

British Airways: back to the Future Size and Shape.

Following the events of September 11 2001, British Airways announced the introduction of a "new" strategy to cope with the changes in the parameters of the business - it was not actually new, but a reiteration and reformulation of the strategic thinking of the previous few years. We have reviewed this strategy several times in the past two years (see *Aviation Strategy*, January and March, 2002 and April, 2003) in an attempt to see if the company might be on track with its plans. Here is another update.

In March, the company held its annual Investor Day where it outlined current thinking and progress. As usual the outcome is more of the same - BA is on track to deliver the Future Size and Shape (FSAS) envisaged two years ago -- but given the way the industry has failed to recover fully to pre-September 11, 2001 levels, the full delivery is going to take more time than originally expected.

The bedrock of the FSAS strategy is simplicity. All incumbent flag carriers have an inherent complexity of operations that has built up over the past eighty years to the point where it has been all too easy for new entrants to muscle in on what were mono- or duopolistic routes and services. From the basic assumption that the company had to simplify this dynosauric business, follows the current strategic priorities: maintain the best UK-based network and schedule; deliver the "customer promise" consistently; deliver a superior experience for premium customers; develop a high performing organisation; strengthen the company's reputation; deliver a competitive cost base; strengthen the balance sheet - and finally provide returns for shareholders.

The management was adamant that the FSAS strategy has not just been about costs. In one sense we may say that - to produce some awful metaphors - it has been an attempt to turn the oil tanker on a sixpence, or to force the evolution of the stegosaurus into the 21st century. The company has had to

FSAS TARGETS		
	Achieved by Dec '03	Target end Mar '04
MPEs		
Manpower reductions	12,652	13,000
£m		
Manpower cost savings	460	450
Distribution cost savings	212	100
Procurement /		
IT savings	123	100
Total	795	650
Disposals	723	900

www.aviationeconomics.com

CONTENTS

Analysis

BA: an update on FSAS	1-4
Virgin Express: a disappointing LCC	5-7
SN Brussels: Sabena's almost successful successor	7-9
Virgin Express and SN Brussels: strategic differences on merger menu	9-10

Briefing

Delta Airlines: deteriorating financial position	11-15
--	-------

Databases 16-19

Airline traffic and financials

Aircraft available

Regional trends

Orders

PUBLISHER

Aviation Economics

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

Tel: +44 (0) 20 7490 5215

Fax: +44 (0) 20 7490 5218

e-mail: info@aviationeconomics.com

Aviation Strategy is published 11 times a year by *Aviation Economics* at the beginning of the month

Editor:

Keith McMullan
kgm@aviationeconomics.com

Contributing Editor

Heini Nuutinen

Subscription enquiries:

Julian Longin
jil@aviationeconomics.com

Tel: +44 (0)20 7490 5215

Copyright:

Aviation Economics
All rights reserved

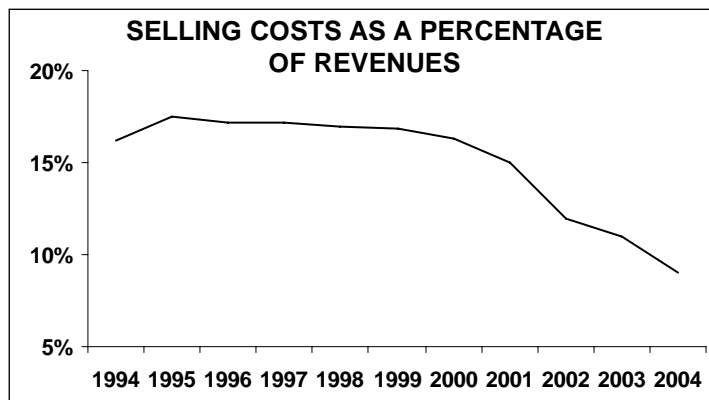
Aviation Economics
Registered No: 2967706
(England)

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

ISSN 1463-9254

The opinions expressed in this publication do not necessarily reflect the opinions of the editors, publisher or contributors. Every effort is made to ensure that the information contained in this publication is accurate, but no legal responsibility is accepted for any errors or omissions.

The contents of this publication, either in whole or in part, may not be copied, stored or reproduced in any format, printed or electronic, without the written consent of the publisher.



cut costs to stay alive: but it has tended to cut "back office" costs while investing strongly in the front end product that the customer sees.

The first element of the strategy is almost in place: BA embarked on a major fleet re-equipment programme to bring the fleet in line with the new liberalised air service environment. That meant downsizing many routes to the 777 from its ageing 747 fleet. It then moved on to disposing its older Boeing short haul fleet, replacing it with the flexible A320 family. This re-equipment is almost over. There are currently only 16 aircraft on order between now and 2008. Over the past few years it has also gradually been rolling out the "dusk" product on long haul business class - the innovative sleeper service - and incorporating the fourth class of the premium coach class service.

In the belt tightening announced early in 2002, the company set itself cost saving targets of an annual run rate of £650m by end FY March 2004. In all areas it appears to have been on or above target. In fact the annual running cost saving by the end of March will have reached £850m.

Distribution channel shift

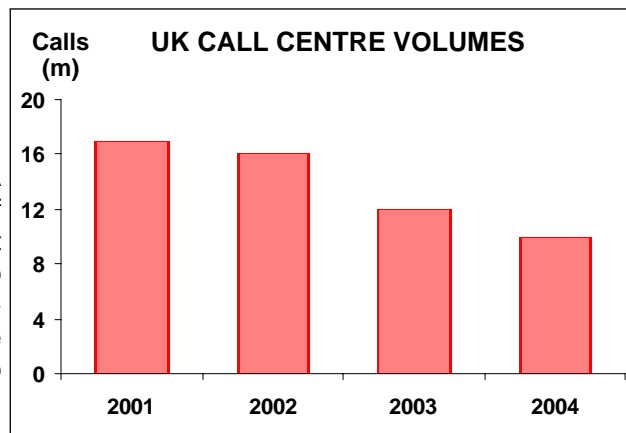
The largest percentage difference from targets is in the area of distribution. BA says it has achieved a cost saving of some £212m per annum against a target of £100m. There are several elements to this disparity. At the end of 2003, the company reduced agent's commissions in the UK (to a 1% booking fee) and in the US to zero; the success of ba.com has resulted in a significant distribution channel shift,

which in itself has led to selling efficiencies. At its worst, selling costs as a percentage of revenues approached 18% in 1995. This proportion will have been halved by the end of March 2004.

Currently travel agents account for some 65% of all bookings, online through ba.com and call centres around 12% each with the remaining 10% coming from other online agents. The company is anticipating that by March 2007,

ba.com will account for nearly 30% of bookings, there will be a shrinkage in the proportion of bookings from call centres and a minimal change in the proportion of bookings from other online engines. Even then, traditional agents would account for at least 50% of bookings. The bookings from ba.com and call centres overall account for 28% of bookings, which means that some 72% of bookings go through the four major GDSs. The company has recently renegotiated deals with the four major GDSs to reduce transaction costs by a further £80-90m.

This channel shift is bound to accelerate. Domestically, the company is enforcing this through a renegotiated 1% on travel agent's commissions, an emphasis on e-tickets, with a charge for physical tickets, the introduction of the facility to pay by debit card on ba.com and increasingly, a service fee for wanting to speak to someone. The increasingly apparent effect of the internet phenomenon is to reduce the cost, time and effort involved in resolving easy questions. The company's call centres have been cut back dramatically in the past three years with a reduction in



staffing levels from 2,400 in 2001 to 1,400 in 2003/4. Calls to the BA call centres have fallen from 17m calls a year in 2001 to 10m currently.

A major part of the success that BA can claim in the past two years is the development and roll out of ba.com - the internet based booking system. The company has put in place an unparalleled system for any of the major carriers. It is easy and simple to use: it allows the user to find the lowest fare for the trip he wants with minimal fuss. BA has been enhancing the system with this very fact in mind. It now allows the passenger to confirm seat allocation, and to check in. It will shortly allow the passenger to print out his own boarding pass. Throughout the design the company has emphasised simplicity: and has been rewriting the convoluted booking restrictions to make it even easier for the punter to understand what he is buying.

Finance

After September 11, 2001 there were severe concerns that BA would not have the funds to survive without coming to the capital markets for funds. (This worry helped push the share price below the 1987 flotation price). At the time the company averred that it had sufficient liquidity and flexibility to do so. So far, it has proved this to be the case.

At the end of September 2001, the company had some £1.2bn cash and cash facilities available against a debt burden, including leases, of £7.8bn. At the time, its debt repayment schedule showed repayments averaging £500m a year up to 2007, with a peak in 2005 of £790m. Through its belt-tightening procedures it has built its cash resources over the past three years to some £2bn. At the same time it has been rescheduling its debt profile and repaying some elements early. It has reduced its total debt position to just above £5bn by the end of December 2003, (although this figure was flattered to the tune of £400m by the strength of sterling over the period) and the repayment schedule has been flattened to an average of £550m a year over the next five years, with no peak repayments. Also, the company has increasingly been fixing its interest costs

so that now some 60% of its net debt is at fixed rates, compared with only 30% in FY2001, with a forecast average rate of 4.5% for FY2005.

