

The new paradigm?

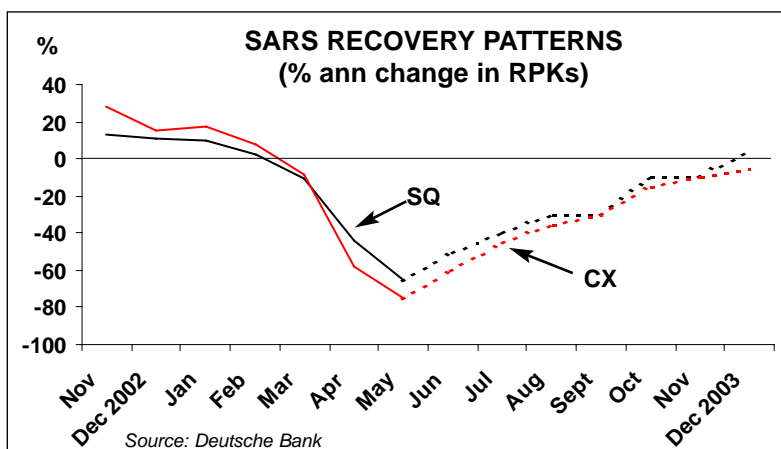
There is a very worrying view that the fundamentals of the global aviation industry have been changed so radically that no overall traffic growth can be guaranteed in the medium term.

The new paradigm is based on the likelihood that we are facing a protracted period of regular but unpredictable shocks, some deliberately directed at the airline business, some random. So the series of catastrophes - September 11, Iraq War 2, SARS -will continue. At the same time the confidence of the travelling public has become so fragile that any incident, or even suspicion of an upcoming incident, will cause traffic volumes to plummet.

This is a possibility but there is countervailing evidence: for instance, the incipient signs of a long-haul traffic recovery at the turn of the year and the continuing dynamism of the LCC sector. Traffic and revenues may not have been lost forever, and a rebound is still on the cards for next year (that at least is our contention - see *Aviation Strategy*, April 2003, for example).

It is very difficult to get a clear perspective in response to a catastrophic event; usually observers over-estimate the impact over time. The chart below shows Deutsche Bank's prediction of Cathay Pacific's and Singapore Airlines' traffic recovery from the depths of the SARS impact (with the number of new hospitalisations now dropping rapidly in Asia, the turning point was probably reached in May). The bank sees at present only a slow recovery with traffic probably still below 2000 levels by the end of the year. Yet the comment attached is "immediately post 9-11, the analyst community cut forecasts dramatically, but spent the next 15 months revising them up as traffic improved". We suspect the same again.

What is exasperating about the traditional scheduled airline industry has been the totally inadequate efforts made to restore faith in flying and reverse the negative psychology. And, the clumsy approach the airport security in the US has undoubtedly helped to deter travel. A proactive strategy on the part of the major airlines seems well overdue.



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Has United escaped Chapter 7 ?

Only a couple of months ago United (by its own admission) was headed for Chapter 7 liquidation. However, the airline now believes that it could emerge from Chapter 11 bankruptcy much earlier than originally envisaged - possibly in late 2003 or early 2004. How realistic is such a scenario?

Despite continued heavy losses through April, UAL's financial position has improved in recent months. The airline has reduced operating cash burn significantly and may even turn cash flow positive for the summer. It has met all of the monthly DIP loan covenants and maintained strong liquidity (it had \$1.7bn of cash at the end of April).

In late April its unions ratified new contracts that will save the targeted \$2.56bn annually over six years. At the end of May, the tally for annual lessor, lender and vendor concessions stood at almost \$700m, well over the \$500m target. The company has also identified numerous extra savings (outsourcing, airport lease renegotiation, etc) on top of the original \$1bn targeted from non-labour/vendor sources.

As a result, the aggregate savings look likely to greatly exceed the earlier \$4bn target and may even reach \$5bn. This means a significant reduction in unit costs, possibly to the 8-cent range - a level that should make United a strong competitor.

United is expecting \$400-500m savings in the current quarter from the labour deals that went into effect on May 1. After also receiving a \$365m tax refund in April and \$300m of federal aid in May (part of the security fee reimbursements),

the airline probably has ample liquidity to meet the DIP covenants through the peak summer season.

The airline was also in the process of finalising its \$1.8bn loan guarantee reapplication (the ATSB rejected the first bid in December but left the door open for it to be considered as a Chapter 11 exit financing option). Presentations to prospective private investors interested in providing exit financing were anticipated in early June. United currently hopes to have a restructuring plan ready by September or October.

Starfish beached

The business plan is almost ready. There is likely to be one important change from the earlier tentative strategy: elimination of the unrealistic "Starfish" proposal in favour of "several revenue-boosting strategies". Nobody outside UAL had expected Starfish to materialise, so perhaps it was just a bargaining tool with the unions (it is not needed in light of the concessions granted by the pilots).

United has been surprisingly slow to sort out its regional strategy, given the important role that RJs play in its recovery efforts. By not affirming contracts, adjusting rates or making decisions about route allocation, it kept its United Express partners in limbo for six months. However, by late May things were moving, with the signal that all contracts would have to be renegotiated.

United appears not to have made any significant progress in attracting private equity and debt investors to provide some or all of the exit

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financing. Before filing for Chapter 11 United had a lot of interest from buyout firms, including Texas Pacific Group (which had just lost its bid for US Airways), and such firms may still play a role in the exit strategy. Otherwise, there is believed to be interest in UAL from various quarters.

It is possible that UAL wants to get the Chapter 11 exit strategy sorted out well before the winter season, while it still enjoys strong liquidity. It has so far tapped only the first \$800m tranche of the \$1.5bn DIP facility and may not need the

remaining \$700m. However, if the need arises later, getting access to those funds is not guaranteed, because the cash flow targets in the second-tranche DIP covenants are fairly onerous.

US airlines' prospects are currently heavily dependent on some degree of revenue recovery by year-end - if it does not take place, there are likely to be Chapter 11 filings. For United in its current state, a no-recovery scenario would probably mean early-autumn breaches of the DIP covenants and subsequent liquidation.

NetJets: expansionist but query over profitability

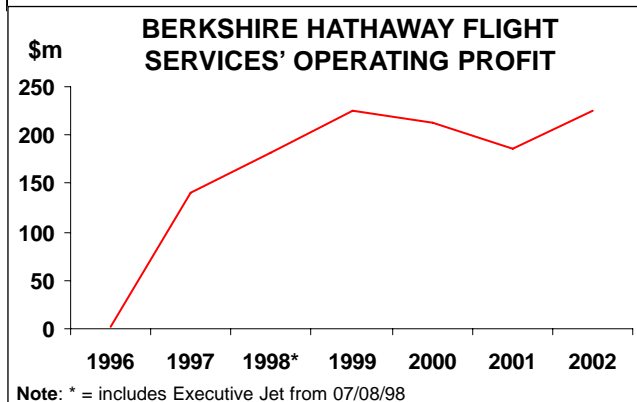
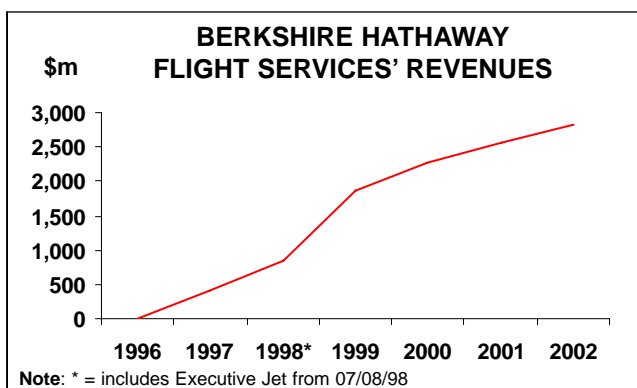
Founded in 1986 by Richard Santulli, Executive Jet Aviation was bought by Warren Buffett's Berkshire Hathaway for \$725m in July 1998. The fractional ownership programme was renamed NetJets in April 2002 and is growing in size and publicity. NetJets and FlightSafety are the two main businesses in the flight services segment.

