Issue No: 81

July/August 2004

Aer Lingus: boom instead of bust

A er Lingus, its management's thinking focused by having to share a home base with Ryanair, has achieved a remarkable turnaround from near bankruptcy, and now has by some way the highest profit margin of the AEA airlines. However, it remains 100% owned by the Irish state, a situation that the airline's top managers have suggested must change.

Aer Lingus has probably been the most aggressive of the European flag carriers in dealing with staff and the unions post September 11. Management and staff went through the process of receiving state aid ("one time - the last time") in 1993. The management message that "things must change or we go bust" has been fully taken onboard and the October 19, 2001 "survival plan" was fully embraced by all parties. A target to reduce costs by €190m (16%) was set and was to be achieved by:

• A 17% decrease in capacity (primarily transatlantic routes);

• Over 2,000 job losses (33%), including a 60% reduction in the management group;

- · Radical changes in work practices;
- · Pay freeze;
- · Stimulating traffic growth through lower fares

Although the €190m cost saving target was achieved, market conditions were worse than forecast - there was no recovery in premium traffic and a shift in the public's buying patterns towards the LCCs. As a result, a further cost reduction of €130m was announced in June 2002. This new plan not only embraced the concept of further cost reduction but also called for expansion. By removing 30%

AER LINGUS' FIN		ESULTS	
	2003	2002	2001
	€m	€m	€m
Turnover	888.3	958.6	1097.2
Op. costs	805.3	894.8	1149.3
Op. profit (1)	83.0	63.8	-52.1
Op. margin	9.3%	6.7%	-4.7%
EBITDAR Continuing Operations (2)	186.9	176.8	104.3
Net exceptional cost	-	-25.7	-104.1
Profit (loss) for the year	69.2	35.3	-139.9
Earnings (loss) per share (€cent)	27.1	13.8	-54.7

Notes: (1) Operating profit on continuing operations before employee participation. (2) Earnings before employee participation, interest, tax, depreciation, amorisation and aircraft rentals.

Source: Aer Lingus

www.aviationeconomics.com

CONTENTS

Analysis

Aer Lingus: the Europea flag carriers' benchmark	n 1-3
NetJets: dominating the fractional ownership mar	ket 3-5
Virgin America: does the US have room enough?	6-8
US regionals: restructuring ahead?	9-13
Briefing	
South Africa Airways: looking to the future	14-19
Databases	20-23
Airline traffic and financia	als
Aircraft available	

Regional trends

Orders



Aviation Economics James House, LG2, 22/24 Corsham Street London N1 6DR Tel: +44 (0) 20 7490 5215 Fax: +44 (0) 20 7490 5218 *e-mail: info@aviationeconomics.com*

Analysis

of its costs from 2001 to 2003, Aer Lingus was now able to play in the low-yield markets that it hadn't been able to enter before.

Most full service carriers are happy to benchmark against each other. Aer Lingus now benchmarks itself against easyJet and Rvanair. One of its largest cost savings has been in distribution, where it has recorded a €20 saving per passenger per sector. Worldwide sales on aerlingus.com have increased from 2% to over 50% with online sales accounting for 70% of all sales in Ireland. The "look-to-book" ratio has improved dramatically from 100:1 to 30:1, and now a target of 85% total online sales has been set (which will bring Aer Lingus near to the benchmark set by the LCCs). However many the similarities to the LCCs, Aer Lingus differentiates itself in four clear areas:

Contributing Editor Heini Nuutinen

Aviation Strategy

is published 11 times a year

by Aviation Economics

at the beginning of

the month

Editor: Keith McMullan

kgm@aviationeconomics.com

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 reponsibility 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. • Punctuality;

Professional, efficient and friendly customer service;

• "We won't leave you stranded";

• Product differentiators (seat allocations, use of primary airports, schedule and network).

Aer Lingus has been one of the very few flag carriers to realise that passengers are willing to pay only a small premium for travelling on Aer Lingus (rather than Ryanair or another LCC). The carrier has seen significant falls in its premium traffic (in the 80s and 90s high volumes of business traffic were carried - it was not unusual for the curtain on the Dublin-Heathrow route to be in row 25).