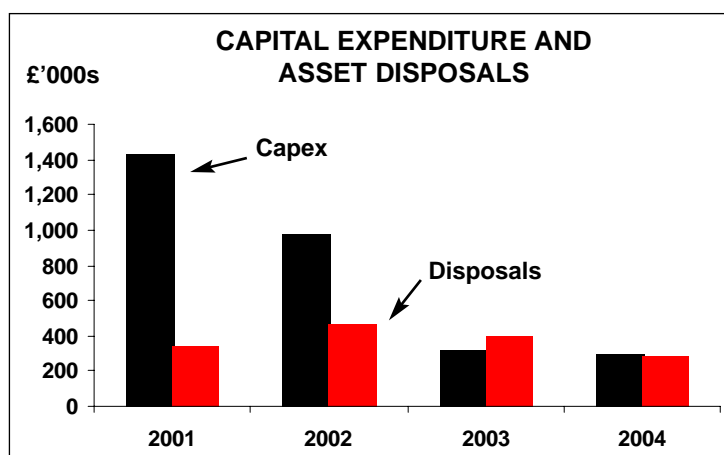
BA also reined back on its capital expenditure programme - although it was, in any case, coming to the end of its fleet re-equipment programme, (see chart, below).

Revenues and costs

In the immediate aftermath of the September 11 atrocities, we anticipated that there would be a relatively swift recovery in industry traffic levels. BA also assumed this in its forecasts then and plans to return to a 10% margin. In fact, there has been a far more damaging impact of the terrorist attacks on demand - not least of all the significant increase in security measures, constraints on travel imposed by authorities and the weak economic environment. The Gulf War, the Bali bombing and SARS added even further to the general malaise.

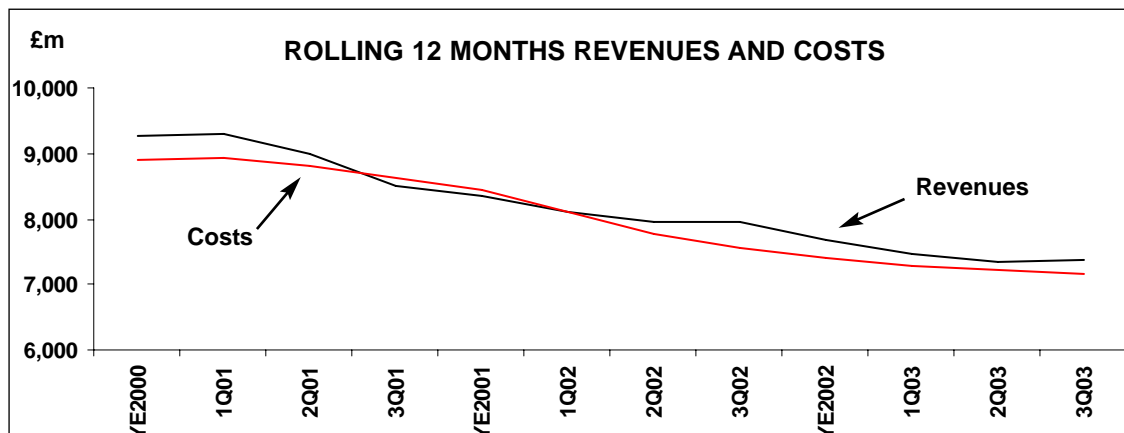
BA's FSAS plan effectively provided for modest downsizing in activity. This, combined with the weak industry environment, lead to a near £2bn drop in annual revenues since the end of FY2001 - annual revenues for the year ended March 2001 reached £9.3bn. For the 12 months ended December 2004 they had fallen to £7.4bn. For FY2002 and FY2003 the main driving force behind this drop was a fall in traffic - BA managed to maintain its pricing and mix fairly satisfactorily.

In the year to March 2004, however, despite a pickup in traffic volumes, there has



Aviation Strategy

Analysis



been a continued downturn in mix of class and a worse downturn in price. For the nine months to December, traffic grew by 1.9% while yields fell by 6.7% and unit revenues fell by 5.3%. The December quarter was in fact a little more encouraging with a 3.3% increase in traffic, only a 0.8% decline in yields and a reasonable 1.8% increase in unit revenues.

On long haul services, premium traffic actually rose against prior year levels in August 2003, for the first time since 2001, whereas economy class travel has been showing modest growth. On short haul, premium cabin traffic continues to run below prior year levels. Economy class travel meanwhile has been rising above prior year levels for the past year and haul CHECK has now started to exceed the levels of 2000/01.

This shift in traffic mix is increasingly visible as a structural shift in the European industry. The propensity of UK business passengers to travel in premium cabins has been declining over the years. For long haul traffic, it remains at around 40-50% of travellers. For short haul, there appears to have been a fall from 60% to 40% over the decade from 1991 to 2001 - and then the ratio has fallen off the cliff to a rate of 20% currently. This accelerated decline in the past three years can partly be explained by the emergence and expansion of the LCCs and the competitive response from the flag carriers (BA included).

However, the company is finally seeing an end to the decline in revenues. It is suggesting a modest 2-3% increase in turnover for the year ended March 2005.

On the cost side, costs have fallen by £1.7bn in the same period to a running 12-month rate at the end of December 2003 of £7.2bn. In the short run, BA emphasised some cost headwinds that could add some 5% to the cost level for the coming financial year: the pension problems will require an additional £133m funding p.a.; fuel costs have jumped again and are likely to push costs up by a further £50m despite the company's hedging policies; in addition there will be pay increases, volume related costs and increases in landing charges. Meanwhile the company continues to implement cost saving strategies. It is half way through its "external spend" plan to reduce costs by £300m. It is on track to deliver cost savings of £150m from its "ceBA" (customer enabled BA) and other initiatives. It has further set itself the target of reducing employee costs by a further £300m by December 2006 - and in this it has unusually put the question to the unions to see if they can resolve an answer.

The original target of achieving a 10% operating margin remains - if the date of managing the achievement has been put back further than expected.

Overall, BA has performed as it said it would. In fact it has performed better. The only problem is that the industry basics have fallen away and the original plan to regain reasonable sustainable profitability has been delayed further. The saving grace is that BA is still alive and kicking and is in a far better shape to allow it to achieve its 10% operating margin through the cycle and provide CVA returns for its shareholders.

Virgin Express: a disappointing LCC

If the proposed Virgin Express/SN Brussels deal goes ahead - and it's by no means certain that it will - will Sir Richard Branson be accepting defeat in his attempt to set up a LCC in Europe, at least in the guise of Virgin Express at Brussels National airport?

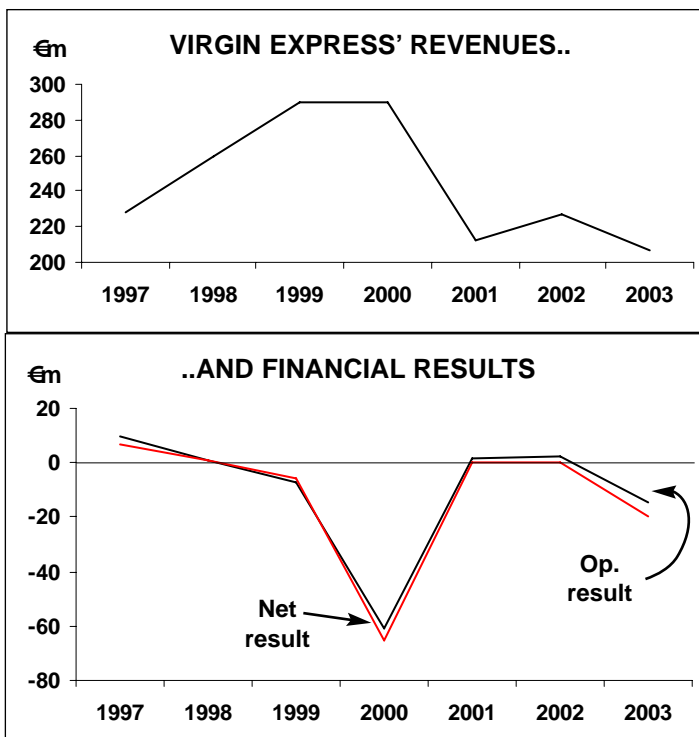
VE started life in 1992 as EuroBelgian Airlines, before being bought by the Virgin empire in 1996 and relaunching as a low-fare airline. Currently VE operates to 16 European destinations with six 737-300s and six 737-400s, though VE once had much greater ambitions. Indeed the current fleet will soon fall to 11 after VE returns another 737-400 to a lessor after its lease expires. This will be the second aircraft to be returned to lessors this year, and with no new aircraft scheduled to replace them, VE is gradually reducing capacity, even before a deal with SN is finalised. The fleet has steadily been cut back from 22 aircraft since David Hoare became executive chairman of VE in 1999.