Even considering the current market environment, NetJet's Chairman, Santulli is adamant that the fractional market is robust and will grow 5-15% a year over the next decade or so. Santulli is "less concerned with quarterly earnings than showing a profit over a 10-year period and Warren Buffett understands this and agrees completely." Although bullish about the prospects for NetJets, in a recent letter Warren Buffett told his Berkshire Hathaway shareholders that the industry "lost significant sums last year, and that is almost certain to be the outcome in 2003 as well."

The 2003 first quarter results were no surprise presumably: flight services' revenues fell by 16.5% to \$548m compared to 1Q 2002. Revenues of FlightSafety declined by 5.4% and comparative revenues at NetJets declined by about 20% in the quarter. Overall, flight services took a pre-tax loss of \$8m.

While NetJets is high-profile, the most significant earner in the Berkshire Hathaway flight services business segment is FlightSafety, the world's largest aviation training organisation. FlightSafety has a fleet of over 200 FAA-certified flight simulators and trains over 65,000 pilots and maintenance technicians annually. 2002 rev-

enues from flight services increased by 11% to \$2.8bn compared to 2001. Total revenues from FlightSafety in 2002 were relatively unchanged compared to 2001, as a decline in training and product revenues was offset by a one-time gain of \$60 million from the disposition of its interest in a joint venture training operation with Boeing. Excluding this gain, pre-tax earnings from flight services in 2002 decreased \$21m from 2001 due



to a slowdown in business aviation activity. NetJets' pre-tax earnings in 2002 were relatively unchanged from 2001 as each year's results reflect losses related to expansion into Europe somewhat offset by small profits from its US operations.

There are three major fractional ownership companies: NetJets, FlexJet, a subsidiary of the Canadian company, Bombardier, and Flight Options LLC (49% owned by Raytheon). These three companies accounted for 15% of total business jet deliveries in 2002. The fractional aircraft fleet increased by 11% last year and in the US fractional-ownership programmes saw shareowners increase by 20%, from 3,416 to 4,100.

The initial price of a 1/8th (or 100 occupied hours) fractional interest purchase of a Citation Excel is about \$1.3m. Monthly management fees are about \$12,000 per month, occupied hourly fees for the 100 hours will be about \$1,500 per hour. If you add supplemental insurance and financing costs then the total cash commitment on an "average" purchase is creeping up to \$2m.

In the fractional ownership business, NetJets is the largest and is following the most aggressive expansion policy. Out of a fleet of over 400, NetJets operates 36 aircraft in Europe (with an average age of 1.9 years) and this fleet is sched-

uled to grow by 50% in the next 18 months. NetJets' presence in the UK has expanded under a deal struck with London's newly formed Northolt Business Aviation to use hangar 311 at the Royal Air Force base. NetJets is entitled to 200 slots per month, accounting for one-third of the civil movements permitted annually by the Ministry of Defence. In Ireland, NetJets is submitting a tender to the Irish Department of Defence, offering its fractional ownership services to the government. Where is

Netjets heading next?

US vs Europe

A key issue is whether the level of corporate/business jet usage in the US can be translated to the European marketplace. In the US, fractional ownership has become more attractive to many companies as commercial flights have become more inflexible. The dotcom crash and heightened focus on corporate governance has prompted many finance directors to sell off their Learjets. The US also has a geography that suits corporate jet usage: long distances, a dispersed population, about 5,000 alternative airfields (commercial airlines fly to 500) and most importantly a large number of high net worth individuals.

Many Europeans find even the idea of owning part of a corporate jet ostentatious. The cost seems to be prohibitively high except for the "super rich" - pop stars, government officials, and business leaders. The fees are at such a level that only the super rich and very specialised missions can support such cost. Europe is a much smaller region that has a high frequency of both air and surface transport between major business and leisure markets. The market for European corporate jet usage seems to remain highly specialised and growth seems to be limited to: emergency or unplanned situations (medical emergencies, governmental requirements), high net worth individuals (of which there are fewer than in the US), specialist corporate (board member movements and incentive programmes).

However, NetJets has recently launched in Eastern Europe, flying to/from Moscow, St. Petersburg, Istanbul and Ankara. In economic terms, Europe is becoming a much larger entity, with western European and US firms having an established presence in the former Communist European states. The long-term vision of a larger, richer Europe seems to qualify NetJet's long-term plans in the area.

Will the NetJets concept change and increase the level of historic corporate jet usage in Europe? After an ill-fated investment several years ago in US Air Group, one would imagine that Warren Buffett could not make an aviation mistake twice and NetJets seem assured that they have a viable future in the ever-expanding community of Europe.

NETJETS' FLEET

Model	Current Fleet	Ordered (Options)	Backlog
125-1000	9		
125-1000A	12		
125-1000B	5		
125-800XP	48	20	1
737-200	1		
737-700BBJ	9		
Citation	152	102 (50)	66
Citation VII	13		
Citation X	65	12	12
Citation ENCORE	7		
Falcon 2000	30	37 (25)	37
Gulf 4SP	37		
Gulf 5	14	10	5
Gulf 5SP		20	20
Galaxy	3		
Horizon		50 (50)	50
Total	405	251 (125)	191

Source: ACAS, fleet as of end March 2003

Debt mountain looms on horizon

Even though many of the large US network carriers have implemented impressive cost cuts and may return to marginal profitability in 2004, their problems will be far from over because of the damage that years of weak cash flow and heavy borrowing have inflicted on their balance sheets. A special report from Fitch*, the credit rating agency, in late May argued that significantly higher cash obligations related to debt, aircraft leases and pension funding would put heavy pressure on airline liquidity through at least 2006.

According to Fitch, the ten largest US carriers face \$21.2bn of debt and capital lease maturities between 2003 and 2006. In addition, the airlines had a similar \$22bn aggregate underfunded pension liability at the end of 2002. As the Fitch analysts put it, this represents an "immense cash funding requirement at a time when operating cash flow may well remain weak".

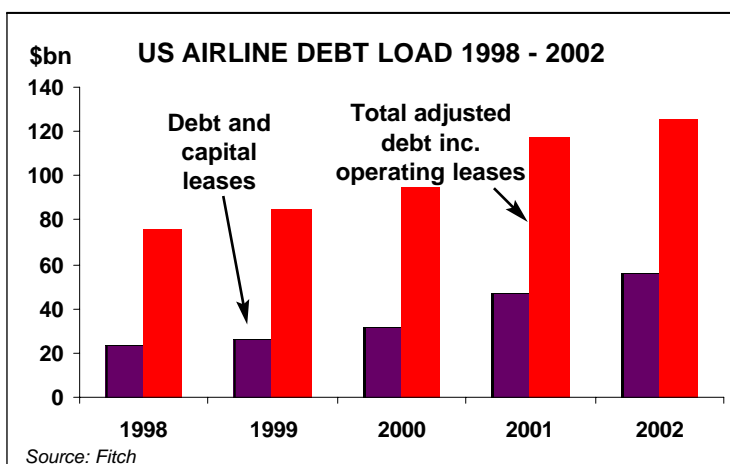
It is hard to put such figures into context, but it is worth noting that industry revenues have fallen from \$96bn in 2000 to an estimated \$78bn in 2003 and that, when the recovery occurs, it is expected to be slow. The US major carriers are currently projected to lose another \$6-7bn in 2003 and, at best, become only marginally profitable in 2004.

