near impossible for an airline with KLM's cost infra-

structure. In 2001/02, for example, the ROCE was -3.9%, and on a like-for-like basis (assuming revenue and capital employed remain the same) KLM would have to strip out €787m of costs - representing 12% of its cost base - to achieve its ROCE target. On April 1 KLM announced it was going to axe



"several thousand" jobs, although the unions are unlikely to accept this lightly. Relations with the Dutch unions are already uneasy, and they were not impressed by the airline's derecognition of NVLT, the engineering union, in 2002 following a wildcat strike by engineers that cost the airline \$10m, according to KLM. This derecognition has since been reversed, but further job cuts will destroy any lingering goodwill between the two sides. KLM is also trimming back capacity this summer, mostly via smaller aircraft and fewer frequencies on some routes, but this will hardly dent the cost target.

Unsurprisingly, KLM is light on the detail of where most of the cost reduction will come from, other than general comments about investing in aircraft to drive down unit costs and, according to Rob Ruijter, "building a shared employee culture in which cost reduction is viewed as an important,

challenging and rewarding activity", and "being prepared to innovate in ways that dramatically alter the shape of the cost curve."

That kind of rhetoric has not appeared to go down well with KLM's shareholders, and the fall in KLM's share price has been steady and consistent, even before September 11. Quoted on the Amsterdam, Frankfurt and New York exchanges, from a high of almost €60 in the late 1990s, KLM's share price fell to €22 prior to September 11 and has kept going down ever since, to around €6 at the end of March 2003. That has given KLM the opportunity to buy back some of its shares, although this exercise is very modest. An alliance deal will take some of the pressure off the share price in the short-term, but with a high cost base and a limited catchment area KLM's long-term survival may depend on a merger that would mean the end of the Dutch carrier's independence.

AirTran: the business model for the Majors?

AirTran Airways, the largest of the early 1990s crop of new entrants, is now as profitable as Southwest or JetBlue, despite operating with a distinctly different business model. It is the type of model that the US Majors might aspire to.

AirTran posted net profits before special items for both 2001 and 2002 - a rare feat in the US airline industry. The 7.2% operating margin that it achieved in the fourth quarter was the industry's second highest after JetBlue's 16.8% (Southwest's was 6.3%).

The profits were impressive also in light of AirTran's stepped up ASM growth (7% in 2000, 12% in 2001 and 26% in 2002). After September 11 the airline accelerated its Boeing 717 deliveries, in part to obtain more timely cost savings from fleet renewal. It accepted 43 new aircraft in 2001-2002 - more than any other US airline. This meant that it was quickly able to take advantage of US Airways' downsizing, while continuing to successfully fend off Delta at their shared Atlanta hub.

While Southwest and JetBlue have been present in coast-to-coast long haul markets for some time, AirTran is only venturing from its Eastern US stronghold to the West Coast this summer. Given

that the major carriers' biggest cuts are likely to be in the East, why is the low-fare airline now going west?

AirTran will also be in the news because it has to be the only US airline looking to place a large new aircraft order this summer. It needs a longer-range aircraft type and is considering proposals from both Boeing and Airbus.

AirTran's business model is interesting because it has components of the sort of strategy that the major carriers should try to aim for. The airline offers a separate "affordable" business class (rather than single-class like Southwest and JetBlue) and its unit costs are in the 8-9 cent range (rather than 6-7 cents). It is primarily a hub-and-spoke carrier but has always operated its main Atlanta hub using the more efficient free-flow system that American and others are now interested in.

On the negative side, AirTran's financial profile is much weaker than Southwest's and JetBlue's. While analysts remain bullish about its longer-term prospects, its highly leveraged balance sheet (when operating leases are included) and lack of a credit line pose risk in the current industry envi-

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ronment. It may avoid a liquidity crunch, but will it be able to execute its growth plans?

AirTran is fortunate in that it was in great shape when the industry crisis began. When it was last featured in an *Aviation Strategy* briefing in March 2001, it had just staged an impressive financial turnaround in 1999-2000, after three years of heavy losses as it rebuilt operations and restructured itself after predecessor ValuJet's 1996 crash and three-month grounding.

The company had retained a low cost culture despite becoming a more up-market and conventional type of operation. It had also raised its unit revenues from just 7 cents per ASM in 1997 to 10.65 cents in 2000, largely thanks to success in attracting business traffic. It had introduced the 717 to its fleet in October 1999 and obtained lease financing on highly favourable terms for deliveries up to February 2002. Most importantly, it had persuaded Boeing Capital to refinance \$230m of debt that was due in April 2001.

With all of those issues resolved, AirTran was ready to focus its efforts on growth, fleet renewal and consolidating profitability. As things turned

out, it accelerated growth and fleet renewal, made extra efforts to cut costs and boost liquidity and escaped with only two quarters of marginal losses.