At the end of March, VE announced its financial results for 2003. For the calendar year, VE reported a 9% reduction in revenue to €207m, an operating loss of €14.8m (compared with a €2.6m operating profit in 2002) and a net loss of €19.6m (compared with a €0.4m net profit in 2002). Yields fell by 21% over the year, and VE's net loss works out at €8 per passenger flown. David Hoare attributes the poor results to the Gulf War, price discounting by Europe's scheduled airlines, and Ryanair's "illegal subsidies" (see below).

To make matters worse, VE also announced that as a result of an audit carried out before detailed merger talks with SN begin, errors in an IT system and their control led to "historically uncollectable debts" which will mean adjustments to the P&L accounts for 1999, 2000 and 2001 equivalent to a 1% reduction in revenue over those years (and which is not reflected in the VE revenue graph, see right).

VE carried 2.5m passengers in 2003, 5.2% up on 2002, and load factor was 81%, compared with 80.7% in 2002, but the unit revenue figure was dire. Revenue per ASK fell by 21% in 2003, far outstripping an 11% reduction in cost per ASK (which was partly helped by the strengthening of the Euro against the dollar). The cost cutting has included the trimming of staff (the workforce is now less than 1,000 strong), a reduction in leasing costs and the renegotiation of handling contracts at non-Belgian airports. Aircraft utilisation has also increased, to an average of more than 12 hours per day per aircraft. For example, after the collapse of a codeshare between VE and SN in March 2003, VE utilised spare capacity by linking with Dutch travel company Airtrade to launch an Amsterdam-Rome route (on which Airtrade agreed to buy half of all available seats.)

Cost per ASK in 2003 was 5.44 Euro



cents, but Hoare added: "Given our low cost position we are surprised to find large network operators pricing below our costs, particularly in the case of Alitalia on flights to Milan and Rome. We will be interested to hear the EC's view of this airline's activities."

This emphasis on cost-cutting is partly the result of VE facing competition from Ryanair, which has a hub at Charleroi, 50km to the south of Brussels Zaventem airport. Ryanair operates out of its Brussels Charleroi hub to 10 destinations - Glasgow Prestwick, Dublin, Shannon, Carcassonne, Valladolid, Barcelona Girona, Rome Ciampino, Pisa, Venice Treviso, Milan Orio al Serio and Stockholm Skavsta - and its presence irked VE so much that in October 2003 (following the release of its third quarter results where revenue dropped 8%) VE complained to the EC about airport sweetener deals. Specifically, VE called for the EC to force Brussels Charleroi airport to stop providing subsidies to Ryanair, a practice it claimed was anti-competitive. In February 2004 the EC did exactly that, forcing Ryanair to hand back subsidies to the airport. Ryanair responded by shutting its London Stansted-Brussels Charleroi route and threatening to drop other services, subject to ongoing talks with the airport.

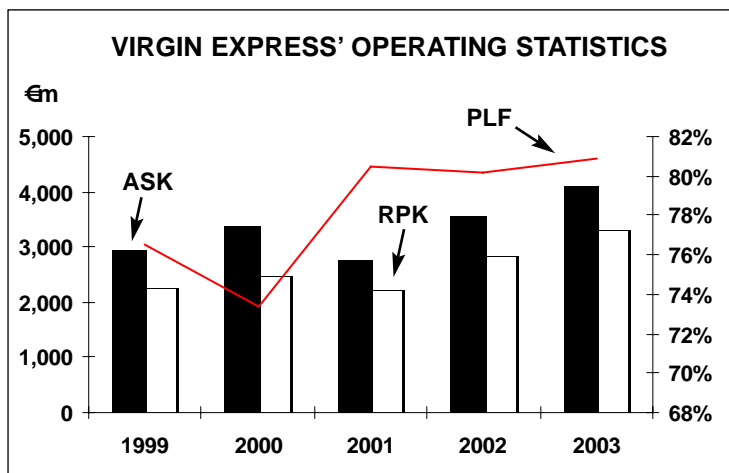
Though the Charleroi/Ryanair deal probably did affect VE, its outrage about Ryanair must be taken with a degree of scepticism, particularly given a January 2003 report by the Belgian parliament that criticised deals made by the then Sabena CEO Paul

Reutlinger with VE. VE flew three routes for Sabena (Brussels to Heathrow, Rome and Barcelona) and the Belgian flag carrier guaranteed to pay for a certain amount of seats per flight, whether or not they were filled. The report contained claims by Christophe Muller, Reutlinger's successor, that the block space deals cost up to €30m a year, and that without these payments VE may not have survived. The report also criticised a 1997 deal in which Reutlinger sold Sabena slots at Heathrow to Virgin Atlantic for \$8m.

Certainly without the Sabena block space deal, VE's results would be even worse than they were and would have made the airline's quest to expand away from Brussels even more urgent than it already was. VE was twice frustrated by failed attempts to launch low-cost operations elsewhere, at Cologne in October 2002 and Paris Orly in 2003. The Cologne-Bonn plan collapsed once VE saw impending competition from LCCs, specifically Hapag-Lloyd Express (part of the TUI empire) and Germanwings (in which Lufthansa has a stake), which both revealed plans to offer low cost operations at the airport. If VE had gone ahead, it would have stationed up to 20 new aircraft at Cologne.

At Paris Orly, after the collapse of Air Lib (the merged Air Liberte and AOM) in February 2003, VE was awarded enough slots to start services to Bordeaux, Toulon and Rome Fiumicino (though just a fifth of the slots it applied for), but it decided not to start services after claiming that slot timings were not close enough to allow the aircraft utilisation it wanted. VE said: "Only one of these three routes had the potential for profitable operations in the near future." If VE had obtained the slots it wanted, again the airline would have based a substantial fleet at Orly. Initially, VE had even considered buying the assets of Air Lib and setting up a French carrier, in co-operation with French shipping company CMA CGM, but this plan was soon scaled back in favour of slot acquisition.

It's more than likely that VE has considered many more airports than Cologne and Paris Orly, but no second base has materialised and VE has been stuck with its Brussels National base in the face of



increasing competition and capacity, and an inevitable reduction in yield. And according to David Hoare, "airport charges at Zaventem continue to be uncompetitive when compared to airports serving markets of similar size, and these high costs place Belgian airlines operating from there at a serious disadvantage".

Strategically, VE is at a dead end, and Branson may consider the proposed SN/VE deal as something of a late but lucky escape. An IPO in 1999 saw Virgin selling 49% of VE, but Virgin's share leapt to 88.6% in July 2004 following a €35m rights issue that was taken up by the Virgin holding company. The money was used to repay loans owed to another Virgin company, Barfair, but at the same time the Virgin group also gave VE a new working capital facility of up to €50m. In many ways the cash that Branson invested in VE is irrelevant - what matters

more is that his attempt at a low cost European airline has foundered while easyJet and Ryanair have rampaged across Europe.

Presuming that the SN/VE deal is signed, how will this fit into Branson's plans? BMI British Midland still doesn't appear keen to merge with Virgin Atlantic, and if BMI doesn't change its mind then Branson may have to build a European operation on his own. And that's the value of the SN/VE deal. On 1st January 2005 Virgin can exercise its put option and Branson would be free to launch another low cost operation, this time well away from the nightmare of Brussels. It is inconceivable that the final SN/VE deal will contain clauses forbidding Branson to use the Virgin name elsewhere in Europe once the put/call options are exercised.

SN Brussels: Sabena's almost successful successor

SN emerged in late 2001 from the remnants of Belgian flag carrier Sabena and its low-cost regional subsidiary Delta Air Transport, which operated short-haul routes with RJs and BAe-146s.

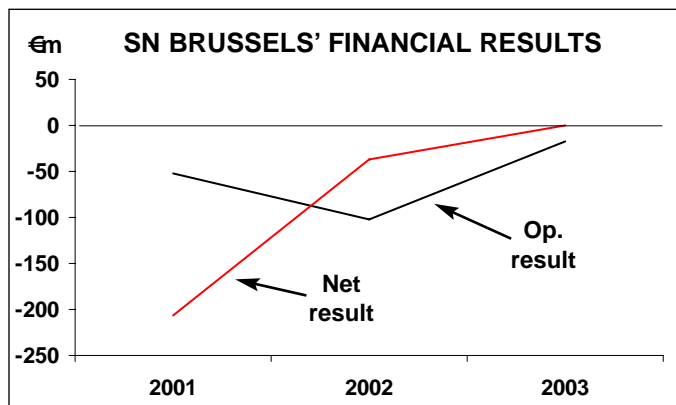
Today SN operates to 54 European and 14 African destinations, 22 in the US (through codesharing with American) and employs 2,000 staff. SN is owned by a number of Belgian companies, and its strategy is to replicate Sabena's route structure without the high cost base of its predecessor. In March it reported its first net profit: €0.6m for 2003 (compared with a €36.4m net loss in 2002), based on revenues of €534m (30% up on 2002). Revenue growth was due largely to new routes, including 13 in Europe, one in Africa and the launch of transatlantic flights. In May 2003, SN signed an agreement with American for codesharing on American's daily Brussels-Chicago service and 21 beyond destinations in the US.