By 2003, Heathrow premium traffic had

fallen by 31%, UK provincial premium traffic by 11% and Continental premium traffic by 14%. Overall, in 2003 premium traffic fell by 24%, and this followed falls in 2002 of 18% and in 2001 of 10%. Recently, the decision has been made to remove Premier Class service from the majority of its 31 European short-haul routes, with the exceptions of Ireland-Heathrow services and the Dublin -Brussels, Amsterdam, Frankfurt, Manchester, Birmingham, Edinburgh and Glasgow flights, although Premier Class on these routes is likely to go by the end of the year.

The positioning of Aer Lingus as a lowfares airline continues successfully as the results for the full year 2003 prove: an operating profit of €83m (a 30% rise on 2002's €64m). The net profit for the year was €69m, a 96% gain on 2002. During 2003 Aer Lingus achieved a further cost reduction of €89.5m, adding to a cumulative reduction since 2001 of €344m. Some of these reductions have come in the following areas: fuel costs down 31%, airport charges 28%, aircraft hire 51%, maintenance 12%, distribution 56%, miscellaneous DOCS 49%, staff costs 21%, overheads 36% and depreciation 21%. The change in business model from 2003 versus 2001 includes a decline in overall capacity of 6%, with traffic up 7% and passenger load factor up 11 percentage points. This comes with a decline in average yield of 23% and a 35% fall in costs per RPK.

Operationally, Aer Lingus' passenger numbers were up 6.2% to 6.6m and passenger load factor rose to 81%. It was a record year for transatlantic passengers with 1.1m flown,



Analysis

an increase of nearly 20% on the year before. These figures continue to be constrained by existing Irish/US bilaterals, which restrict operations to five destinations in the US. The geographical split of Aer Lingus' revenues is as follows: Ireland - US (37%), Ireland -Continental Europe (32%) and Ireland - UK (31%).

Agreements have been made with Airbus, ILFC and CFM that will mean 17 A320s (seven direct from Airbus and ten leased from ILFC) will be added to the existing fleet of six A321s and four A320s and therefore by the end of 2005, Aer Lingus will operate a homogenous, all-Airbus, European fleet. There are opportunities to grow long haul operations and a review of the long haul fleet is underway. Any further addition to the seven A330s in the existing fleet will come only with increased profitability and cash generated from operations. Aer Lingus achieved an operating margin of 9.3% in 2003, although good relative to its peers, CEO Willie Walsh says "we are significantly underperforming our main competitor in Europe [Ryanair] ... we have set ourselves a medium term target of a 15% operating margin. Competition within the European market is intense and we anticipate further low cost competition on key routes".

MBO on the horizon?

Earlier in July, an offer was made by Willie

AER LINGU	S VERSUS	S RYANAIR	
	Ryanair	Aer Lingus	RATIO FR/EI
Passengers (m)	23.13	6.60	3.5
Revenues (€m)			
Scheduled	925	730	1.3
Ancillary/Other	150	158	0.9
Total Revenues	1,074	888	1.2
Operating Costs (€m)	803	805	1.0
Operating Profit (€m)	271	83	3.3
Operating Margin	25.2%	9.3%	2.7
Average Fare (€)	39.97	110.69	0.4
Source: Aer Lingus			

Walsh, CFO Brian Dunne and COO Seamus Kearney, which could lead to a management buyout (MBO). The three have asked permission from the Irish government to approach private equity houses with a view to organising an MBO of the airline. The Irish government has the legislation in place to allow a privatisation of the airline but has yet to make a formal decision regarding its ownership of the carrier. Its attitude towards privatising Aer Lingus may centre round these issues: a reluctance to upset the unions; the fact that the Irish economy is doing very well and tax revenues are buoyant so it doesn't need additional privatisation income; and a residual concern about maintaining, under all circumstances, the services to the Irish diaspora in the US.

NetJets: dominating the fractional ownership market

NetJets, the biggest player in the fractional game by a wide margin, although only at times profitable in the US, is building up its fleet to an unassailable position. Warren Buffet, through Berkshire Hathaway, owns NetJets and is confident on a return in his investment. The fleet in Europe will soon be in a position to deliver the fastest, most reliable service at a competitive price.