Substantial cost advantage

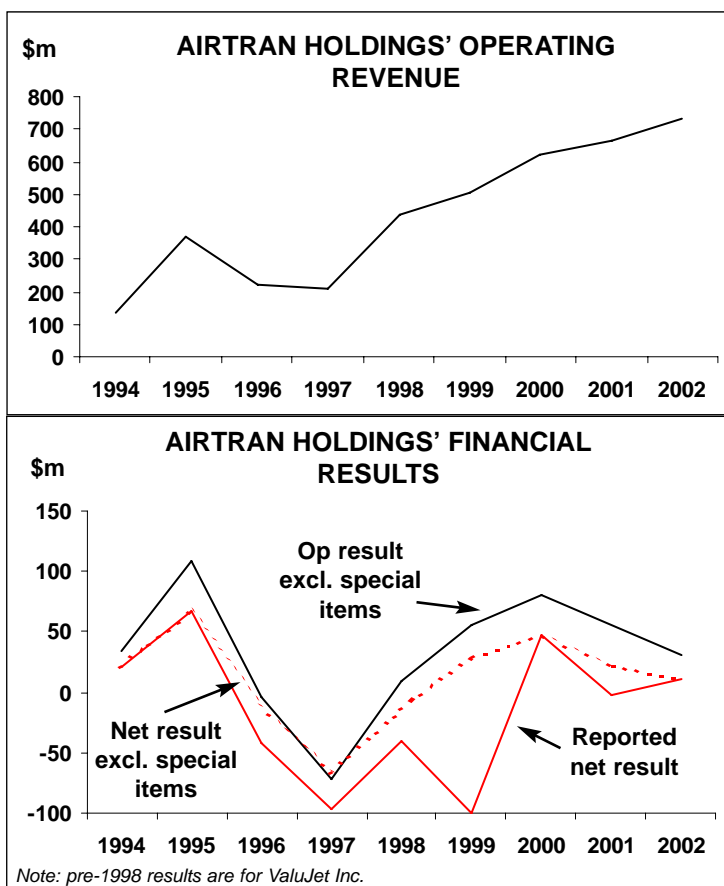
AirTran has achieved impressive cost cuts over the past 18 months; in 2002 its unit costs fell by 8.8% to 8.51 cents per ASM. It appears to enjoy a substantial cost advantage over its main competitors - by its own estimates, at its average stage length of 575 miles, Delta and US Airways have 35% and 50% higher unit costs respectively. AirTran executives suggested recently that even after US Airways' restructuring the cost advantage would still be 40-45%.

Significantly, AirTran was able to achieve meaningful cost reductions in the wake of September 11 without furloughing workers. Thanks to great labour relations, it quickly secured agreements with its pilots and other key groups on a range of temporary measures, including salary cuts and more flexible work rules, that reduced payroll costs by about 20% - the same as the initial capacity reduction. As well as helping maintain morale, this strategy ensured that the airline had all the people in place to quickly respond to new market opportunities.

At a recent conference, AirTran's CEO Joe Leonard described current staff morale as "absolutely sky-high". This is because the company is growing "whereas the competitors who used to mock our employees are getting laid off" (a reference to Delta). Labour agreements are in place with all groups until late 2004-2006, except for the flight attendants whose contract became amendable in October 2002 and who are currently in negotiations.

The fleet renewal process has contributed substantial cost savings, particularly in fuel and maintenance. The 717's 24% better fuel burn over the DC-9 resulted in an \$11.8m cost saving in 2002. The earlier decision to accelerate 717 deliveries has obviously paid off handsomely in light of the sharp pre-war surge in fuel prices.

Like other airlines, AirTran has continued to benefit from lower distribution costs. Internet sales have risen to account for 56% of total sales in 2002 - among the highest percentages in the industry. The carrier estimates that the cost of



booking a passenger on the Internet is just 20 cents, compared to \$5.50 via a travel agency (or \$3 via AirTran's own internal reservation system).

Relatively weak balance sheet

AirTran fortunately managed to repair its balance sheet from the worst damage inflicted by the post-ValuJet restructuring before the post-September 11 crisis hit the industry. Cash position improved from just \$10.8m at the end of 1998 to \$103.8m at year-end 2000, while stockholders' equity recovered to \$7.9m positive from a deficit of \$40m in 1999. The April 2001 refinancing replaced a \$230m balloon payment due that month with \$201.4m of new debt obligations due in 2008-2009.

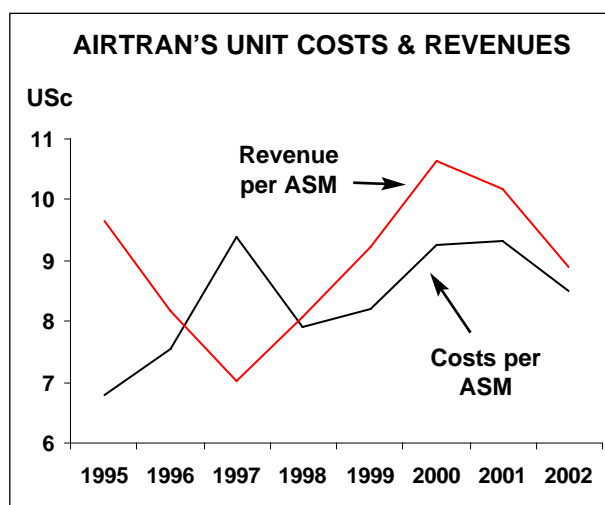
The balance sheet has continued to gradually strengthen thanks to continued profitability. Cash reserves amounted to \$150m in early March, up from \$138.3m at the end of 2002 and \$130m a year earlier. Stockholders' equity rose from \$33.4m at year-end 2001 to \$51.9m at year-end 2002, while long-term debt (including current portion) fell from \$254.8m to \$199.7m in the same period.

However, AirTran's debt-to-total-capital ratio (including operating leases) is currently about 93% - similar to the large network carriers' ratios and in an entirely different league from Southwest's low 40s or JetBlue's 60s. The ratio is expected to decline marginally by 1-2 points in 2003.