Some of the debt coming due in the next few years will undoubtedly be refinanced. However, the Fitch analysts are not pinning much hope on the industry's ability to borrow in the future because of "diminished unencumbered asset bases and limited investor appetite for new airline exposure".

Needless to say, low-cost carriers like Southwest, JetBlue, AirTran and Frontier will not be facing similar liquidity pressures because of their competitive cost structures, modest debt loads and lack of expensive "defined-benefit" pension plans.

Burdensome debt maturities

US airlines' debt load has more than dou-



bled over the past four years. According to Fitch, industry debt and capital lease obligations surged from \$23.3bn at the end of 1998 to \$55.8bn at year-end 2002. Lease-adjusted debt (including operating leases, capitalised at eight times gross annual rental expenses) rose from \$75.9bn to \$125.6bn in the same period.

The post-2001 borrowing has enabled US airlines to survive through the prolonged industry crisis. However, the industry's lease-adjusted debt-to-total-capital ratio has risen to 95% - the highest leverage ratio ever witnessed (in the pre-September 11 days the ratio was around 70%).

The problem has been compounded by the fact that most of the recent borrowing has been short-term - typically for 4-5 years - because it has been taken to shore up liquidity. By contrast, before 2001 most of the new debt and leases were taken to fund new aircraft deliveries, which typically meant long-term mortgage-type financings or leveraged leases that involved the issuance of EETCs. Therefore, in addition to the higher interest, lease costs and maturities, much of the new

**Picking up the pieces: US airline cash flow concerns beyond 2003", a special report by Fitch Inc., May 29, 2003. Report prepared by airline ratings analyst Bill Warlick with Mark Oline and Erin Chapman. Contact: bill.warlick@fitchratings.com

debt will begin to mature in a couple of years' time, putting added stress on cash flow in a critical recovery period.

The report suggested that 2005 and 2006, when some large bank credit facilities mature, could be difficult years even for otherwise strongly positioned carriers like Northwest and Delta. Northwest's debt and capital lease obligations peak at \$1.7bn in 2005, and its secured bank credit facility (currently \$962m outstanding) also matures in October that year. Delta, which recently refinanced the bulk of its near-term debt repayments, still has \$1.3bn of debt coming due in 2005.

The Fitch report made the point that, in order to avoid a cash squeeze in 2005, Northwest and Delta would depend on continued access to the capital markets and the willingness of secured lenders to roll over existing debt. However, given those airlines' excellent record so far, it is hard to envisage them not being able to refinance the debt.

Having recently averted bankruptcy thanks to labour concessions, AMR still faces liquidity issues. It has significant fixed cash obligations, including \$839m in 2004, \$1.5bn in 2005 and \$1.3bn in 2006. Also, its fully used \$834m secured bank credit facility matures in December 2005 - or, in the worst-case scenario, this summer - if AMR is not able to meet the covenant requiring at least \$1bn of unrestricted cash. It had only \$1.27bn of unrestricted cash at the end of March.

Continental's current liquidity position is

also weak, but Fitch believes that its relatively light debt maturity burden beyond 2003 (\$470m in 2004, \$680m in 2005 and \$527m in 2006) will allow it to make more progress in repairing its balance sheet. It is also worth noting that Continental has consistently outperformed its competitors on both the revenue and cost fronts and is expected to be among the first network carriers to return to profitability.

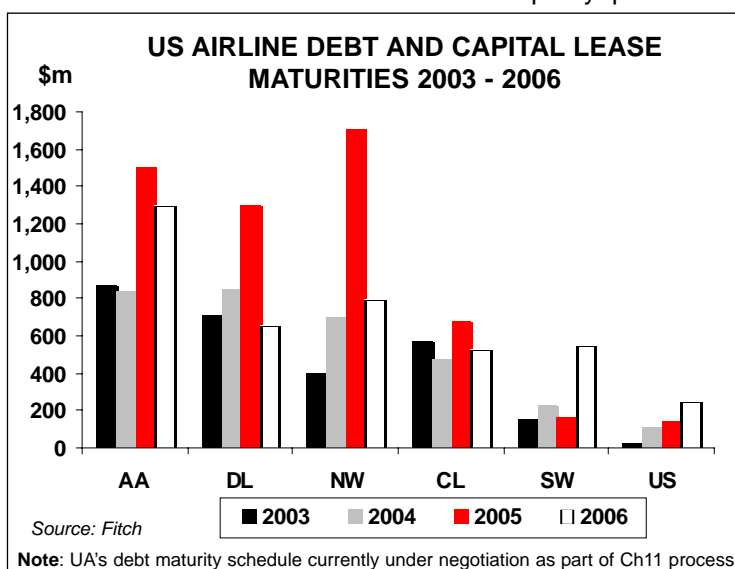
US Airways' post-bankruptcy balance sheet has been significantly deleveraged. It now has "more manageable" debt and capital lease maturities of \$109m in 2004, \$141m in 2005 and \$245m in 2006.

Before its Chapter 11 filing United faced debt and capital lease repayments of about \$1.2bn in 2004 and more than \$600m in both 2005 and 2006. It is too early to speculate what the balance sheet might look like if and when the airline emerges from Chapter 11. Fitch merely noted that the repayment obligations would be restructured to ease the 2004-2006 financing cash flow burden but that those reductions would be partly offset by any government-guaranteed loan.

Refinancing prospects

After relying heavily on secured borrowing over the past few years, the major airlines have seen their unencumbered asset bases dwindle dramatically. Many have recently pledged the last of their remaining desirable assets - either to secured creditors in private transactions (Continental), DIP lenders (United) or lenders supported by a federal guarantee (US Airways). Northwest, in turn, is finding that its unencumbered DC-9s and DC-10s no longer represent attractive collateral for investors that have become increasingly selective.

Only Delta and American retain unencumbered asset pools large enough to support significant additional borrowing. However, even those airlines have relatively little left in terms of Section 1110-eligible aircraft, which enjoy special status in Chapter 11 proceedings and are therefore most attractive to investors. At the end of March, Delta and American had only \$500m and \$700m in Section 1110-eligible unencumbered aircraft,



out of total pools of \$2.9bn and \$2.8bn, respectively.

Furthermore, the Fitch report suggested that neither of those carriers would be able to borrow up to the full estimated values of their Section 1110-eligible assets. In Delta's case, this is because the pool consists of MD-11s and MD-90s that have limited market appeal. AMR, in turn, "may look for ways to avoid pledging these assets in an effort to preserve collateral for a future DIP facility in Chapter 11".

All of this led Fitch to conclude that "future access to the capital markets is likely to be very limited for all but the best-positioned carriers". The agency also noted that, despite Northwest's success in raising \$150m through a convertible note offering in May, "prospects for extensive issuance of unsecured debt by the network carriers remain poor".

In that respect the report may be painting an unnecessarily gloomy picture. The US major carriers and their bankers are known for their ingenuity in coming up with new ways of raising funds. Also, at least the stronger carriers like Delta and Northwest should be able to refinance their 2005 debt obligations - as long as they secure pilot concessions to reduce costs to the new levels set by American and United.