Despite the American connection, through traffic is just 20% of SN's total traffic

(compared with as much as 60% at one point at Sabena). This is a deliberate policy - SN is a point-to-point operator, dedicated to serving the needs of European business travellers. Indeed, in 2003 SN was Europe's second most punctual airline, according to AEA statistics.

In 2003 SN flew 3m passengers (11% up on 2002), with load factor rising 7.5 percentage points to 57.3%. SN flew 2.6m passengers in Europe last year, 6% up on 2002 and with a load factor of 52.6%, and 331,000 on African routes (+80%), with a load factor of 64.4%.

But the 2003 net profit and rising passenger figures do not tell the whole story, as SN has had considerable help along the way. The Belgian government gave state aid of €125m at start-up - loans that SN has to repay over 2004-05 (the original loan has been replaced by a €125m loan from government fiancé arm FIM - but this still has to be repaid). This loan was originally earmarked for Sabena, but the EC allowed it to be transferred to SN. In 2002, SIC wrote-off



€50m in debt, IATA cancelled Sabena's €16m debt to it, and SN made €59m from slot sales and exchanges with BA and Virgin Atlantic at London Heathrow.

And 2003 started off badly for SN thanks to the Gulf War and the end of a partnership with Virgin Express. As a result, in March 2003 net equity fell to below half the value of the share capital, which under Belgian law forced shareholders to partly convert existing loans into equity. Following poor 1Q 2003 results, SN declared a cost-cutting target of €20m in 2003. SN renegotiated contracts with suppliers and leased out one of its A319s for summer charter work. In July SN axed its Brussels-Milan Linate route as part of general cost-cutting, though curiously it also cited the fact that Linate was primarily a business traffic destination, while its Brussels-Milan Malpensa service was suited to both leisure and business travellers.

Following the setbacks of early 2003, SN fought back well in the rest of the year, expanding routes and codeshares significantly. SN is big believer in codeshares - it

currently has 15 such agreements, which it considers a vital way of attracting business passengers and their revenues.

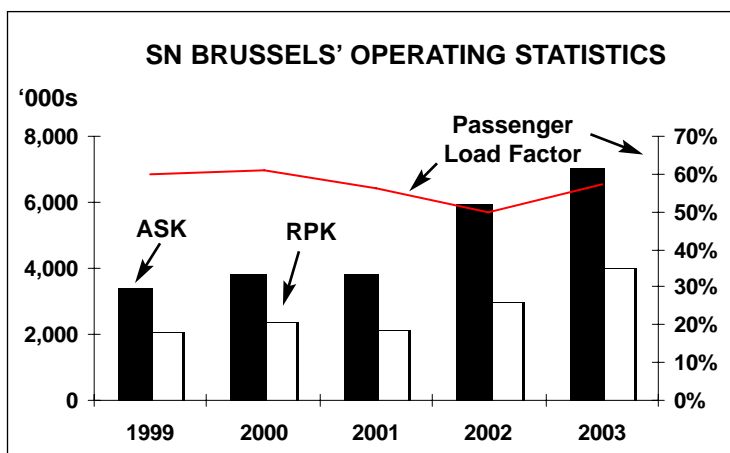
For example, in January 2003, SN started a joint selling agreement with Lufthansa, in which each airline can sell tickets for each other's routes, as well as providing connections to Lufthansa's routes out of Brussels. In March 2003, SN began codesharing with Alitalia from Brussels to Rome, Milan Malpensa, Turin, Venice and Bologna (the Rome codeshare replacing a similar codeshare with VE), and in 3Q 2003 SN began codesharing with Cyprus Airways on the latter's services from Brussels to Larnaca and Paphos, and with Hellas Jet on its Brussels-Athens service. In April 2003, the EC allowed SN and British Airways to enter into a codesharing alliance. Later in the year SN took over the Brussels-London Gatwick route from BA after the latter pulled out of the route. But despite its BA and American codeshares, SN has not joined oneworld - SN CEO Peter Davies said in June 2003 that he had yet to see the benefits of joining an alliance.

In mid-2003 SN also considered an acquisition of loss-making charter specialist Sobelair, appointing a management consultant to examine the possibility. A deal never materialised, probably due to concerns over Sobelair's higher cost base, including staff salaries and aircraft leasing rates.

Despite this, SN's frantic pace is continuing. In December 2003, SN replaced its Brussels-Paris service by a high-speed train service between Paris Nord and Zaventem airport. It takes just 1hr 50mins, and is a direct competitor to Air France's TGV connection between Brussels city and Paris CDG. SN also expects this service to increase its catchment area for African flights

This year services have already been launched to Istanbul, Moscow and St. Petersburg, and SN is introducing "first-class style" catering for business class passengers from spring. In May a daily Brussels-New York JFK service will begin, operated by American and using 767-300s.

In terms of its fleet, by mid-year SN will make a decision on whether to find replacements for its five BAe 146s and 26 RJ



85/100s. If it does renew the fleet, the choice is between the Emb 170/195, the CRJ700/900, A318s and 737-600s. For its long-haul African services, SN uses wet-lease A330-300s, under contract to the end of October 2004. Indeed in October 2003, SN considered exercising an option to acquire its wet-lease supplier Birdy Airlines, but decided against doing so at that time. But SN can still exercise an option to buy Birdy - which was set up by Belgian entre-

preneurs George Gutelman and Victor Hasson - any time until the end of its contract.

SN is now in a relatively healthy financial position. At the end of 2003, SN had more than €138m in cash and cash equivalents, and in 2004 the airline is targeting a net profit of €2.5m, based on increased scheduled load factor and extra charter passengers in the summer.

Virgin Express/SN Brussels: a clash of business models

In mid-March, SN Brussels Airlines and Virgin Express announced they intended to merge, though remaining separate legal entities. Will the merged entity prove a solid successor to Sabena - or will a clash of business models prove irreconcilable?

It's clear from the two companies' non-binding LoI that the detail of just how operations will be combined have yet to be worked out, but the intention is that each will retain its livery, with SN operating a full-service product on long-haul routes to Africa and a few key business routes in Europe, and VE providing low-cost operations in Europe.

Credit Suisse First Boston and consulting firm Arthur D. Little advised the airlines on the deal, in which a holding company for VE and SN would be owned 29.9% by VEX plc, part of the Virgin empire (and quoted on NASDAQ and Euronext Brussels), and 70.1% by the current shareholders of SN (Fortis, Tractebel, KMC, Dexia, BBL, UCB, Brussels Airport, the Walloon region and the Brussels region). However, this holding company wouldn't control all of SN - 8% would continue to be owned by SIC (Sabena Interservice Centre) - the former financial subsidiary of Sabena. The tentative deal also includes a put option for VEX to sell its 29.9% stake in the new holding company anytime in 2005 and 2006 for €64m, and a call option for SN Brussels' shareholders to buy VEX's stake for €100m during the same time period.

The combined airline

Merger talks between SN and VE were first held in 2002. The negotiations failed allegedly due to a fierce disagreement on valuation, with VE reported to want 50% of the merged company. The disagreement was such as that an existing codeshare between the two (under which each airline bought seats from the other one) was terminated in March 2003. At the time VE argued that the ending of the agreement would be beneficial for the airline, and that its flights would be more productive.

Fresh talks started in September 2003 at the instigation of an investment bank, and just a few weeks before the proposed deal was announced, David Hoare, VE's executive chairman, claimed that in the event there was a merger between SN and VE, "Richard Branson will be by far the largest ultimate shareholder in the new company".

Quite clearly this is not to be the case. This dramatic switch in value capture from VE to SN's shareholders is probably the function of their relative performance in 2003, combined with the fact that for strategic reasons Branson may be keen to free himself from VE, even if the returns are not as great as he once wanted. But there may be another reason for the relative weighting for the deal towards SN's shareholders - the fact that SN's business model is much more likely to be adopted by the combined airline than VE's.

It's will be difficult, if not impossible, for the combined SN/VE to adopt the bizarre strategy of being both a full-service, point-to-point carrier and a low cost, low fare airline - as its Lol statement claims. Though VE wants to develop smaller, regional routes feeding traffic into Brussels, SN and VE's customer bases are not compatible. Something will have to give, and the odds are that SN's strategy will win through in the end - partly because a business focus at Brussels airport appears more likely to succeed than a LCC strategy, and partly because SN's shareholders will be in a majority in the new holding company.