AirTran relies on internally generated cash to meet liquidity needs, because it has no short-term credit facilities and substantially all of its assets are encumbered. On the positive side, however, it has very modest debt maturities - just \$10-18m annually in 2003-2007 - and low capital spending needs because all of the 717s will be leased from Boeing Capital. Contractual obligations and commitments add up to \$201m in 2003, followed by about \$140m annually in 2004-2007. The bulk of it is operating lease payments, which amount to \$133m in 2003 and \$121-128m annually in subsequent years.

Improved business mix

While AirTran caters for all passenger seg-



ments, it has a product strategy that is more specifically designed to meet the needs of business travellers than the Southwest and JetBlue models are. It offers "key attributes of major airlines at affordable prices". This includes a simplified fare structure, walk-up fares that are generally 60% below those of high-cost competitors, a business class product for only \$35 extra per segment, assigned seating and frequent-flyer and corporate travel programmes.

The airline believes that having a separate business class cabin, with larger seats and more legroom, as well as five-abreast seating in the coach cabin (rather than the normal six-abreast) are key attributes that set it apart from competitors. (The five-abreast seating means that 83% of seats must be filled before somebody is forced into the middle seat.)

These strategies have been instrumental in pulling in business traffic. Although the revenue mix has deteriorated since September 11, AirTran is seeing growth in business customers and believes that they are coming from the larger carriers. There are also growing numbers of repeat customers.

At a recent Raymond James investor conference, Leonard presented the results of a new passenger survey that showed dramatic changes in the make-up of AirTran's clientele from four years earlier. First, 38% of its passengers now have a household income of at least \$100,000 (no longer backpackers). Second, 65% of the passengers fly at least once a month and 15% fly at least once a week (extremely frequent flyers). Third, 85% of the passengers were satisfied with their most recent trip on AirTran (the highest per-

centage ever seen by the company that carried out the survey). Fourth, 68% of the passengers agreed or completely agreed that AirTran's service is comparable with or better than any other airline.

Growth opportunities

AirTran has so far focused on short haul markets primarily in Eastern US, where it enjoys the greatest cost differential over competitors. The strategy is to serve large primary business centres and develop underserved secondary markets.

Two years ago the network was still heavily focused on Atlanta, which accounted for 90% of AirTran's passenger flows, though the airline had begun to diversify with some point-to-point services from Chicago and in the Northeast-Florida market. It was keen to expand service from the Northeast and even establish a new hub operation there, but those plans were hampered by a lack of airport slots and gates.

Over the past 18 months there have been several significant developments. First, US Airways' decision to eliminate MetroJet in late 2001 provided an opportunity for AirTran to develop a hub at Baltimore-Washington - it announced its schedule within five days of US Airways' announcement. The operation, which will have grown to ten cities by June, is apparently a great success and will see further expansion. AirTran is the only jet operator from Baltimore to cities such as Boston, Fort Myers and Grand Bahama Island (its recently-introduced second international route), but it has also fared well in head-on competition with Southwest on the Orlando and Tampa routes.

Second, AirTran has passed some of its hardest-hit short haul markets in the Southeast to a new regional jet operation established with Air Wisconsin. "AirTran JetConnect" will not be a huge network (at most perhaps 10 CRJs by year-end); rather, it is seen as a tactical move to discourage the major carriers from coming into those markets with longer-haul RJs.

Third, AirTran announced last month that it would begin twice-daily service from Atlanta to Los Angeles, Las Vegas and Denver in May and June, as part of a new focus on east-west expansion. The West Coast flights will initially be operated with wetleased A320s because the 717s do not have the range (AirTran's pilots have agreed

to the arrangement as long as necessary).

Going west just as opportunities are cropping up in the East may not make sense at first glance, but JetBlue has demonstrated that the economic benefits of such a move can be significant for a north-south short haul carrier. The main benefits are improved aircraft utilisation (as the operating day is extended) and reduced seasonal variation in earnings. AirTran specifically wants to boost earnings in the third quarter, when the Florida market is weak.

These new services are part of a strategy to "selectively add" service at Atlanta - the nation's fourth largest travel market - which has seen its share of AirTran's passenger flows decline by 16 percentage points in the past two years to 74% at the end of 2002. The airline has a great 26-gate facility at Atlanta Hartsfield, which also happens to be one of the nation's cheapest airports to operate from.

Interestingly, AirTran has always operated Atlanta more like a "rolling complex" than a classic hub where aircraft arrive and depart in waves. The first and the last banks of the day are classic hub-style, but at other times the airline free-flows aircraft. This explains why it has relatively high average aircraft utilisation for a short haul carrier (about 11 hours daily). Over the past year American, in particular, has been resigning its hubs into rolling complexes.

AirTran certainly expects to continue to take advantage of new market opportunities in the East as the major airlines retrench further. It is interested in developing both point-to-point services and new focus cities like Baltimore.

The leadership is not too concerned about Delta's Song (which is due to begin operations on April 15) or other planned low-fare units within high-cost airlines, because "we think our business model has been proven". Over the past two years, Delta has mounted a particularly aggressive competitive response to AirTran, with little adverse impact on the smaller carrier.

Fleet plans

This is a very important year for AirTran on the fleet front. First, it will be finishing the 717-200 deliveries (taking the last 23 on firm order to bring that fleet to 73 by year-end) and retiring the remaining 10 DC-9s. Second, it will need to decide on a new aircraft type - it needs a longer-range model and more aircraft (only six purchase

options remain on the 717s).

Completion of the 717-200 programme means that AirTran will have transformed its fleet from one of the industry's oldest to one of the youngest in just over four years. The average fleet age will be less than three years at the end of 2003, compared to 27 years at the end of 1998.