Also, four US airlines (Northwest, Alaska, AirTran and Delta) have completed convertible debt offerings in recent months, and Continental announced one in early June. The latest completed deal was Delta's private placement of \$300m of 20-year convertible bonds at the end of May. The method, which was popular among airlines in the early 1990s, was revived by Continental in January 2002. The unsecured notes, which can be converted into shares, are a good cash-raising tactic for airlines that lack unencumbered assets. By selling the equity option, the companies can secure low-cost financing. The deals are less risky for investors than share offerings.

While bond analysts caution about reading too much into the latest convertible deals, they nevertheless mark the return of the large network carriers to unsecured financings after many years and show that the capital markets

are not totally shunning airlines. The deals obviously reflect improved investor sentiment (end of war, reduced bankruptcy concerns, stronger summer season, rising stock prices, etc.), despite the lack of any concrete sign of recovery in industry fundamentals. In a recent research note, Merrill Lynch analyst Mike Linenberg called it a "positive trend for the industry, as until recently airlines were unable to tap the capital markets".

Pension funding requirements

After three years of poor pension plan asset returns, declining interest rates and accruing benefit obligations tied to costlier labour contracts, the US major airlines have witnessed a sharp decline in the funded status of their defined-pension plans. According to Fitch, the eight carriers with defined-benefit plans moved from an aggregate overfunded position of \$700m at the end of 1999 to an underfunded obligation of \$22.5bn at the end of 2002. Of the \$22.5bn total liability, United accounted for \$6.4bn, Delta \$4.9bn, Northwest \$3.9bn, American \$3.4bn, US Airways \$2.4bn and Continental \$1.2bn.

On the positive side, this year's revisions to labour agreements (so far, at US Airways, United and American) will help limit the growth of future pension obligations. However, the report argued that, absent the termination of a defined-benefit plan in Chapter 11 (as at US Airways) or its replacement with cash-balance plans (at Delta for non-pilot groups), it would be hard for airlines to avoid meeting their pension plan obligations. Under defined-benefit plans, annual cash funding requirements are mandated by federal law.

In Fitch's estimates, in the absence of improved pension plan asset returns or an increase in the applicable discount rates, nearly all of the US majors will face substantially higher cash funding obligations in 2004-2006. Over the next two years, American and Delta would be required to pay \$750m-\$1bn, United \$1.5-1.8bn, Northwest \$900m-\$1.2bn and Continental \$350-600m.

US Airways averted the problem by using the Chapter 11 process to terminate its pilots' pension plan and replace it with a version that

reduced and spread out funding requirements. The Fitch analysts suggested that United would probably have to follow suit, because its existing pension obligations would be "unmanageable" and impede its ability to attract outside equity investors.

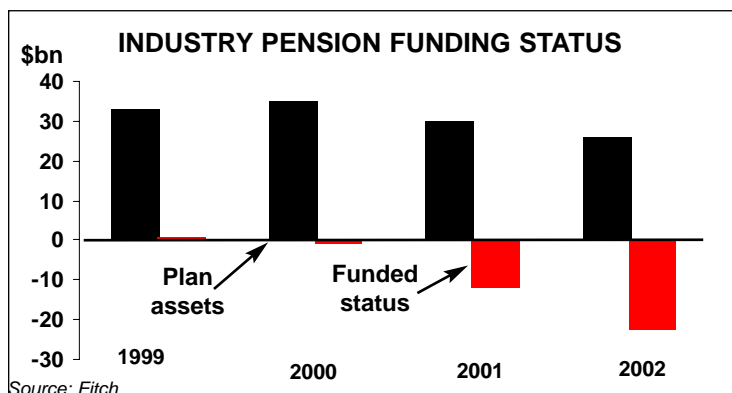
In the meantime, Northwest is asking the Department of Labor for an exemption that would allow it to fund its pension requirements for 2003 and 2004 rather creatively - with the stock of its wholly owned regional subsidiary Pinnacle. If allowed, the company would save \$330m in cash.

Aircraft capital commitments

US major airlines have generally done a very good job in deferring new aircraft deliveries since September 11. In fact, now most of the aircraft capital commitments over the next three years are for regional jets.

However, the Fitch report ticked off American and Continental for taking large jet aircraft at a time when significant numbers of aircraft remain parked. American is taking 11 Boeing widebody aircraft in 2003 (because it was unable to defer them), while Continental will resume Boeing aircraft deliveries in October (as part of its fleet renewal plan). Needless to say, Boeing Capital is providing backstop financing for all of those aircraft.

Northwest continues to take delivery of large numbers of mainline aircraft and RJs as part of its ongoing fleet renewal programme, which involves spending \$1.75bn this year and \$1.2bn in 2004. However, virtually all of those aircraft were prefinanced with earlier EETCs.



Further government assistance?

Since September 11, the government has provided a total of \$7.3bn in cash payments to US airlines - \$5bn in late 2001 and \$2.3bn in security fee reimbursements in May 2003. The ATSB has approved \$1.6bn in federally guaranteed loans, and the government has assumed an equity position (through warrants) in America West, US Airways and ATA. In addition, the airlines have collected billions of dollars in tax refunds through revised "net operating loss (NOL)" provisions, which enabled them to use their 2001 and 2002 losses to recover federal income taxes paid in 1996-2000.

The problem is that there may not be any more assistance on the horizon. The federal tax credits tied to operating losses have by now been largely exhausted. The Fitch analysts also rate the probability of another round of cash payments as "quite low" - a conclusion that most Washington observers would probably agree with.

Nevertheless, as the report points out, the government remains a wild card in shaping the future of the industry. United's application for loan guarantees as part of its Chapter 11 exit-financing package could provide an interesting test, particularly if the airline has not secured equity or other financial support from the private sector.

The Fitch analysts see hope in legislative moves to ease some of the financial burden associated with the funding of defined-benefit pension plans. Much of it is in the context of general pension reform for all US companies, though there are some proposals specifically related to airlines. Among other things, proposals under discussion would allow US companies to delay making deficit reduction contributions for five years and to amortise underfunded liabilities in equal installments over 20 years. The report suggests that the government's efforts with pension reform "could be decisive in removing one of the key financial challenges facing the major network carriers over the next several years".

By Heini Nuutinen

SAS Group's restructuring plans: A, B, C ...

First quarter 2003 results for the SAS Group reveal that losses are increasing despite significant restructuring and cost cutting in 2002. Can the multinational company, Europe's fourth largest airline group, ever overcome its high cost base, or might it be forced into selling off parts of the SAS empire?

In the first three months of 2003 the SAS Group reported an operating loss of SEK1.9bn (€210m), compared to a loss of SEK1.4bn in 1Q 2002). The Group made a net loss of SEK1.6bn (SEK1.3bn loss in 1Q 2002). The figures make grim reading for a company that underwent substantial changes supposed to bring it back into profit for the first time since 2000.

It wasn't supposed to be this way. The Group managed to significantly reduce its pre-tax loss in 2002 (see graph, p.10) and it was hoping to achieve a positive result in 2003 after overhauling its complicated capital structure, strengthening its grip on the Scandinavian market (through, notably, the acquisition of Braathens) and implementing cost-cutting (see *Aviation Strategy*, February 2002).

Plan C

In April 2002 SAS announced what it called Plan C - yet another round of substantial cost-cutting to come on top of Plans A and B (see below). Plan C is designed to take out another SEK8bn (€884m) from annual costs, which it claims will reduce unit costs by 30%. The measures will be carried out over an 18 month period, according to SAS Group, and include:

- Adjusting collective agreements with pilots and cabin crews, including an increase in the pilot working week from 42 to 45 hours, a pay freeze for pilots in 2003 and 2004, and further redundancies. Target cost saving on collective agreements = SEK1.5bn, on "production"

= SEK900m and on "in-flight" = SEK1bn.