If this is the case, just how will VE's current management take to a change in strategy? It was only in January 2004 that VE announced it was terminating a codeshare with VLM on Brussels-London City in March due to incompatible differences in focus. VE said that: "It is difficult to match our strategies. They are developing the market as a niche carrier focused on the corporate traveller, whereas we concentrate on budget traveller."

And when VE's third quarter 2003 results were released, David Hoare condemned SN for adding extra capacity into the Belgian market, a country with a population of just 10m. He added: "On a number of routes out of Brussels, initially to Spain and now to Italy, prices have fallen below even VE's very low costs. We do not believe this situation can last for long, assuming of course that carriers are not receiving any illegal state subsidies. Sustainable profits will only be generated when capacity is brought into line with profitable demand."

It will be interesting to see just how many of VE's management are still with the combined airline a few months after the deal

goes though. There's little doubt that differences between the two airlines as they currently operate are enormous, and something (or someone) will have to give. As well as the obvious difference in customer focus and operational strategy, SN places a large emphasis on codesharing, whereas VE does not. VE codeshares with just Air Luxor and Malmo Aviation - the former deal being signed in April 2003 and entailing Air Luxor buying block-space on VE's Brussels-Faro and Brussels-Lisbon routes.

That's not to say that that the merger won't uncover some benefits. VE and SN overlap on services from Brussels to nine destinations - Barcelona, Geneva, Gothenburg, Lisbon, Athens, Copenhagen, Rome, Madrid and Stockholm - and consolidation is inevitable. SN is likely also to learn from aspects of VE's operations, such as distribution - in 2003 VE's internet bookings were worth €78m.

But how far can a low cost mentality be adopted at SN/VE without losing a focus on business traffic? In the past, SN has claimed its emphasis is not on high load factor, which has always been far lower than VE's, as SN says logically that revenue and profit are more important than high load factor. But VE's LCC strategy calls for high load factor and revenue per seat dilution, something that will be anathema to SN's management.

In the end, the differences between the two strategies are likely to be too great, and a decision will have to be made as to what focus SN/VE will have: being full service and attracting business traffic versus being a LCC and chasing the budget traveller. If that decision isn't made, then strategic schizophrenia could condemn the merged company to a fate similar to that of Sabena.

AVIATION STRATEGY ONLINE

Subscribers can access *Aviation Strategy* (including all back numbers) through our website www.aviationeconomics.com. However, you need a personal password - to obtain it email info@aviationeconomics.com

Delta Airlines: liquidity problems looming

Delta's financial position has deteriorated significantly in the past 12 months or so - something that previously went relatively unnoticed amid all the dramas at AMR, UAL and US Airways. The third largest US major faces heavy debt maturities and pension obligations this year. It has a significant exposure to LCCs; yet its unit costs are now probably the industry's highest on a stage length-adjusted basis. Can these problems be solved without Chapter 11?

Delta entered the current industry crisis in great financial shape. In the five years up to and including 2000, it had earned double-digit annual operating margins and net profits in the region of \$1bn each year. Unlike many of its competitors, it had retained a low unit cost structure (while also improving unit revenues) in the boom years of the late 1990s.

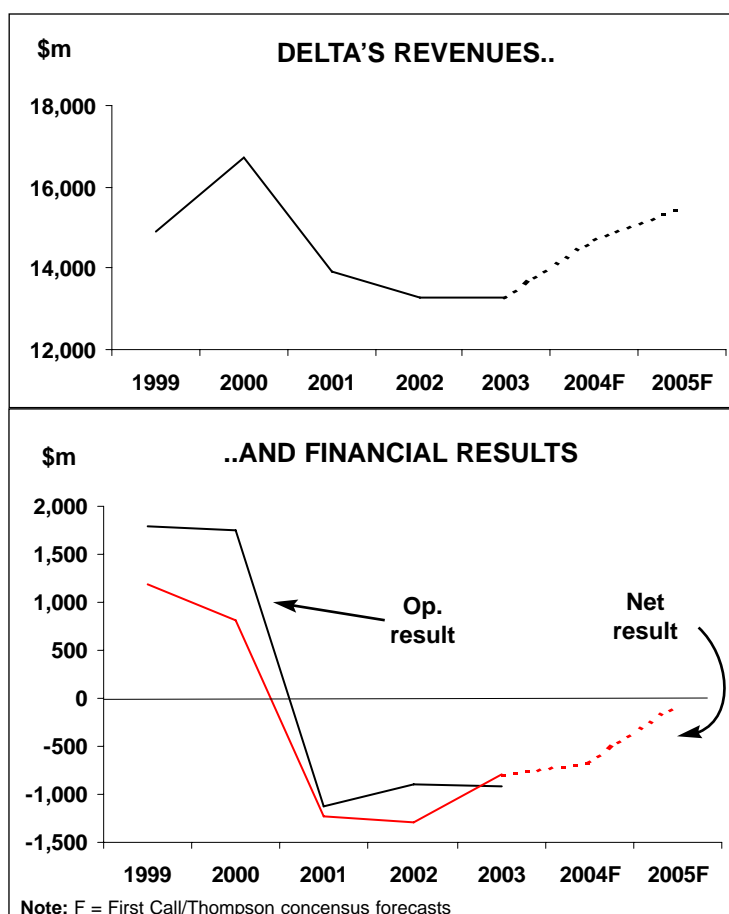
The low cost structure was the result of the famous (and much-maligned) 1994-96 "Leadership 7.5" project, which slashed operating costs by \$1.6bn and made Delta the lowest-cost major network carrier in the US. The project had to be abandoned early because of the more pressing need to restore service quality and employee morale. But a favourable four-year pilot contract in April 1996, low-fare subsidiary Delta Express (October 1996) and tight cost controls helped keep unit costs at an enviable 8.80-8.90 cents per ASM through to the end of the decade.

Because of the mid-1990s restructuring, Delta also had a strong balance sheet and investment-grade credit ratings. Consequently, it was able to continue to tap the capital markets for funds to a much greater extent than other large network carriers after September 11, 2001, despite losing just as heavily in 2001 and 2002. It has completed a variety of financings, including privately placed EETCs. Last year it refinanced most of its 2003 debt maturities.

However, since early 2003 Delta's financial recovery has essentially stalled. Its loss

margins have been among the worst in the industry in recent quarters. While most other US airlines reported at least some improvement in 2003, Delta's results worsened. Excluding special items, it posted a \$1bn net loss for 2003 (7.8% of revenues), after losing \$958m in 2002. Last year's operating loss before restructuring charges was \$916m - also larger than the previous year's \$904m loss.

The main problem has been a surge in unit costs: from 8.80 cents in 1999 to 9.30 cents in 2000, 10.14 cents in 2001, 10.03 cents in 2002 and 10.58 cents in 2003 (all excluding restructuring charges). In this four-year period, CASM rose by 20% while RASM was essentially unchanged (down slightly from 9.97 to 9.90 cents).



Delta has not only lost its CASM advantage but may have become the highest-cost large network carrier in the US. Its top executives are claiming that its stage length-adjusted CASM is now even higher than that of US Airways - rhetoric that is obviously aimed at labour, but the claim may well be true.

Delta blames the problem squarely on its pilot costs, which are now totally out of line with its competitors. This is mainly due to the unlucky timing of past pilot contracts and extraordinary developments at competitors, but the implications are potentially serious.

Because of the continued heavy losses and substantially increased debt load, Delta has lost the competitive advantage it previously enjoyed in terms of balance sheet strength. The past winter has seen a steady stream of downgradings of its credit ratings - most recently by Fitch on April 7 and by S&P on March 17. As a result, Delta will find it harder (if not impossible) to access the capital markets and its borrowing costs may increase.

In the absence of pilot concessions, Delta's financial situation will continue to deteriorate. S&P noted that "Delta will likely continue to report the heaviest losses among US airlines, consuming cash and undermining its already weakened balance sheet".

At the end of March, the First Call consensus forecast for Delta was a net loss before special items of around \$660m in 2004, followed by a \$63m loss in 2005. While these figures may change significantly depending on fuel price fluctuations, they nevertheless suggest that Delta has little chance of returning to profitability even in 2005. Delta has hedged 32% of its anticipated 2004 fuel needs at an average price of 76.5 cents per gallon - a relatively weak position, though many competitors are even worse off.

What makes Delta particularly interesting at present is that, more than any other network carrier, it represents both opportunity and risk to investors. After underperforming the industry for the past 12 months, its share price has excellent appreciation potential if and when a new pilot deal is announced. But

if the labour talks drag out, Delta's weakening liquidity and high cost levels make it vulnerable to prolonged adverse industry fundamentals.

To add to the uncertainty, Delta is in the process of digesting several leadership changes. First, Leo Mullin stepped down as CEO at year-end and was replaced by Gerald Grinstein, a longtime board member and a former CEO of Western Airlines and Burlington Northern (a railroad company). This month Mullin will also retire as chairman, to be replaced by Jack Smith, a board member and former chairman/CEO of General Motors. On April 1, Fred Reid stepped down as president/COO to take up the CEO's position at Virgin's planned US domestic airline; Grinstein was expected to initially assume his responsibilities.