The process of selecting the longer-range aircraft type began a couple of months ago, when AirTran requested proposals from both Boeing and Airbus. Preliminary talks have focused on three types: the stretched or longer-range 717-300 (which Boeing may or may not launch this summer), the 737-700 and the A319. (The preliminary 717-300 proposal that AirTran received would put in four extra fuel tanks to permit non-stop operation from Atlanta to Los Angeles.)

Since AirTran is talking about placing an order for 100 aircraft, it will no doubt be an extremely hot contest. The management has noted many times recently that this is an exceptionally good time to be buying aircraft and that they believe AirTran can do a better deal on new aircraft than on used aircraft. The airline says that it never intended to operate a single aircraft type - something that, in any case, is a less important consideration now that prices (and hence ownership costs) are so low.

CFO Stan Gadek indicated in January that AirTran hoped to start buying aircraft, suggesting that it might go to the debt markets in conjunction with the longer-range aircraft order. It has leased all of the 717-200s from Boeing Capital, except for the first ten that were financed with an EETC transaction in 1999.

Prospects

Up to early March AirTran was enjoying strong

traffic and revenue trends and forward bookings, but the war in Iraq has meant that it is likely to only break even financially in the first quarter. However, it is still expected to post a healthy profit for 2003 - a feat that only a few US airlines will accomplish - despite 25%-plus capacity growth.

The current First Call consensus forecast is a profit of 46 cents per share in 2003, which would be more than three times the 14 cents earned last year, and a profit of 78 cents per share in 2004. However, these estimates are likely to change when the full impact of the war becomes clearer.

In AirTran's case, the negative effects of the war on traffic and revenues will be mitigated by its low cost structure and favourable cost trends. Unit costs will still decline this year as the final phase of the fleet transition is completed. Also, AirTran had the foresight to take on additional fuel hedges in early February, which gave it an excellent hedge position: 70% of first-quarter needs at mostly 86 cents per gallon (maximum 97 cents) and 55% of second-quarter needs at a maximum price of 87 cents.

Until very recently, AirTran's shares were on the "buy" or "strong buy" lists of most analysts. However, the share price has gone against market trends over the past six months and more than doubled to \$6-7 from the September-October lows of less than \$3. This led some analysts, including Merrill Lynch's Michael Linenberg, to lower their recommendations to "neutral" mainly due to valuation at the end of March. However, in contrast, Raymond James analyst Jim Parker retained his "outperform" rating and raised the 12-month price target from \$7 to \$9.50 (the consensus median 12-month target was \$7.50 at the end of last month).