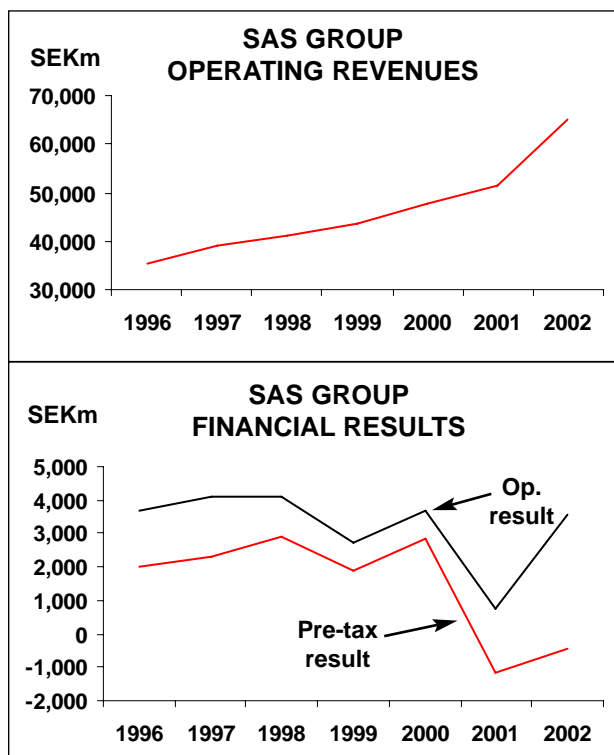
- Restructuring airline support businesses, including redundancies, outsourcing of certain ground services, concentrating aircraft maintenance at Stockholm Arlanda (with almost 1,000 redundancies) and reducing travel agent commissions on ticket sales. Target cost saving = SEK3.4bn.

- Reducing administration and other overhead costs at Scandinavian Airlines by 40-50%, including making half of the 1,000 administration staff at the airline redundant. Target cost saving = SEK600m. Overhead costs will also be reduced on group-wide functions. Target cost saving = SEK600m.

Altogether, Plan C includes another 4,000 redundancies, on top of more than 6,200 already taking place over 2002-2005 and announced last year (although despite deep cuts in Scandinavian Airlines' staff through 2002 the Group still had 35,000 employees as of the first-quarter 2003 - almost identical to the figure for 1Q 2002 - due to staff expansion elsewhere). So far unions have largely accepted these restructurings, but staff morale is believed to be at an all-time low.

SAS estimates that the Plan C measures will increase Group earnings by around SEK400m (€44m) in the fourth quarter of 2003, with the full SEK8bn savings not filtering through until 2005.

Of the other ongoing cost-cutting initiatives, perhaps the most urgent is reducing the fleet and the bewildering number of aircraft types (see table p.11). Of the total Group fleet of 311, 195 belong to Scandinavian Airlines, which the Group estimates is still 36 too many for its capacity plans going forward. Nine of these are leased out at present and 25 other aircraft will have to be either be leased out or sold. Scandinavian Airlines currently has nine aircraft on firm order, mostly A321s and 737-800s. The four A321s were part of a firm order for 12 placed in 2000, but after eight were delivered the last four were deferred for deliv-



ery in 2000/06. One A 330-300 remains to be delivered from an order for four made in 2000.

The nine outstanding orders will cost the Group US\$342m in Capex over the next few years, after deposits have been taken into account. In future, new aircraft orders may be made in co-ordination with other

Star alliance members, although SAS is not expected to place any further orders anytime soon.

At the other Group airlines - Braathens, Spanair, Wideroe and Air Botnia - further cost cutting will generate an extra SEK1bn in annual savings by 2005, the Group claims.

The core problem

So will this additional cost cutting be enough to restore profitability to the SAS Group? It is clear where the problems at the SAS Group come from. On its own, despite accounting for just 41% of operating revenue in 1Q 2003, Scandinavian Airlines was responsible for SEK382m of the Group's SEK 398m operating loss before depreciation and leasing costs (a 96% ratio), and SEK1.3bn of the Group's SEK1.9bn pre-tax loss (67%). In full-year 2002 the rest of the SAS Group (i.e. excluding Scandinavian Airlines) actually made a SEK 582m pre-tax profit, but this was wiped out by Scandinavian Airlines' pre-tax loss of SEK1,032m (€114m). And it was a similar situation in 2001 as well, with main airline pre-tax losses of SEK1.5bn swamping a SEK359m profit at other Group activities.

In contrast to Scandinavian Airlines, the Group's other carriers performed well last year. 2002 operating profits of SEK774m, SEK164m, SEK83m and SEK22m were posted respectively at Braathens, Wideroe, Air Botnia and Spanair, though it must be noted that, like Scandinavian Airlines, all of them had a rough first quarter in 2003.

Of these subsidiaries, Norwegian carrier Braathens is the biggest contributor to the bottom line. Wholly acquired in December 2001, it ensures that the SAS Group has a firm grip on the Norwegian market. Braathens has a fleet of 27 737s and is now expanding its European leisure routes, with Rome, Palma, Las Palmas and Dublin being added this year. Norwegian regional Wideroe, which the SAS Group has controlled 99% of since June 2002, is a domestic short-haul specialist with a fleet of 29 Dash 8s, while Air Botnia is a Finland-based feeder carrier with 10 RJ85s and Saab 2000s.

In the long-term, perhaps the greatest potential of all the subsidiaries lies in SAS's Spanish subsidiary. The SAS Group now owns 74% of Spanair, which started off as a charter carrier back in 1986 but now 75% of its flights are scheduled. With 50 aircraft based in Madrid and Barcelona, Spanair - which joined Star in April 2003 - is now the second-largest airline in Spain and is a low-cost operator compared with Iberia. Spanair dropped long-haul routes in early 2002 in favour of codeshare deals, instead concentrating on opening new European routes. However, domestic Spanish traffic is still the largest market for Spanair, accounting for 75% of total scheduled RPKs in 2002.

The success of the other parts of the Group means that if Scandinavian Airlines was disposed of, the Group would in theory turn in a healthy profit. That may not be so outlandish given the February appointment of Soren Belin - previously a consultant at Booz Allen & Hamilton - as COO and vice president. The Group also separated operations into five distinct business units from July 2002 - Scandinavian Airlines, Subsidiary & Affiliated Airlines, Airline Support Businesses, Airline Related Businesses, and Hotels - which means that not only can individual performances be compared but also allows the pos-

sibility of selling off units in the future. For political reasons Scandinavian Airlines could probably never be sold off, but Belin is likely to take a consultant's view of where (and where not) Scandinavian Airlines is adding value to the SAS Group.

In the first quarter of 2003 the main reason for the poor performance of Scandinavian Airlines was a continuing fall in yield, which was 9% lower than 1Q 2002. The Group claims much of this is due to expansion of long-haul routes with A330/340s (which depresses average yields) and on this sector ASKs grew by 20% over the period and RPKs by 9%. But, worryingly, yield erosion was also seen on European and intra-Scandinavian routes, with respective declines of 5% and 4% in the year-on-year first quarter. On these sectors the airline has cut capacity significantly but RPKs have declined even faster. In Europe the Group cites the weak economy and uncertainty over Gulf War II, while on intra-Scandinavia the Group blames weak economies and cuts in feeder routes.

But it is not falling yield that is the core trouble for SAS - after all, yield erosion is being experienced by most other European airlines at the moment - but rather it is high unit costs.