NetJets Europe (part of NetJets Inc.) has also taken over control of sub-fractional members club Marquis Jet Europe (MJE). MJE was established three years ago by private UK investors alongside funding from its US parent Marquis Jet, in order to sell smaller chunks of NetJets' fractions to European customers. MJE's European operation was lagging behind the US operation, which was selling around 100 of its 25-hour cards per month. Ten additional sales directors will be hired in order to successfully bring onbard 250 extra customers per year.

As the operation is now in-house, NetJets Europe has branded the product the "NetJets Corporate Card" which allows users to buy 25 hours of flight time on a Citation Bravo for €115,000. Customers wanting more than 25 hours can buy extra hours in 5-hour incre-

Analysis



ments, with no upper limit. Prices escalate by aircraft size, 25 hours in a Citation Excel is \in 170,000, in a Dassault Falcon 2000 the price is \in 271,000 and for longe-range flying in a Gulfstream V the price is upwards of \in 340,000. This new service is a complementary product to the existing fractional-ownership programme run by NetJets Europe.

Netjets Europe will take delivery of 20 new aircraft this year, which will take its fleet to a total of 60. Last December, in the US, NetJets Inc. placed an order for 50 new Hawker 400XPs (plus 50 options) and eight Hawker800XPs to be delivered to their fleet of almost 400 aircraft. In February, NetJets signed a 10-year maintenance agreement with Raytheon, ordered two Hawker 800XP jets and signed a contract on options for Hawker 1000, Hawker 800XP and Hawker 400XP jets. If all options are exercised, the transactions are valued at more than \$1 billion, Raytheon officials said. At the end of June, NetJets Inc. bolstered its worldwide operations by signing a contract with Raytheon for 20 Hawker 800XP mid-size business jets and 20 Hawker 400XP light business jets. Total value of the contract will exceed \$300 million. The Hawker 400XPs and 800XPs will be based in Europe and the United States. The 40 aircraft will be delivered in the 2005-07 timeframe.

Moody's recently revised the outlook for Raytheon's debt ratings to "stable" from "negative," citing the company's improved cash flow as its defence business flourishes and its aircraft business improves. Moody's outlook revision comes after Raytheon announced that NetJets Inc. had placed its latest, large order for 40 aircraft.

Flight services, the segment of Berkshire Hathaway's holdings that is made up of FlightSafety (aviation training) and NetJets, earned revenues of \$739m in the first quarter of 2004, compared to \$548m in the first quarter of 2003, a rise of nearly 35%. This revenue included an \$182m (45%) increase in aircraft sales and flight operations revenue at NetJets, and \$9m (7%) in revenue at FlightSafety, which was primarily attributed to a 10% increase in simulator usage over the period. Revenues for 2003 fell to \$2,431m from \$2,837m in 2002. The decline in revenues was split between FlightSafety (about \$96m) and NetJets (about \$310m).

This decline in revenues at NetJets was due to a reduction of revenues from sales of

NE	TJET'S I	FLEET
Model	Current	Order Backlog
125-1000	9	
125-1000A	10	
125-1000B	3	
125-800XP	31	
737-200	1	
737-700BBJ	5	
Citation	132	12
Citation VII	13	
Citation X	69	11
Citation ENCORE	10	
Falcon 2000	31	
Gulf 4SP	33	
Gulf 5	8	
G200	8	
King Air B200	1	
Total	364	23
Note: Fleet as at end Source: ACAS	June 2004	

Analysis

aircraft of \$514m, partially offset by increased flight services and other revenues of about \$204m. Pre-tax earnings from Flight services were \$72m in 2003 as compared to \$225m in 2002. The results for 2002 had included a gain of \$60m from the sale of a partnership interest to Boeing and the results for 2003 include the recognition of pre-tax charges of \$69m related to write-downs of certain simulators and aircraft inventory. Excluding this gain and write-down, "normal" earnings from these businesses were \$141m in 2003 versus \$165m in 2002. The reduction in combined pre-tax earnings from Flight services is due to reduced pre-tax earnings at FlightSafety of \$34m, which is somewhat offset by improved results at NetJets, where its pre-tax loss before write-downs was \$9m in 2003 versus about \$19m in 2002.