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Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Alaska	Year 2000	2,177	2,198	-20.6	-70	-0.9%	-3.2%	27,834	19,277	69.3%	13,512	9,940
	Year 2001	2,141	2,263	-121.8	-39.5	-5.7%	-1.8%	28,837	19,712	68.4%	13,668	10,742
	Jan-Mar 02	497	548	-51.4	-34.4	-10.3%	-6.9%	7,189	4,791	66.6%	3,193	
	Apr-Jun 02	477	480	-2.2	-2.5	-0.5%	-0.5%	7,932	5,427	68.4%	3,616	10,222
	Jul-Sep 02	620	597	24	11	3.9%	1.8%	8,380	5,911	70.5%	3,978	10,465
	Oct-Dec 02	430	484	-54		-12.6%		7,657	5,092	66.5%	3,367	
	Year 2002	1,833	1,908	-75		-4.1%		31,156	21,220	68.1%	14,154	
American	Year 2000	19,703	18,322	1,381	813	7.0%	4.1%	258,951	187,507	72.4%	86,239	99,610
	Year 2001	18,963	20,823	-1,860	-1,762	-9.8%	-9.3%	161,030	176,143	69.4%	99,235	102,093
	Jan-Mar 02	4,136	4,865	-729	-575	-17.6%	-13.9%	64,515	44,766	69.4%	24,340	97,800
	Apr-Jun 02	4,479	5,080	-601	-495	-13.4%	-11.1%	70,724	53,125	71.4%	24,340	100,100
	Jul-Sep 02	4,494	5,815	-1,321	-924	-29.4%	-20.6%	73,899	53,236	72.0%	24,952	99,700
	Oct-Dec 02	4,190	4,869	-679	-529	-16.2%	-12.6%	67,964	47,428	69.8%	22,857	93,500
	Year 2002	17,299	20,629	-3,330	-3511	-19.2%	-20.3%	277,121	195,927	70.7%	94,143	93,500
America West	Year 2000	2,344	2,357	-13	8	-0.6%	0.3%	43,580	30,741	70.5%	19,950	13,869
	Year 2001	2,066	2,380	-316	-148	-15.3%	-7.2%	42,709	30,696	71.9%	19,576	13,827
	Jan-Mar 02	460	583	-123	-358	-26.7%	-7.8%	9,780	6,859	70.1%	4,303	11,506
	Apr-Jun 02	533	534	-1	-15	-0.2%	-2.8%	11,024	8,351	75.8%	5,080	11,973
	Jul-Sep 02	510	552	-42	-32	-8.2%	-6.3%	11,504	8,619	74.9%	5,165	12,320
	Oct-Dec 02	522	560	-38	-32	-7.3%	-6.1%	11,154	8,160	73.2%	4,906	
	Year 2002	2,047	2,246	-199	-430	-9.7%	-21.0%	43,464	33,653	73.6%	19,454	13,000
Continental	Year 2000	9,899	9,170	729	342	7.4%	3.5%	134,718	100,283	74.4%	45,139	45,072
	Year 2001	8,969	9,119	-150	-95	-1.7%	-1.1%	135,962	98,393	72.4%	44,238	45,166
	Jan-Mar 02	1,993	2,180	-187	-166	-9.4%	-8.3%	30,498	22,582	74.0%	10,057	
	Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%	10,727	
	Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581	
	Oct-Dec 02	2,036	2,094	-56	-109	-2.8%	-5.4%	31,496	22,382	70.6%	9,651	
	Year 2002	8,402	8,714	-312	-451	-3.7%	-5.4%	128,940	95,510	73.3%	41,014	43,900
Delta	Year 2000	16,741	15,104	1,637	828	9.8%	4.9%	236,665	173,453	73.1%	105,591	79,584
	Year 2001	13,879	15,124	-1,245	-1,216	-9.0%	-8.8%	237,914	163,693	68.8%	104,943	77,654
	Jan-Mar 02	3,103	3,538	-435	-397	-14.0%	-12.8%	54,298	37,384	68.9%	24,618	74,300
	Apr-Jun 02	3,474	3,601	-127	-186	-3.7%	-5.4%	60,709	42,355	73.4%	27,427	75,700
	Jul-Sep 02	3,420	3,805	-385	-326	-11.3%	-9.5%	59,287	44,037	74.3%	27,713	76,000
	Oct-Dec 02	3,308	3,670	-362	-363	-10.9%	-11.0%	56,776	40,419	71.2%	27,290	75,100
	Year 2002	13,305	14,614	-1,309	-1,272	-9.8%	-9.6%	228,068	172,735	71.9%	107,048	75,100
Northwest	Year 2000	11,240	10,671	569	256	5.1%	2.3%	171,789	127,298	76.6%	56,836	53,131
	Year 2001	9,905	10,773	-868	-423	-8.8%	-4.3%	158,284	117,682	74.3%	54,056	50,309
	Jan-Mar 02	2,180	2,376	-196	-171	-9.0%	-7.8%	35,022	26,611	76.0%	11,899	45,005
	Apr-Jun 02	2,406	2,452	-46	-93	-1.9%	-3.9%	39,848	29,902	78.9%	13,627	46,260
	Jul-Sep 02	2,564	2,556	8	-46	0.3%	-1.8%	40,321	31,787	78.8%	14,365	45,466
	Oct-Dec 02	2,339	2,951	-612	-488	-26.2%	-20.9%	37,115	27,611	74.4%	12,779	44,323
	Year 2002	9,489	10,335	-846	-798	-8.9%	-8.4%	150,355	115,913	77.1%	52,669	44,323
Southwest	Year 2000	5,650	4,628	1,021	603	18.1%	10.7%	96,463	67,961	70.5%	72,568	28,752
	Year 2001	5,555	4,924	631	511	11.4%	9.2%	105,079	71,604	68.1%	64,447	31,014
	Jan-Mar 02	1,257	1,207	49	21	3.9%	1.7%	26,586	16,726	62.9%	14,463	32,244
	Apr-Jun 02	1,473	1,284	189	102	12.8%	6.9%	29,074	20,314	69.9%	16,772	33,149
	Jul-Sep 02	1,391	1,300	91	75	6.5%	5.4%	28,342	19,180	67.7%	16,256	33,609
	Oct-Dec 02	1,401	1,313	88	42	6.3%	3.0%	28,296	17,835	63.0%	15,554	33,705
	Year 2002	5,522	5,104	417	241	7.6%	4.4%	110,859	73,049	65.9%	63,046	33,705
United	Year 2000	19,351	18,685	666	96	3.4%	0.5%	282,276	204,188	72.3%	83,853	100,976
	Year 2001	16,138	18,481	-2,343	-2,145	-14.5%	-13.3%	265,291	187,701	70.8%	75,457	96,142
	Jan-Mar 02	3,288	3,999	-711	-510	-21.6%	-15.5%	55,056	39,761	72.2%	15,361	
	Apr-Jun 02	3,793	4,278	-485	-341	-12.8%	-9.0%	60,315	44,896	74.4%	17,501	79,800
	Jul-Sep 02	3,737	4,383	-646	-889	-17.3%	-23.8%	64,147	48,335	75.4%	18,900	79,900
	Oct-Dec 02	3,468	4,462	-994	-1,473	-28.7%	-42.5%	59,988	43,158	71.9%	16,823	77,000
	Year 2002	14,286	17,123	-2,837	-3,212	-19.9%	-22.5%	238,569	176,152	73.5%	68,585	78,700
US Airways	Year 2000	9,268	9,322	-54	-269	-0.6%	-2.9%	106,999	75,358	70.4%	59,772	45,228
	Year 2001	8,288	9,355	-1,067	-1,969	-12.9%	-23.8%	107,347	73,944	68.9%	56,114	43,846
	Jan-Mar 02	1,709	2,079	-370	-269	-21.7%	-15.7%	22,495	15,419	68.5%	11,825	33,859
	Apr-Jun 02	1,903	2,078	-175	-248	-9.2%	-13.0%	23,516	17,658	75.1%	13,000	33,902
	Jul-Sep 02	1,752	1,933	-181	-335	-10.3%	-19.1%	24,075	17,276	71.8%	11,994	33,302
	Oct-Dec 02	1,614	2,217	-603	-794	-37.4%	-49.2%	20,631	14,096	68.3%	10,354	30,585
	Year 2002	6,977	8,294	-1,317	-1,646	-18.9%	-23.6%	90,700	64,433	71.0%	47,155	30,585

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK.