SAS Group estimates that Scandinavian Airlines is 25-40% less efficient than the best airlines in Europe, and this difference is largely due to aircraft and crew utilisation, overhead costs and the complexity of the airline's route network, all of which are key target areas for cost-cutting. As an intermediate measure Scandinavian Airlines aims to reduce its maintenance and ground service costs by 10-15% from 2002 levels, increase aircraft utilisation from 7.5 block hours per day per aircraft in 2002 to 9 hours; and raise crew utilisation rates from 490 block hours per pilot per year in 2002 to 600 hours.

SAS is also trying to substantially reduce its distribution costs as a proportion of passenger revenue. In 1999 it was 20% and though it had fallen to 16.4% by 2002 the Group believes it is still too high. The target for 2003 is 13%, which SAS hopes to achieve through greater internet distribution and the introduction of "net sales". At present travel agents account for 79% of passenger rev-

enue but the aim is to increase internet sales from their current 5% share to 25% by 2005. Net pricing on travel agent sales was introduced from start of 2003, in line with what is increasingly common practice elsewhere in Europe. Instead of tickets being sold by travel agents at one standard price, with agents then taking off a 4-7% commission, from now on Scandinavian Airlines sells tickets to agents at a net price, allowing agents to vary the ticket price to customers depending on the level of services they require.

A flaky idea?

The latest part of the effort to reduce SAS's high cost base is - almost inevitably - the launch of its own low-cost carrier (LCC): the imaginatively named "Snowflake". This started operations at the end of March 2003 and has already achieved a 72% load factor in April according to the SAS Group. Snowflake uses four 150-seat 737-800s borrowed from the main airline and will operate on 15 European routes from Copenhagen and Stockholm by the end of 2003. Most are of these are holiday destinations not currently served by Scandinavian Airlines, although Snowflake will also serve some non-traditional destinations such as Beirut and Belgrade. Plans are also in place for operations out of Oslo Gardermoen for the winter 2003/04 timetable, where another 737-800 would be based in order to serve five or six destinations.

As well as the aircraft, flight crew and

	SAS GROUP FLEET				Orders (Options)
	Owned	Leased in	Total	Leased out	
A320		8	8		
A321	8	4	12		4 (8)
A330	2	1	3		1
A340	5	2	7		(7)
717		4	4		
737-400		4	4		
737-500		14	14		
737-600	12	18	30		
737TBD					(9)
737-700	8	7	15		
737-800	14	5	19	4	4
767-300	3	6	9		
MD-81	5	10	15		
MD-82	17	26	43		
MD-83	2	22	24	1	
MD-87	10	6	16		
MD-90	8		8		
RJ-85		5	5		
ERJ-145		3	3		
F28	7		7	2	
F50	7		7	2	
Q100	16	1	17		
Q300		8	8		
Q400	10	18	28		
Saab 2000		5	5		
Total	134	177	311	9	9 (24)

other personnel are transferring across from Scandinavian Airlines, which raises the question: how much lower will Snowflake's costs actually be compared with Scandinavian Airlines?

Snowflake could be regarded as being not so much part of a cost-cutting drive, but as a marketing exercise that mops up some of the Group's excess capacity. Certainly Snowflake does little to combat the aggressive conversion of Stockholm Skavsta into Ryanair's latest min-hub from April 2003. The LCC now offers more than 30 flights day to six new routes out of Skavsta - Aarhus, Glasgow, Hamburg, Paris, Oslo and Tampere - in addition to existing routes to Frankfurt and London. With more than 100 staff and a fleet of four 737-800s at Skavsta (located 100km south of Stockholm). Ryanair's intention is clear - it is targeting SAS passengers, whom Michael O'Leary, Ryanair CEO, says have to "put up with SAS's high fares monopoly". Ryanair's Skavsta move may have encouraged Scandinavian Airlines to restart international routes from Stockholm Bromma airport, situated close to the city centre, from May 12 for the first time in 41 years, although again this will do little to dent the advance of Ryanair.

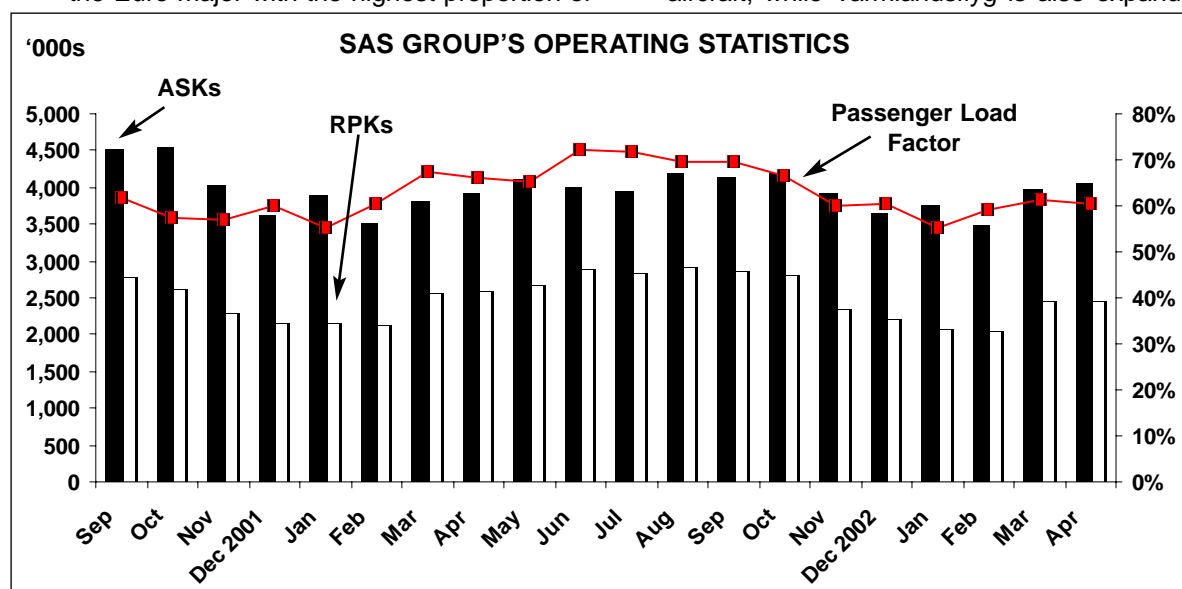
The Snowflake move is essentially part of a change in Scandinavian Airlines' market strategy responding to the increasing weakness in business traffic. While SAS remains the Euro-major with the highest proportion of

business traffic, this dependence is a key weakness when economies are under pressure.

In March, in order to revive weakening business traffic, the airline introduced four tiers of business fares, two of which offer business-type flexibility and frequent-flyer benefits but in economy seats. On major European business destinations SAS intends to strengthen its network of non-stop services, but on "smaller" business destinations the airline may be less aggressive, particularly as it cuts back its excess capacity.

In addition to these moves in the business market, SAS Group has taken a strategic decision to add price-sensitive European leisure travellers as another core target market, joining European business, long-haul business and intra-Scandinavian. SAS Group estimates it has a 37% market share of the outgoing Scandinavian leisure market and just 20% of tour operator package flights, but Snowflake and the expansion of leisure routes at Scandinavian Airlines and the other airline subsidiaries should improve those percentages. Whether this will prove to be a strategic overstretch remains to be seen.

SAS is also feeling pressure on the intra-Scandinavian sector. With the Group cutting intra-Scandinavian capacity by 18% in 1Q 2003, regional rivals have been quick to step in. Stockholm-based Skyways Express (25% owned by SAS) has increased its fleet to 28 aircraft, while Varmlandsflyg is also expand-



ing services in response to SAS's reduction of capacity. In response, SAS started negotiations to buy Maersk Air's 49% stake in Estonian Air, which - strategically - could sit well alongside SAS Group's existing 47% investment in Air Baltic of Latvia. However, talks are currently on hold. SAS has withdrawn from a possible bid for Lithuanian Airlines after deciding prospects for the privatising airline were not great.