Competition in Europe

In June 2002, PrivatAir began operating six-days a week, non-stop flights for Lufthansa between Dusseldorf and New York's Newark airport on a 48-seat BBJ under an ACMI contract. In 2003, PrivatAir acquired two new A319LRs to operate similar point-topoint services for Lufthansa between Munich-Newark and Dusseldorf-Chicago. PrivatAir's latest venture in this field will be starting in January of 2005. It will begin to operate a 56seat BBJ on behalf of Swiss International Airlines, providing direct non-stop flights between Zurich and Newark. Much as for the services operated for Lufthansa, the route will be served six days a week, with one day a week being reserved for maintenance.

Bombardier **Flexjet Europe** launched, in May of this year, what is believed to be the first fixed-price business jet charter service between Europe and US. The "Transatlantic Express" will use the Global Express fleets of Flexjet's European operating partners including ExecuJet and TAG Aviation. The service will be pitched against NetJets Europe, which operates its fractionally-owned transatlantic programme using Gulfstream GIV-SPs, GVs and, from September, Dassault Falcon 2000EXs. According to the Bombardier Flexjet quarterly newsletter, the "Transatlantic Express" flight from western Europe to the US East Coast will cost a fixed €150,000 (around \$186,000) return. The aircraft seats ten and if full the return ticket would cost around £10,000 per person.

"Following Concorde's retirement last year, we have received overwhelming demand to develop a similar solution to cross the Atlantic, faster than today's scheduled services," says Judith Moreton, MD of Flexjet Europe. The long-range Global Express provides access to a significantly larger number of airports, such as Teterboro, where the Airbus Corporate Jetliner and Boeing BBJ, used by the airlines, are not permitted to operate, Moreton adds.

Another company looking to plug the post-Concorde gap is **ExecuJet**. The business aviation services company aims to double its management of Bombardier Global Express long-range business jets in Europe over the next three years. ExecuJet Europe's managing director Peter Smales expects "great demand" over the next few years. He said: "We have come out of a difficult [trading] environment and we expect a sudden massive upswing in demand for the long range of this aircraft and, due to the long lead time for new orders, much of this demand will be satisfied by charter activity".

ExecuJet plans to add four Bombardier Global Express jets to their bases in Copenhagen and Zurich by 2007. Also, as the company expands into central and eastern Europe, ExecuJet Europe expects to add two Learjet 40s, two Learjet 45s and two Learjet 60s over the next two years.

Schemes such as the Bombardier Flexjet Jet rely on members like Aero-Dienst GmbH & Co. KG, Daimler Chrysler Aviation GmbH, Eurojet Italia, ExecuJet Scandinavia AS, ExecuJet Switzerland, Gold Air International Ltd., Jet Connection Businessflight AG, TAG Aviation S.A., GAMA Aviation Ltd. (All of these European operators have a combined active fleet of 88 aircraft, ranging from four at Jet Connection Businessflight AG to 18 at TAG Aviation). NetJets (with a fleet of 364, and almost 60 of these in Europe) seems to be well placed to see off the competition.



Is there room for Virgin America?

Following the June 5 announcement of plans to launch a Virgin-branded lowcost airline in the US next year, Sir Richard Branson and his US team provided further details of the venture in the subsequent weeks. While Virgin America has yet to disclose its business plan, here is *Aviation Strategy's* initial assessment of the strategy that is emerging.

As the most concrete sign of its intentions, Virgin has signed agreements to buy or lease up to 105 A320-family aircraft. It has placed a firm order for 18 aircraft from Airbus (11 A319s and seven A320s), plus 72 options, and arranged to lease 15 A320s from GECAS. This is a departure from the Boeing fleets of the two existing Virginbranded LCCs (Virgin Express in Europe and Virgin Blue in Australia). Pricing is not believed to have been a deciding factor in this extremely hotly contested deal; rather, like JetBlue, Virgin appears to have been attracted by the A320's wider cabin and modern design features - facilitating the highest possible standards of passenger comfort.

As of July 10, there had not yet been any news about a second aircraft type. It is worth noting that Virgin America executives have referred to the A320 as "the backbone of the fleet", rather than a single type. Some months ago Branson reportedly indicated that there could be an order for about 20 regional jets from Embraer or Bombardier.