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France	Year 2000/01	11,148	10,746	402	382	3.6%	3.4%	119,562	93,355	78.1%	42,400	64,717
	Oct-Dec 01	2,682	2,785	-103	-121	-3.8%	-4.5%	30,070	20,907	70.6%		
	Jan-Mar 02	2,667	2,647	20	1	0.7%	0.0%	29,703	22,925	77.2%		
	Year 2001/02	11,234	11,017	217	141	1.9%	1.3%	123,777	94,828	76.6%		70,156
	Apr-Jun 02	3,276	3,124	163	157	5.0%	4.8%	31,687	24,435	77.1%		
	Jul-Sep 02	3,264	3,122	142	57	4.4%	1.7%	33,806	26,366	78.0%		71,290
	Oct-Dec 02	3,396	3,392	4	2	0.1%	0.1%	32,581	24,558	75.4%		
Alitalia	Year 2000	4,968	5,210	-242	-236	-4.9%	-4.8%	57,483	41,433	72.1%	26,700	23,478
	Jan-Jun 01	2,348	2,504	-156	-228	-6.6%	-9.7%	26,437	18,953	71.7%	12,565	24,023
	Year 2001	4,745	5,007	-262	-818	-5.5%	-17.2%	51,392	36,391	70.8%	24,737	23,667
	Jan-Jun 02	2,462	2,574	-63	-49	-2.6%	-2.0%			69.7%		21,366
	Year 2002	5,279	4,934	-89	101	-1.7%	1.9%	42,224	29,917	70.8%	22,041	
BA	Year 2000/01	13,700	13,139	561	189	4.1%	1.4%	162,824	116,674	71.7%	44,462	62,844
	Oct-Dec 01	2,616	2,882	-266	-205	-10.2%	-7.8%	35,449	23,106	65.2%	8,574	55,758
	Jan-Mar 02	2,842	2,908	-66	-63	-2.3%	-2.2%	34,998	25,221	72.1%	8,831	53,410
	Year 2001/02	12,138	12,298	-160	-207	-1.3%	-1.7%	151,046	106,270	70.4%	40,004	57,227
	Apr-Jun 02	3,127	2,886	241	61	7.7%	2.0%	35,020	24,679	70.5%	9,665	52,926
	Jul-Sep 02	3,323	2,931	392	240	11.8%	7.2%	35,608	27,301	76.7%	10,607	52,116
	Oct-Dec 02	3,025	2,939	86	21	2.8%	0.7%	34,815	24,693	70.9%	9,200	51,171
Iberia	Oct-Dec 01	1,086	1,118	-143	-88	-13.2%	-8.1%	14,275	9,698	67.9%	6,265	26,800
	Year 2001	4,240	4,236	4	45	0.1%	1.1%	59,014	41,297	70.8%	24,930	27,567
	Jan-Mar 02	1,070	1,076	-9	-5	-0.8%	-0.5%	13,502	9,429	69.8%	5,916	
	Apr-Jun 02	1,245	1,134	98	76	6.1%	14,004	10,105	72.2%	6,726		
	Jul-Sep 02	1,229	1,103	132	104	10.7%	8.5%	14,535	11,419	78.6%	6,624	
	Oct-Dec 02	1,236	1,219	18	-17	1.5%	-1.4%	13,593	9,695	71.3%	5,689	25,544
	Year 2002	5,123	4,852	272	174	5.3%	3.4%	55,633	40,647	73.0%	24,956	25,963
KLM	Year 2000/01	6,319	6,068	251	70	4.0%	1.1%	75,222	60,047	79.8%	16,100	30,253
	Oct-Dec 01	1,291	1,358	-67	-82	-5.2%	-6.4%	17,030	12,483	73.3%		27,738
	Jan-Mar 02	1,302	1,414	-112	-97	-8.6%	-7.5%	16,473	13,215	79.9%		
	Year 2001/02	5,933	6,018	-85	-141	-1.4%	-2.4%	72,228	56,947	78.7%	15,949	33,265
	Apr-Jun 02	1,639	1,599	40	11	2.4%	0.7%	18,041	14,326	79.4%		34,366
	Jul-Sep 02	1,844	1,523	140	86	7.6%	4.7%	19,448	16,331	82.7%		34,931
	Oct-Dec 02	1,693	1,760	-68	-71	-4.0%	-4.2%	19,063	14,722	77.2%		34,850
Lufthansa	Year 2000	14,014	12,648	1,366	635	9.7%	4.5%	123,801	92,160	74.4%	47,000	69,523
	Oct-Dec 01	3,437	3,674					28,293	18,854	67.4%	9,873	
	Year 2001	14,966	14,948	18	-530	0.1%	-3.5%	126,400	90,389	71.5%	45,710	87,975
	Jan-Mar 02	3,556	3,513	43	-165	1.2%	-4.6%	26,451	19,409	71.0%	9,700	84,802
	Apr-Jun 02	4,968	4,601	285	138	5.7%	2.8%	30,769	22,835	70.8%	11,300	90,308
Jul-Sep 02	4,431	4,254	454	369	10.2%	8.3%	32,409	25,189	71.1%	12,067	90,704	
SAS	Year 2000	5,185	4,853	332	233	6.4%	4.5%	33,782	22,647	67.0%	23,240	22,698
	Oct-Dec 01	1,208	1,316	-108	-108	-8.9%	-8.9%	8,509	5,097	59.9%	5,300	
	Year 2001	4,984	5,093	-109	-103	-2.2%	-2.1%	35,521	22,956	64.6%	23,060	22,656
	Jan-Mar 02	1,392	1,534	-142	-133	-10.2%	-9.6%	8,228	5,229	63.1%	5,091	
	Apr-Jun 02	1,965	1,608	242	106	12.3%	5.4%	8,773	6,240	71.1%	6,034	
	Jul-Sep 02	1,821	1,587	233	56	12.8%	3.1%	8,701	6,281	70.2%	5,586	21,896
	Oct-Dec 02	1,984	1,826	158	-34	8.0%	-1.7%	8,334	5,463	65.6%	5,155	
Ryanair	Year 2000/01	442	338	104	95	23.5%	21.5%	6,657	4,656	69.9%	7,000	1,476
	Oct-Dec 01	122	97	25	26	20.5%	21.3%	2,304		79.0%	2,700	
	Jan-Mar 02	220	165	55	50	25.0%	22.7%	2,352				
	Year 2001/02	642	474	168	155	26.2%	24.1%	10,295	7,251	81.0%	11,900	1,547
	Apr-Jun 02	189	153	47	40	24.9%	21.2%	2,852		83.0%	3,540	
	Jul-Sep 02	272	149	123	113	45.2%	41.5%	3,138			4,300	1,676
	Oct-Dec 02	201	149	53	47	26.4%	23.4%			86.0%	3,930	1,761
easyJet	Oct 00-Mar 01	210	225	-15	-15	-7.1%	-7.1%	3,908		80.6%	3,200	
	Apr-Sep 01	314	273	41	41	13.1%	13.1%				3,915	
	Year 2000/01	513	455	58	54	11.3%	10.5%	7,003	5,903	83.0%	7,115	1,632
	Oct-Mar 02	285	279	6	1	2.1%	0.4%	4,266		84.2%	4,300	
	Apr-Sep 02	579	474	105	76	18.1%	13.1%	6,503			7,050	
	Year 2001/02	864	656	111	77	12.8%	8.9%	10,769	9,218	84.8%	11,350	3,100