Grinstein's first major move was to order a full strategic assessment of Delta's business plan - due to be completed by July and presented to the board that month. Otherwise, Delta's priorities are to secure cost concessions from its pilots, meet this year's debt and pension obligations, decide on low-fare unit Song's future and, in the longer-term, address the heavy debt load.

The need for pilot concessions

Delta has a pilot cost problem because it has been unlucky in two respects. First, it happened to be the last major carrier to sign an expensive pilot deal before September 11. The contract was negotiated in the wake of United's previous industry-leading deal, and it made Delta's pilots the highest-paid in the industry.

Second, because Delta's balance sheet was still relatively strong in 2002 and 2003, it could do nothing but watch helplessly as United and American, in their Chapter 11 and near-Chapter 11 situations respectively, extracted significant cost concessions from their pilots last year. In other words, Delta happened to be financially strong at precisely the wrong point in the industry (pilot contract) cycle.

It is worth noting, however, that Delta does not have a general labour cost prob-

lem. Only 18% of its employees are unionised (mainly pilots). There is considerable work rule flexibility among the non-union workforce. The management estimated recently that Delta had a \$600m non-pilot employee productivity advantage over competitors last year (the figure includes the impact of technology initiatives).

Much of that non-pilot labour cost advantage has been gained since September 11. However, there have been no pay reductions (except for management); 70-80% of the improvement came from non-pocket book issues such as work processes. All worker groups continue to earn top-tier wage rates.

But pilots are extremely highly paid workers and the scale of the cost disadvantage there is staggering. Delta estimates that its pilot cost per block hour of \$527 compares with an industry average of \$315. Its pilots are paid 59% more than American's and 82% more than United's. Had Delta's pilot cost structure been similar to competitors' in the fourth quarter, it would have posted a \$120-220m lower net loss or almost broken even.

Delta has been in dialogue with its pilots since February 2003. It initially proposed cutting hourly wages by 23% and canceling scheduled 4.5% pay increases in 2003 and 2004. It also asked for flexibility to start negotiations early on the entire contract, which becomes amendable in May 2005.

But there has been no progress. The pilots have offered to take a 9% pay cut and forgo the scheduled increases, while the management now has a 30% pay-cut request on the table. The talks have been at an impasse since January, though recently there were reports that some pilots are calling for the union to unilaterally decline the 4.5% wage increase scheduled for May 1 to help restart negotiations.

The management has a very strong case and there is little doubt about the eventual outcome: Delta will secure a cost-saving pilot contract. However, many analysts feel that getting that deal could take another 12 months. This is because Delta is nowhere near Chapter 11. Also, Grinstein has indicated that he is not prepared to accept a package of lesser short-term concessions.

Realistically, however, Delta will not be able to negotiate concessions that are anywhere near as deep as what American and United achieved in or near bankruptcy. Delta pilots' pay rates are likely to remain the highest in the industry, though productivity improvements may help reduce the overall pilot cost disadvantage.

That said, a quick deal and deeper concessions are possible under some scenarios. First, the pilots may realise that the longer the delay, the deeper the concessions are going to have to be (as Delta's financial condition deteriorates).

Second, there could be some specific adverse event that requires a quick pilot deal. For example, Delta might suddenly find itself unable to raise needed capital if banks and investors began to worry about the cost issues.

Grinstein has continued to insist in recent speeches that a pilot deal before July is possible. He has persistently hammered the point that if there is a switch from "mid-contract" to "new contract" negotiations, the number that is on the table will have to be larger (he is more experienced with unionised labour than Mullin was). However, if there is no deal by August, it will then probably have to be a new contract negotiation.

In the meantime, Delta continues to press on with cost cutting in other areas. There is a broad-based plan to save \$2.5bn or reduce non-fuel unit costs by 15% by the end of 2005 (over year-end 2002 levels). A few months ago the airline was talking about 8.5 cents being the CASM goal before pilot concessions.

Delta claims to have achieved \$1.2bn of the targeted \$2.5bn cost or revenue initiatives in 2003, though the net gain (after offsetting cost pressures) was only \$700m. However, none of that was

DELTA'S MAINLINE FLEET	
737-200	51
737-300	18
737-800	57
757-200	96
767-300	28
767-300EREM	59
767-400EREM	21
777-200	8
L1011	26
MD 11	13
MD 80	120
MD 90	16
Total	528

reflected in 4Q CASM, which rose marginally even when fuel was excluded.

What role will Song play?

Delta has a strong business franchise, with solid market positions in North America and on the transatlantic (82% and 13% of its total revenues, respectively). Its positive attributes include a powerful hub at Atlanta, unbeatable RJ feeder operations (Delta Connection), Delta Shuttle, a marketing alliance with Continental and Northwest, and SkyTeam and other foreign airline alliances.

Like other large network carriers, Delta may need to rethink some of its hub operations. Like the rest of the industry, it could probably benefit from scaling back its 2004 growth plans; it is currently still aiming for 8.5% mainline ASM growth this year (6.9% domestically, 13.9% internationally).

But those are the sort of things that are probably part of the regular planning process anyway. It is not clear why Delta needed to launch a special review of all aspects of its operations (Grinstein did not exactly have to learn about it since he had been on the board). The project might have just been called "reassessment of Song".

Delta needs to think out the Song/LCC strategy very carefully because, like US Airways, it has unusually heavy exposure to low-cost carriers (about 70% of its revenues). It feels particularly vulnerable, first, because of its strong Northeast-Florida presence and, second, because of its heavy reliance on connecting traffic.

Song was launched in April 2003 as a new low-fare unit to replace Delta Express primarily in East Coast and some transcontinental markets. Its purpose was to help Delta compete more effectively with LCCs through larger aircraft, high-frequency flights, advanced in-flight entertainment technology and innovative product offerings. It was both modelled on and targeted at jetBlue. The aim was to get unit costs 20% below Delta's mainline 757s - through increased productivity of people, aircraft and other assets, rather than separate lower pay scales.

It is important to remember that Song has only just completed its first quarter of full-scale (36-aircraft) operations, so up to this point it has not been possible to assess how successful it is. But it has obviously not lived up to expectations since Delta put the unit's much-anticipated New York expansion on hold in January.

At a recent JP Morgan conference, Grinstein referred to Song as a "fighter brand", saying that it is sometimes worth making an economic investment in order to hold off competition. "But there is always the question of the price you're willing to pay", he added. "We simply have to understand that better before we expand or make any changes."

On the negative side, comparisons carried out late last year by Raymond James analyst James Parker indicated that Song was performing very poorly in terms of load factors and fare levels on routes where it competed directly with jetBlue (though that was probably too early for a fair comparison).

Also, Delta appears to be falling seriously behind the other large network carriers in total RASM. According to 4Q length-of-haul adjusted RASM figures presented by Continental at a recent conference, Delta's RASM of 7.22 (adjusted to Continental's length of haul) was way below the industry average of 7.70 (American's was 8.37 and Southwest's 5.22). Merrill Lynch analyst Michael Linenberg said recently that he believed Song was part of the yield problem.

On the positive side, there are all the operational innovations and efficiency improvements achieved with Song that are being migrated into the rest of the airline. In particular, the Song experience has helped boost aircraft utilisation (through faster turn-arounds, loading passengers differently, managing the gate process differently, etc.).

Liquidity and balance sheet issues

Delta has little near-term risk of bankruptcy because of its good liquidity position, namely unrestricted cash reserves of \$2.7bn

at year-end. The strong cash position is the result of various financings and the sale of stakes in Worldspan, Orbitz and Hotwire last year.

However, the cash position is expected to decline this year due to substantial financial obligations. The extent of the decline will depend on how much new funding Delta decides to or is able to raise. It had a promising start in February when it completed a \$325m private offering of convertible bonds.

The convertible bond offering was an ideal method for Delta since it will not add to debt in the longer term. The airline took on \$2.3bn of new debt in 2001, \$2.6bn in 2002 and \$2.2bn in 2003. It had \$12.6bn in total debt and capital leases at year-end, plus \$8bn of minimum operating lease commitments. Its lease-adjusted debt-to-capital ratio was 103% - shockingly high but not out of line with the industry average.

Delta faces \$1bn of debt maturities in 2004, of which \$300m is interim RJ financing likely to be replaced by permanent financing. This year's total pension plan funding oblig-

ations are estimated at \$450m. Capex is \$1.2bn, half of which is for aircraft (mostly RJs which already have financing in place).

There are no available lines of credit and little in terms of attractive unencumbered aircraft that could be used as collateral in secured financings. However, fully owned regional subsidiaries Comair and ASA are attractive assets that could be monetised.