In March 2003, SAS Group sold its 26% stake in Danish regional airline Cimber Air, which operates domestic Danish and Germany routes. Interestingly, SAS's reasons for the move included the fact that the Danish market provided only limited feed to SAS hubs. SAS is also considering selling its 37.5% stake in Air Greenland, presumably for the same reason as for its exit from Cimber Air.

Where next for SAS?

SAS Group's management is confident that the extra cost cutting and the expansion into the leisure market will be enough to reverse the mounting losses.

Plan A, which started in autumn 2001, has now been completed and is on target to save SEK6.4bn by 2005. Plan B, which aims to cut another SEK6.4bn by 2005, is less than two-thirds complete but will save SEK3.2bn in 2003. With Plan C adding another SEK8bn, the total cost-cutting target by 2005 is a hefty SEK21bn (€2.3bn). Jorgen Lindegaard, SAS Group CEO since May 2001, says that the plans are "about achieving changes that are absolutely essential and achieving them fast" and he is "convinced that the ability to do this exists in the organisation".

The obvious criticism is why didn't the Group start substantial cost-cutting earlier, before September 11 even, as British Airways had the foresight to do? In any case, equity analysts in particular will be benchmarking the progress of Plan C against BA's "Future Size and Shape Plan", which is currently ahead of schedule in some key areas.

And what if the Plans don't go to plan, so to speak? Will there be a Plan D or E? A worrying statement from the Group said that the company's result for the rest of 2003 is

"impossible to predict". Whatever the current trading climate, every other airline manages to come up with forecasts for the year ahead, so why not SAS?

Strategically, it is almost impossible for the SAS Group to escape its high cost base in northern Europe. SAS's complicated share structure which leads to complicated business and union structures (39 unions within the group) further exacerbates matters.

Despite an attempt to expand into leisure traffic the Group is essentially a niche airline, based on dominating the Scandinavian market and carrying large amounts of business traffic. With Scandinavia under increasing attack from LCCs and others, and business traffic dependent on the economic cycle, there is little room for manoeuvre other than to attack costs as much as possible. No matter how much outsourcing it carries out or how many redundancies it makes, SAS Group will never become a low-cost carrier. The Star alliance is some help, with interline revenue accounting for 10% of passenger revenue at Scandinavian Airlines in 2002, but this cannot compensate for SAS's structural disadvantages.

If the cost cutting does not produce fast results the pressure will mount on SAS Group's management. On April 11, Moody's downgraded SAS Group's credit rating to Ba1 - not a healthy sign for a company with a net debt of SEK21bn (€2.3bn) as at March 31 (an increase of SEK3bn in just three months) and with a net cash outflow from operations of SEK1bn in 1Q 2003. SAS Group's own key target - a minimum CFROI (cash flow return on investment) of 20% a year - appears far away, with a CFROI of 11% in April 2002-March 2003.

Having made some key appointments in 2002, the Group reorganised senior management yet again in early May 2003. If results keep deteriorating then long-suffering investors - who haven't received a dividend since 2000 and who have seen SAS's share price plunge from SEK143 in 1998 to around SEK30 at the end of May 2003 - may demand a cull of senior management similar to that seen among its employees. The only other alternative would be the sale of some of SAS Group's five business units.

Jet values and lease rates

The following tables reflect the current values (not "fair market") and lease rates for narrowbody and widebody jets. The figures are from The Aircraft Value Analysis Company (contact details opposite) and reflect AVAC's opinion of the worth of the aircraft. These values are different from

and inevitably above the opportunistic offer prices or distressed sale prices prevalent today. These figures are not solely based on market averages, but also such factors as remarketing value, number in service, number on order and backlog, projected life span, etc.

NARROWBODY VALUES (US \$m)									
	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A318	28.6				717-200	22.3			
A319 (IGW)	34.7	27.3			727-200Adv				1.2
A320-200 (IGW)	41.5	32.9	24.2		737-200Adv				2.3
A321-200 (LGW)	47.8	38.2			737-300 (LGW)		16.4	13.2	
					737-400 (LGW)		17.2	14.3	
					737-500		15.4	11.3	
					737-600	30.6	22.1		
					737-700	34.9	27.9		
					737-800	43.7	34.3		
					737-900	43.4			
					757-200	46.1	31.3	23.8	
					757-200ER	48.8	34.7	26.1	
					757-300	54.2	41.1		
					MD-82		13.2	11.1	6.9
					MD-83		15.1	12.5	
					MD-88			12.9	
					MD-90		18.5		
WIDEBODY VALUES (US \$m)									
	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A300B4-200				5.2	747-200B				9.2
A300B4-600			17.2		747-400	129.4	98.8	68.3	
A300B4-600R (HGW)		42.5	31.2		767-200				9.5
A310-300 (IGW)			27.2		767-300		46.8	33.4	
A330-200	94.1	78.6			767-300ER (LGW)		57.5	41.3	
A330-300 (IGW)	90.1	70.8			767-400	81.4			
A340-200			46.7		777-200		77.4		
A340-300 (LGW)	97.8	77.6	57.4		777-200ER	118.3	96.2		
A340-300ER	105.2	83.8			777-300	121.8	93.6		
A340-500	120.4								
A340-600	128.8								
					DC-10-30				8.0
					MD-11P		50.0	37.6	

Note: As assessed at end April 2003, mid-range values for all types.
Source: AVAC

Aviation Strategy

Lease trends

NARROWBODY LEASE RATES (US \$000s per month)

	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A318	220				717-200	177			
A319 (IGW)	264	224			727-200Adv				43
A320-200 (IGW)	269	239	206		737-200Adv				48
A321-200 (LGW)	352	297			737-300 (LGW)		127	113	
					737-400 (LGW)		138	122	
					737-500		131	117	
					737-600	189	164		
					737-700	254	212		
					737-800	304	252		
					737-900	304			
					757-200	258	220	199	
					757-200ER	294	243	210	
					757-300	289	267		
					MD-82		137	121	88
					MD-83		147	127	
					MD-88			130	
					MD-90		147		

WIDEBODY LEASE RATES (US \$000s per month)

	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A300B4-200				101	747-200B				153
A300B4-600			212		747-400	870	734	579	
A300B4-600R (HGW)		299	269		767-200				115
A310-300 (IGW)			209		767-300		330	280	
A330-200	631	550			767-300ER (LGW)		418	355	
A330-300 (IGW)	625	520			767-400	559			
A340-200			411		777-200		570		
A340-300 (LGW)	677	577	474		777-200ER	794	691		
A340-300ER	733	604			777-300	832	683		
A340-500	826								
A340-600	897				DC-10-30				134
					MD-11P		475	391	

Note: As assessed at end April 2003, mid-range values for all types.
Source: AVAC