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
ANA	Apr-Sep 00	5,228	4,793	495	359	9.5%	6.9%	47,586	31,753	66.7%	24,958	
	Oct 00-Mar 01	5,376	5,186	190	-486	3.5%	-9.0%	46,278	29,168	63.0%	24,471	
	Year 2000/01	10,914	10,629	285	-137	2.6%	-1.3%	85,994	58,710	68.3%	43,700	14,303
	Apr-Sep 01	5,168	4,811	357	136	6.9%	2.6%	45,756	30,790	67.3%	25,876	
	Oct 01-Mar 02											
	Year 2001/02	9,714	9,529	185	-76	1.9%	-0.8%	87,908	57,904	64.7%	49,306	
Cathay Pacific	Apr-Sep 02	5,322	5,194	127	-69	2.4%	-1.3%	44,429	29,627	66.7%	25,341	
	Year 2000	4,431	3,752	679	642	15.3%	14.5%	61,909	47,153	76.2%	11,860	14,293
	Jan-Jun 01	2,031	1,898	133	170	6.5%	8.4%	32,419	23,309	71.9%	5,936	
	Year 2001	3,902	3,795	107	84	2.7%	2.2%	62,790	44,792	71.3%	11,270	15,391
	Jan-Jun 02	1,989	1,753	235	181	11.8%	9.1%	29,537		78.1%		14,300
	Year 2002	4,243	3,634	609	513	14.4%	12.1%	63,050		77.8%		14,600
JAL	Year 1999/00	14,442	14,039	403	177	2.8%	1.2%	119,971	88,479	70.2%	37,200	18,974
	Year 2000/01	13,740	13,106	634	331	4.6%	2.4%	129,435	95,264	73.6%	38,700	17,514
	Year 2001/02	9,607	9,741	-135	-286	-1.4%	-3.0%				37,183	
Korean Air	Year 2000	4,916	4,896	20	-409	0.4%	-8.3%	55,824	40,606	72.7%	22,070	16,000
	Year 2001	4,309	4,468	-159	-448	-3.7%	-10.4%	55,802	38,452		21,638	
	Jan - Mar 02	1,113	1,060	54	23	4.9%	2.1%	13,409	9,799	73.1%	5,399	
Malaysian	Year 1999/00	2,148	2,120	28	-68	1.3%	-3.2%	48,158	34,930	71.3%	15,370	21,687
	Year 2000/01	2,357	2,178	179	-351	7.6%	-14.9%	52,329	39,142	74.8%	16,590	21,518
	Year 2001/02	2,228	2,518	-204	-220	-9.2%	-9.9%	52,595	34,709	66.0%	15,734	21,438
Qantas	Year 1999/00	5,710	5,162	548	324	9.6%	5.7%	85,033	64,149	75.4%	20,490	29,217
	Jul-Dec 00	2,745	2,492	224	142	8.2%	5.2%	46,060	35,451	77.0%	11,175	31,382
	Year 2000/01	5,473	5,099	374	223	6.8%	4.1%	92,943	70,540	75.9%	22,150	31,632
	Jul-Dec 01	3,050	2,904	125	84	4.1%	2.8%	48,484	37,262	76.9%	13,335	32,361
	Year 2001/02	6,133	5,785	348	232	5.7%	3.8%	95,944	75,134	78.3%	27,128	33,044
Singapore	Jul-Dec 02	3,492	3,181	305	210	8.7%	6.0%	51,009	40,779	79.9%	15,292	34,770
	Year 2000/01	5,729	4,954	775	892	13.5%	15.6%	92,648	71,118	76.8%	15,000	14,254
	Apr-Sep 01	2,592	2,329	263	90	10.1%	3.5%	48,058	36,091	75.1%		
	Oct 01-Mar 02	2,807	2,508	299		10.7%		46,501	33,904			
	Year 2001/02	5,399	4,837	562	395	10.4%	7.3%	94,559	69,995	74.0%	14,765	
Apr 02-Sep 02	2,278	2,134	144	289	6.3%	12.7%	49,196	37,799	76.8%	7,775	14,252	

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK.