On the positive side, Delta's credit facilities do not contain any negative covenants. Also, large portions this year's debt and pension obligations were already met in the first quarter. Fitch estimates that the impact was to reduce unrestricted cash to about \$2bn at the end of March but that further erosion this year is unlikely.

All eyes now focus on 2005, which is not looking good at all for Delta. Debt maturities, capex and pension funding will all be higher next year. In the absence of pilot concessions and after another winter season, the airline could face serious liquidity pressures in the spring of 2005.

By Heini Nuutinen

CUSTOMISED COMPANY AND MARKET BRIEFINGS

If you are interested in a briefing on a particular airline, airport, manufacturer, lessor or industry sector/market, *Aviation Economics* is able to produce in-depth reports customised to your requirements.

Contact: Keith McMullan, Tim Coombs or Justin Symonds
+44 (0)20 7490 5215
info@aviationeconomics.com

AIRCRAFT AND ASSET VALUATIONS

Contact Paul Leighton at AVAC (Aircraft Value Analysis Company)

- Website: www.aircraftvalues.net
- Email: pleighton@aircraftvalues.net
- Tel: +44 (0) 20 7477 6563 • Fax: +44 (0) 20 7477 6564

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 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%	7,577	5,058	66.7%	3,258	9,988
	Apr-Jun 03	576	581	-5	-3	-0.9%	-0.5%	7,932	5,427	68.4%	3,616	10,222
	Jul-Sep 03	702	623	79	41	11.3%	5.8%	8,380	5,911	72.5%	4,280	10,114
	Year 2003	2,445	2,456	-11	13	-0.4%	0.5%	37,614	26,061	69.3%	19,981	13,401
American	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
	Apr-Jun 03	4,324	4,237	87	-75	2.0%	-1.7%	68,678	51,095	74.4%		
	Jul-Sep 03	4,605	4,440	165	1	3.6%	0.0%	69,234	52,653	76.0%		
	Oct-Dec 03	4,391	4,618	-227	-111	-5.2%	-2.5%	66,541	47,622	71.6%		90,600
Year 2003	17,440	18,284	-844	-1,128	-4.8%	-6.5%	279,706	202,521	72.4%		96,400	
America West	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	
	Apr-Jun 03	576	559	17	80	3.0%	13.9%	11,223	8,854	78.9%	5,185	11,309
	Jul-Sep 03	592	542	50	33	8.4%	5.6%	11,365	9,068	79.8%	5,322	11,175
	Oct-Dec 03	563	551	13	7	2.3%	1.2%	11,265	8,508	75.5%	4,888	
Year 2003	2,255	2,222	33	57	1.5%	2.5%	44,880	34,270	76.4%	20,050	11,326	
Continental	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	
	Apr-Jun 03	2,216	1,978	238	79	10.7%	3.6%	30,847	24,841	75.9%	10,120	
	Jul-Sep 03	2,365	2,191	174	133	7.4%	5.6%	33,071	26,450	79.1%	10,613	
	Oct-Dec 03	2,248	2,232	16	47	0.7%	2.1%	31,528	23,789	74.9%	9,884	
Year 2003	8,870	8,667	203	38	2.3%	0.4%	139,703	104,498	74.8%	39,861	37,680	
Delta	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
	Apr-Jun 03	3,307	3,111	196	184	5.9%	5.6%	51,552	38,742	75.2%	25,969	69,800
	Jul-Sep 03	3,443	3,524	-81	-164	-2.4%	-4.8%	55,535	42,704	76.9%	27,059	70,100
	Oct-Dec 03	3,398	3,764	-366	-327	-10.8%	-9.6%	55,740	40,522	72.7%	26,514	70,600
Year 2003	13,303	14,089	-786	-773	-5.9%	-5.8%	216,263	158,796	73.4%	104,452	70,600	
Northwest	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
	Apr-Jun 03	2,297	2,370	-73	227	-3.2%	9.9%	34,434	26,322	76.4%	12,800	39,442
	Jul-Sep 03	2,556	2,410	146	47	5.7%	1.8%	37,476	30,491	81.4%	13,971	38,722
	Oct-Dec 03	2,407	2,419	-12	370	-0.5%	15.4%	34,413	26,732	77.7%	12,821	
Year 2003	9,510	9,775	-265	248	-2.8%	2.6%	142,573	110,198	77.3%	51,900	39,100	
Southwest	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
	Apr-Jun 03	1,515	1,375	140	246	9.2%	16.2%	28,796	20,198	70.1%	17,063	32,902
	Jul-Sep 03	1,553	1,368	185	106	11.9%	6.8%	29,296	20,651	70.5%	17,243	32,563
	Oct-Dec 03	1,517	1,406	111	66	7.3%	4.4%	29,439	18,771	63.8%	16,290	32,847
Year 2003	5,937	5,454	483	442	8.1%	7.4%	115,532	77,155	66.8%	65,674	32,847	
United	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
	Apr-Jun 03	3,109	3,540	-431	-623	-13.9%	-20.0%	51,692	39,809	77.0%	16,381	60,000
	Jul-Sep 03	3,817	3,798	19	-367	0.5%	-9.6%	56,726	45,500	80.2%	17,635	59,700
	Oct-Dec 03	3,615	3,750	-135	-476	-3.7%	-13.2%	55,709	42,823	76.9%	16,448	58,900
Year 2003	13,274	15,084	-1,360	-2,808	-10.2%	-21.2%	219,878	168,114	76.5%	66,000	58,900	
US Airways	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
	Apr-Jun 03	1,777	1,710	67	13	3.8%	0.7%	20,929	15,789	75.4%	10,855	26,587
	Jul-Sep 03	1,771	1,808	-37	-90	-2.1%	-5.1%	21,615	16,611	76.9%	10,584	26,300
	Oct-Dec 03	1,764	1,838	-74	-98	-4.2%	-5.6%	23,550	16,759	71.2%	13,507	26,797
Year 2003*	5,312	5,356	-44	-174	-0.8%	-3.3%	85,673	62,408	72.8%	44,373	26,797	
JetBlue	Year 2002	635	530	105	55	16.5%	8.7%	13,261	11,000	83.0%	5,752	3,823
	Jan-Mar 03	217	183	34	17	15.7%	7.8%	4,696	3,822	81.4%	2,011	4,005
	Apr-Jun 03	245	199	46	38	18.8%	15.5%	5,271	4,498	85.3%	2,210	4,475
	Jul-Sep 03	274	220	54	29	19.7%	10.6%	5,962	5,229	87.7%	2,414	4,650
	Oct-Dec 03	263	228	35	20	13.3%	7.6%	6,021	5,002	83.1%	2,378	4,892
Year 2003	998	830	168	104	16.8%	10.4%	21,950	18,550	84.5%	9,012	4,892	

*Note: US Airways' financial results are for the 9 months up to Dec 31, 2003. Operating statistics are for the full year.

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK. All US airline Financial Year Ends are 31/12.