AIRCRAFT AND ASSET VALUATIONS

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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 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	10,540
	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	-60	-94	-14.0%	-21.9%	7,657	5,092	66.5%	3,367	
	Year 2002	2,224	2,313	-89	-119	-4.0%	-5.4%	31,156	21,220	68.1%	14,154	10,142
	Jan-Mar 03	519	597	-79	-56	-15.2%	-10.8%			66.7%		
American	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	4,163	4,892	-729	-1,563	-17.5%	-37.5%	64,515	44,766	69.4%	21,995	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	-3,511	-19.2%	-20.3%	277,121	195,927	70.7%	94,143	93,500
	Jan-Mar 03	4,120	4,989	-869	-1,043	-21.1%	-25.3%	64,813	44,800	69.1%	21,021	92,200
America West	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	-274	-26.7%	-59.6%	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
	Jan-Mar 03	523	569	-46	-62	-8.8%	-11.9%	11,027	7,841	71.1%	4,655	
Continental	Year 2001	8,969	9,119	-150	-95	-1.7%	-1.1%	135,962	98,393	72.4%	44,238	44,273
	Jan-Mar 02	1,993	2,180	-187	-166	-9.4%	-8.3%	30,498	22,582	74.0%	10,057	40,312
	Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%	10,727	41,116
	Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581	40,925
	Oct-Dec 02	2,036	2,094	-56	-109	-2.8%	-5.4%	31,496	22,382	70.6%	9,651	40,500
	Year 2002	8,402	8,714	-312	-451	-3.7%	-5.4%	128,940	95,510	73.3%	41,014	40,713
	Jan-Mar 03	2,042	2,266	-224	-221	-11.0%	-10.8%	30,699	21,362	68.9%	9,245	
Delta	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
	Jan-Mar 03	3,155	3,690	-535	-466	-17.0%	-14.8%	53,435	36,827	68.9%	24,910	72,200
Northwest	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
	Jan-Mar 03	2,250	2,576	-326	-396	-14.5%	-17.6%	36,251	26,653	73.5%	12,284	42,781
Southwest	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
	Jan-Mar 03	1,351	1,305	46	24	3.4%	1.8%	28,000	17,534	62.6%	15,077	33,140
United	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
	Jan-Mar 03	3,184	3,997	-813	-1,343	-25.5%	-42.2%	55,751	39,980	71.7%	15,688	70,600
US Airways	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
	Jan-Mar 03	1,534	1,741	-207	1,635	-13.5%	106.6%	19,579	13,249	67.7%	9,427	27,397

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
	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%		
	Jan-Mar 03	3,240	3,373	-133	-106	-4.1%	-3.3%	32,070	23,906	74.5%		
	Year 2002/03	13,702	13,495	207	130	1.5%	0.9%	131,247	99,960	76.2%		71,525
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	22,536
	Jan-Mar 03	1,097	1,226	-187		-17.0%		10,503	6,959	66.3	4,993	21,984
BA	Year 2000/01	13,700	13,139	561	189	4.1%	1.4%	162,824	116,674	71.7%	44,462	62,844
	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
	Jan-Mar 03	2,721	2,988	-213	-216	-7.8%	-7.9%	33,729	23,439	69.5%	8,547	50,309
	Year 2002/03	12,490	12,011	543	117	4.3%	0.9%	139,172	100,112	71.9%	38,019	51,630
Iberia	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	7.9%	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
	Jan-Mar 03	1,128	1,183	-55	-24	-4.9%	-2.1%	13,200	9,458	71.6%	5,717	
KLM	Year 2000/01	6,319	6,068	251	70	4.0%	1.1%	75,222	60,047	79.8%	16,100	30,253
	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
	Jan-Mar 03	1,487	1,521	-272	-483	-18.3%	-32.5%	20,390	15,444	75.7%		34,497
	Year 2002/03	7,004	7,147	-144	-449	-2.1%	-6.4%	87,647	69,016	78.7%		34,666
Lufthansa	Year 2000	14,014	12,648	1,366	635	9.7%	4.5%	123,801	92,160	74.4%	47,000	69,523
	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
	Oct-Dec 02							30,282	21,476	70.9%	10,886	
	Year 2002	17,791	16,122	1,669	751	9.4%	4.2%	119,877	88,570	73.9%	43,900	94,135
	Jan-Mar 03	4,242	4,588	-346	-411	-8.2%	-9.7%	29,251	20,618	70.5%	10,391	
SAS	Year 2000	5,185	4,853	332	233	6.4%	4.5%	33,782	22,647	67.0%	23,240	22,698
	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	
	Year 2002	7,430	7,024	78	-15	1.0%	-0.2%	34,626	23,621	68.2%	21,866	
	Jan-Mar 03	1,608	1,654	-224	-188	-13.9%	-11.7%	8,040	4,900	60.9%	4,477	30,373
Ryanair	Year 2000/01	442	338	104	95	23.5%	21.5%	6,657	4,656	69.9%	7,000	1,476
	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
	Year 2002/03	910	625	285	259	31.3%	28.5%			84.0%	15,740	1,900
easyJet	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
	Oct-Mar 03	602	676	-74	-76	-12.3%	-12.6%	9,594	7,938	82.2%	9,347	

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	
	Year 2002/03	17,387	17,298	88	97	0.5%	0.6%	145,944	99,190	68.0%	56,022	
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
	Jul-Dec 02	3,492	3,181	305	210	8.7%	6.0%	51,009	40,779	79.9%	15,292	34,770
Singapore	Year 2000/01	5,729	4,954	775	892	13.5%	15.6%	92,648	71,118	76.8%	15,000	
	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	29,422
	Apr 02-Sep 02	2,278	2,134	144	289	6.3%	12.7%	49,196	37,799	76.8%	7,775	
	Year 2002/03	5,936	5,531	405	601	6.8%	10.1%	99,566	74,183	74.5%	15,326	30,243

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

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	366	144	510	273	102	375	885
2003 - Feb	361	149	510	301	104	405	915

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	439	213	652	1,205	246	1,451	2,103
2003 - Feb	28	8	36	85	8	93	129

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
April-03	17.2	11.1	64.4	15.3	11.6	75.8	10.4	6.5	62.8	37.0	26.9	72.6	56.5	39.4	69.7
Ann. chng	-0.9%	-3.4%	-1.7	2.2%	0.9%	-1.0	1.5%	-21.4%	-18.3	1.7%	-4.5%	-4.8	-0.1%	-5.1%	-3.6
Jan-April 03	66.6	39.2	58.9	58.4	43.3	74.1	42.6	31.8	74.7	147.8	112.1	75.8	224.8	157.7	70.2
Ann. Chng	2.7%	-1.3%	-2.4	7.0%	3.0%	-2.9	3.3%	-5.9%	-7.3	4.1%	0.5%	-2.7	3.4%	-0.6%	-2.8

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
Apr - 03	77.8	56.7	72.9	10.4	7.9	76.5	7.2	4.0	56.0	7.0	4.6	65.3	24.6	16.5	67.3
Ann. chng	-4.4%	-1.9%	1.9	-20.2%	-21.7%	-1.5	-12.7%	-35.9%	-20.3	2.3%	2.8%	0.3	-12.5%	-20.8%	-7.1
Jan-Apr 03	313.4	219.8	70.1	44.7	31.8	71.1	32.8	23.3	71.1	28.4	19.6	69.0	105.9	74.7	70.6
Ann. chng	-1.0%	0.2%	0.8	-4.7%	-10.0%	-4.2	4.5%	-9.5%	-11.1	1.9%	1.7%	-0.1	-0.2%	-7.0%	-5.2

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	19 May	Turkmenistan A/L	2 717-200s	\$78m		
Airbus						
Bombardier	12 May	US Airways	60 CRJ200 25 CRJ700		4Q03-2Q05	and 100+ options

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 %
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					-2.4	-0.6
2002P							4,587	3,243	70.7					-1.9	0.4
*2003							4,865	3,502	72.0					6.1	8.0
*2004							5,145	3,730	72.5					5.8	6.5
*2005							5,415	3,954	73.0					5.3	6.0
*2006							5,702	4,191	73.5					5.3	6.0

Note: *=Forecast; P=Preliminary; ICAO traffic includes charters. Source: Airline Monitor, January 2003

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