AIRCRAFT SOLD OR LEASED

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1998	482	243	725	795	127	922	1,647
1999	582	230	812	989	170	1,159	1,971
2000	475	205	680	895	223	1,118	1,798
2001	286	142	428	1,055	198	1,253	1,681
2002 - Dec	52	8	60	122	17	139	199

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1998	187	125	312	67	55	122	434
1999	243	134	377	101	53	154	531
2000	302	172	474	160	42	202	676
2001	368	188	556	291	101	392	948
2002 - Dec	366	144	510	273	102	375	885

Source: BACK Notes: As at end year; Old narrowbodies = 707, DC8, DC9, 727, 737-100/200, F28, BAC 1-11, Caravelle; Old widebodies = L1011, DC10, 747-100/200, A300B4; New narrowbodies = 737-300+, 757. A320 types, BAe 146, F100, RJ; New widebodies = 747-300+, 767, 777. A600, A310, A330, A340.

Aviation Strategy

Databases

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total Int'l		
	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 %
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72
1999	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
2000	208.2	132.8	63.8	229.9	179.4	78.1	137.8	108.0	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2001	212.9	133.4	62.7	217.6	161.3	74.1	131.7	100.9	76.6	492.2	372.6	75.7	743.3	530.5	71.4
2002	197.2	129.3	65.6	181.0	144.4	79.8	129.1	104.4	80.9	447.8	355.1	79.3	679.2	507.7	74.7
Feb-03	15.4	8.8	57.2	13.0	9.4	71.7	10.0	8.0	79.8	34.1	26.2	77.0	52.1	36.7	70.5
Ann. chng	4.2%	0.6%	-2.0	7.9%	5.2%	-1.8	5.3%	1.3%	-3.1	4.9%	3.5%	-1.0	4.9%	2.6%	-1.5
Jan-Feb 03	32.1	17.7	55.0	28.0	20.2	72.2	21.1	16.8	79.7	72.4	55.7	77.0	110.1	77.0	70.0
Ann. Chng	4.3%	2.5%	-1.0	9.4%	8.2%	-0.8	4.4%	2.8%	-1.3	5.1%	5.3%	0.2	5.1%	4.6%	-0.3

Source: AEA

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	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 %
1995	900.4	591.4	65.7	130.4	98.5	0.8	114.3	83.7	73.2	62.1	39.1	63.0	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
2002	990.0	701.6	70.9	159.0	125.7	67.2	103.0	83.0	80.5	84.1	56.8	67.5	346.1	265.5	76.7
Feb - 03	72.0	49.6	68.9	10.2	6.9	67.2	7.9	5.9	73.8	6.5	4.5	68.9	24.7	17.2	69.8
Ann. chng	-1.5%	0.6%	1.4	-0.3%	-2.8%	-1.7	11.7%	0.3%	-8.4	-0.9%	-0.7%	0.2	3.1%	-1.2%	-3.0
Jan-Feb 03	153.0	102.6	67.1	23.7	15.3	68.0	16.9	13.0	77.3	14.7	9.8	70.2	53.3	38.0	71.5
Ann. chng	0.6%	3.3%	1.8	2.7%	2.1%	-0.4	11.2%	4.4%	-5.0	2.1%	2.3%	0.2	5.1%	2.9%	-1.5

Note: US Majors = Aloha, Alaska, American, Am. West, American Transair, Continental, Cont. Micronesia, Delta, Hawaiian JetBlue, Midwest Express, Northwest, Southwest, United and US Airways Source: ATA

JET ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Boeing	28 Feb	Luxair	2 737-700s			CFM56-7/plus 2 options
	26 Feb	Unidentified	2 737-700s			CFM56-7
Airbus	25 Mar	Aircalin	1 A320		1Q/04	IAE V2500
	01 April	Egyptair	7 A330-200s		06/04	

Note: Prices in US\$. Only firm orders from identifiable airlines/lessors are included. Source: Manufacturers

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 %
1993	1,349	855	63.3	1,785	1,205	67.5	3,135	2,060	65.7	3.4	2.0	4.4	4.8	3.9	3.6
1994	1,410	922	65.3	1,909	1,320	69.1	3,318	2,240	67.5	4.6	7.9	6.9	9.4	5.9	8.8
1995	1,468	970	66.1	2,070	1,444	69.8	3,537	2,414	68.3	4.1	5.4	8.5	9.4	6.6	7.8
1996	1,540	1,043	67.7	2,211	1,559	70.5	3,751	2,602	79.4	4.9	7.4	6.8	8.0	6.0	7.8
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
1999	1,911	1,297	67.9	2,600	1,858	71.5	4,512	3,157	70.0	5.4	5.0	5.7	7.4	5.6	6.4
2000	2,005	1,392	69.4	2,745	1,969	71.8	4,750	3,390	70.8	4.9	7.2	5.6	6.0	5.3	6.5
*2001							4,698	3,262	69.4					-1.1	-3.9
*2002							4,607	3,294	71.1					-1.9	0.4
*2003							4,903	3,584	73.1					6.4	9.4
*2004							5,154	3,819	74.1					5.1	6.6

Note: * = Forecast; ICAO traffic includes charters. Source: Airline Monitor, June 2002

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