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 YE 31/03	Year 2001/02	11,234	11,017	217	141	1.9%	1.3%	123,777	94,828	76.6%		70,156
	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
	Apr-Jun 03	3,442	3,453	-10	5	-0.3%	0.1%	31,888	23,736	74.4%		71,936
	Jul-Sep 03	3,715	3,598	117	56	3.1%	1.5%	35,255	27,544	78.1%		
Oct-Dec 03	3,933	3,855	78	35	2.0%	0.9%	33,380	25,329	75.9%		71,900	
Alitalia YE 31/12	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 YE 31/03	Year 2001/02	12,138	12,298	-160	-207	-1.3%	-1.7%	151,046	106,270	70.4%	40,004	57,227
	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
	Apr-Jun 03	3,023	2,957	59	-104	2.0%	-3.4%	34,962	25,102	71.8%	9,769	49,215
	Jul-Sep 03	3,306	2,980	333	163	10.1%	4.9%	35,981	27,540	76.5%	9,739	47,702
Oct-Dec 03	3,363	3,118	244	148	7.3%	4.4%	35,098	25,518	72.7%	8,453	46,952	
Iberia YE 31/12	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	
	Apr-Jun 03	1,348	1,265	83	60	6.2%	4.5%	13,516	9,982	73.8%	6,472	
	Jul-Sep 03	1,434	1,301	133	93	9.3%	6.5%	14,819	11,846	79.9%	7,073	
	Oct-Dec 03	1,475	1,443	32	44	2.2%	3.0%	14,621	10,815	74.0%	6,350	
KLM YE 31/03	Year 2001/02	5,933	6,018	-85	-141	-1.4%	-2.4%	72,228	56,947	78.7%	15,949	33,265
	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%	23,437	34,666
	Apr-Jun 03	1,621	1,483	-76	-62	-4.7%	-3.8%	17,261	13,077	75.8%		33,448
	Jul-Sep 03	1,878	1,537	152	104	8.1%	5.5%	18,905	15,874	84.0%		32,853
	Oct-Dec 03	1,838	1,609	36	10	2.0%	0.5%	17,969	14,378	80.0%		31,804
Lufthansa YE 31/12	Year 2001	14,966	14,948	18	-530	0.1%	-3.5%	126,400	90,389	71.5%	45,710	87,975
	Jul-Sep 02	4,431	4,254	454	369	10.2%	8.3%	32,409	25,189	71.1%	12,067	90,704
	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	
	Apr-Jun 03	4,423	4,214	209	-39	4.7%	-0.9%	30,597	22,315	71.7%	10,758	
	Jul-Sep 03	4,923	4,783	140	-20	2.8%	-0.4%	32,895	24,882		12,020	
	Year 2003	20,037	20,222	-185	-1,236	-0.9%	-6.2%	124,000	90,700	73.1%	45,440	94,798
SAS YE 31/12	Year 2001	4,984	5,093	-109	-103	-2.2%	-2.1%	51,578	31,948	64.6%	23,060	22,656
	Jul-Sep 02	1,821	1,587	233	56	12.8%	3.1%	12,240	8,590	70.2%	5,586	21,896
	Oct-Dec 02	1,984	1,826	158	-34	8.0%	-1.7%	11,689	7,308	65.6%	5,155	
	Year 2002	7,430	7,024	78	-15	1.0%	-0.2%	47,168	30,882	68.2%	21,866	
	Jan-Mar 03	1,608	1,654	-224	-188	-13.9%	-11.7%	11,169	6,551	60.9%	4,477	30,373
	Apr-Jun 03	1,906	1,705	201	8	10.5%	0.4%	12,278	7,855	64.0%	5,128	
	Jul-Sep 03	1,941	1,715	131	91	6.7%	4.7%	12,543	8,681	69.2%	8,301	34,856
Oct-Dec 03	1,910	1,797	113	-80	5.9%	-4.2%	11,931	7,344	61.6%	7,512	34,544	
Ryanair YE 31/03	Year 2001/02	642	474	168	155	26.2%	24.1%	10,295	7,251	81.0%	11,900	1,547
	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
	Apr-Jun 03	280	220	57	46	20.4%	16.4%			78.0%	5,100	2,135
	Jul-Sep 03	407	237	170	148	41.8%	36.4%				5,571	2,200
	Oct-Dec 03	320	253	67	51	20.9%	15.9%				6,100	2,356
easyJet YE 30/09	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	
	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	
Year 2002/03	1,553	1,472	81	54	5.2%	3.5%	21,024	17,735	84.1%	20,300	3,372	

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												
YE 31/03	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	
	Year 2001/02	9,714	9,529	185	-76	1.9%	-0.8%	87,908	57,904	64.7%	49,306	
	Apr-Sep 02	5,322	5,194	127	-69	2.4%	-1.3%	44,429	29,627	66.7%	25,341	
	Year 2002/03	10,116	10,137	-22	-235	-0.2%	-2.3%	88,539	59,107	66.7%	50,916	14,506
	Apr-Sep 03	5,493	5,362	131	186	2.4%	3.4%	32,494	19,838	61.1%	22,866	
Cathay Pacific												
YE 31/12	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
	Jan-Jun 03	1,575	1,672	-97	-159	-6.2%	-10.1%	26,831		64.4%	4,019	14,800
	Year 2003	3,810	3,523	287	168	7.5%	4.4%	59,280	42,774	72.2%	12,322	14,673
JAL												
YE 31/03	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												
YE 31/12	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	
	Year 2002	5,206	4,960	246	93	4.7%	1.8%	58,310	41,818	71.7%		
Malaysian												
YE 31/03	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
	Year 2002/03	2,350	2,343	7	89	0.3%	3.8%	54,266	37,653	69.4%		21,916
Qantas												
YE 30/06	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	3,429	3,126	303	200	8.8%	5.8%	50,948	40,743	80.0%	15,161	34,770
	Year 2002/03	7,588	7,217	335	231	4.4%	3.0%	99,509	77,225	77.6%	28,884	34,872
	Jul-Dec 03	4,348	3,898	450	269	10.3%	6.2%	50,685	40,419	79.7%	15,107	33,552
Singapore												
YE 31/03	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%	25,091	19,600	78.1%	3,972	
	Year 2002/03	5,936	5,531	405	601	6.8%	10.1%	99,566	74,183	74.5%	15,326	30,243
	Apr 03-Sep 03	2,411	2,447	-36	7	-1.5%	0.3%	22,380	17,773	79.4%	3,644	
	Oct-Dec 03	1,623	1,345	278	222	17.1%	13.7%	24,088	18,349	76.2%	3,875	

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 - Oct	305	125	430	315	142	457	887

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 - Oct	36	5	41	75	21	96	137

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 %
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
2003	210.7	136.7	64.9	215.0	171.3	79.7	131.7	101.2	76.8	497.2	390.8	78.6	742.6	551.3	74.2
Feb 04	15.7	9.5	59.2	15.5	11.1	71.6	11.4	9.0	79.6	39.6	30.4	76.9	58.2	41.8	71.7
Ann. chng	5.0%	8.3%	1.8	7.3%	7.1%	-0.1	8.6%	9.4%	0.6	8.2%	8.7%	0.3	7.6%	9.2%	1.1
Jan-Feb 04	31.9	18.2	56.9	32.2	23.6	73.3	23.3	18.4	78.7	82.0	63.3	77.2	119.9	85.7	71.4
Ann. chng	2.4%	5.8%	1.8	4.2%	6.0%	1.2	5.9%	5.5%	-0.3	5.8%	6.5%	0.6	5.0%	6.8%	1.2

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 %
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
2003	963.1	706.6	73.4	148.3	117.6	79.3	94.8	74.0	80.5	84.2	59.3	70.5	327.2	251.0	76.7
Feb - 04	78.0	54.6	69.3	11.1	7.5	67.7	7.8	6.3	81.8	7.8	5.5	69.8	26.7	19.3	72.4
Ann. chng	9.4%	10.0%	0.4	8.2%	9.1%	0.6	-2.1%	8.5%	7.9	19.9%	21.6%	1.0	8.0%	12.1%	2.7
Jan-Feb 02	161.0	108.5	67.6	230.0	162.5	70.7	161.2	134.0	83.1	160.4	114.1	71.1	551.5	410.6	74.4
Ann. chng	5.00%	5.90%	0.6	2.20%	6.30%	2.7	-4.40%	2.70%	5.8	14.90%	16.5%	1.0	3.5%	7.7%	2.9

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	Delivery	Other information/engines
Boeing	16 March	Air Europa	2x 737-800	05/05	
	30 March	Qantas	5x 737-800		
Airbus	30 March	Qatar Airways	1x A330-300		
	5 April	Independence Air	10x A319, 5x A320		
Bombardier	2 March	Delta	32x CRJ-200	2005	
Embraer	2 March	Delta	13x ERJ	2004	
	15 March	Chautauqua	16x ERJ-145	05/05	

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, April 2003

Aviation Economics

The Principals and Associates of *Aviation Economics* apply a problem-solving, creative and pragmatic approach to commercial aviation projects.

Our expertise is in strategic and financial consulting in Europe, the Americas, Asia, Africa and the Middle East, covering:

- Start-up business plans
- Turnaround strategies
- State aid applications
- Antitrust investigations
- Merger/takeover proposals
- Competitor analyses
- Credit analysis
- Corporate strategy reviews
- Market forecasts
- Privatisation projects
- IPO prospectuses
- Cash flow forecasts
- Asset valuations
- E&M processes
- Distribution policy

For further information please contact:

Tim Coombs or Keith McMullan

Aviation Economics

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

Tel: + 44 (0)20 7490 5215 Fax: +44 (0)20 7490 5218

e-mail:kgm@aviationeconomics.com

SUBSCRIPTION FORM

Please enter my Aviation Strategy subscription for:

- 1 year (11 issues-Jul/Aug combined)
@ £390 / €625 / US\$625,
starting with the _____ issue

(Discounts available for multiple subscriptions - please call for details)

Delivery address

Name _____

Position _____

Company _____

Address _____

Country _____ Postcode _____

Tel _____ Fax _____

e-mail _____

DATA PROTECTION ACT

The information you provide will be held on our database and may be used to keep you informed of our products and services or for selected third party mailings

I enclose a Sterling, Euro or US Dollar cheque, made payable to:
Aviation Economics

Please invoice me

Please charge my AMEX/Mastercard/Visa credit card

Card number _____

Name on card _____ Expiry date _____

I am sending a direct bank transfer of
£390 net of all charges to Aviation Economics' account: HSBC Bank
Sort code: 40 04 37 Account no: 91256904

Invoice address (if different from delivery address)

Name _____

Position _____

Company _____

Address _____

Country _____ Postcode _____

PLEASE RETURN THIS FORM TO:

Aviation Economics

James House, LG

22/24 Corsham Street

London N1 6DR

Fax: +44 (0)20 7490 5218