An RJ order would mean Virgin America copying JetBlue's latest strategy of also going for smaller markets. Last year JetBlue ordered 100-seat Embraer E190s (100 firm plus 100 options) from mid-2005. A similar decision by Virgin would help validate a strategy that many still regard as questionable for LCCs. However, Virgin may well delay such a decision, because it will have more than enough on its plate with the launch of the A320 operations.

The A320 deliveries are due to begin in

early 2005, suggesting a planned start of operations in the spring of 2005. The schedule is ambitious, given that the venture has yet to secure start-up funding from US investors and begin the certification process. It is possible that, like other companies needing government approval for mergers and other transactions, Virgin America will wait until after the November presidential election before filing its business plan.

Virgin America has been headed by former Delta president/COO Fred Reid since April. The rest of the senior management, introduced in mid-June, look like reasonably seasoned executives drawn from all over the US airline industry. The CFO, Bob Dana, was previously an investment banker with US Bancorp Piper Jaffray and Credit Suisse First Boston.

Everything points to a relatively normal new-entrant growth rate, certainly nowhere near JetBlue's dizzying pace. The venture anticipates having a 3,000-strong workforce within five years; although that is probably a very preliminary figure (meant as a rough estimate of job creation), JetBlue reached that level in about half that time (within 2.5 years, with about 25 aircraft).

East Coast/West Coast split

The biggest surprise so far has been Virgin America's decision to split its bases between the two coasts. The airline will have San Francisco as the principal base of operations ("Ops HQ") and New York as its corporate headquarters ("Airline HQ"). It will be "the first and only airline with its principal operations based in California" and "the only airline to call Manhattan home".

A cynic might suggest that this is some kind of a strange compromise between where the best market opportunities are (West Coast), where the airline wants to operate (East Coast) and where the man-

Analysis

agement wants to be (New York). However, Virgin America claimed that its "dual approach" would create operational efficiencies and provide a foundation for an innovative business model.

It does seem appropriate that a Virginbranded carrier - an overseas franchise would focus on two of the country's largest travel markets. The original shortlist had also included Boston, Los Angeles, Philadelphia and Washington/Dulles. The company made the point that "culturally, New York and San Francisco reflect the Virgin brand's fun, dynamic style, making them both ideal places for us to recruit creative, skilled employees".

Financial incentives

The strategy will probably enable the airline to make the most of the financial incentives offered by state and city authorities. California and San Francisco have promised it \$15m-plus and New York state and city \$11m-plus in hard and soft grants and incentives, including employment training grants, cooperative marketing and tax and energy cost reductions.

However, Virgin America will need all of those savings because New York and San Francisco are expensive cities. There is a reason why no airline calls Manhattan home: it is horrendously expensive. Also, having it as a base would fly against the value-formoney image that even the most up-market LCCs strive to project. JetBlue, which has set new standards in product and service quality and is building a "cult following", has its HQ in the modest Forest Hills section of Queens.

It is easy to see that a flashy Manhattan HQ would go with Virgin's flamboyant and trendy image and could be exploited with advertising to quickly build customer awareness. However, that kind of image is outdated, very 80s and certainly not fresh (the common goal of Virgin companies is "to offer something better, fresher and more valuable to the consumer under a single brand"). Or perhaps Virgin America will surprise by obtaining office space in Harlem? Of course, like other new-entrant LCCs, Virgin America should be able to obtain a low cost structure by employing a young workforce and having flexible work rules.

The venture is expected to be a highfrills, up-market operation. Executives from Virgin USA (the group's US business development and management arm) have described the likely product as "sexy" and "JetBlue-plus". According to a press release, the airline would be "obsessed with customer service and flawless execution".

Virgin's challenges

One of the challenges faced by Virgin America's US management team is adapting the essentially UK brand to US tastes. That may mean cutting out the extremes of tackiness (a recent experiment with urinals in the shape of red lips in men's bathrooms at JFK put off many US-based customers). That said, Virgin has built a formidable reputation with its transatlantic service, and experience in the US has shown that there are potentially many different successful domestic LCC models.

One potential problem with the separation of headquarters from the operations base by such a distance is that it will not facilitate easy contact between management and employees - something that carriers like Southwest and JetBlue regard as vital for staff morale and work standards. JetBlue's CEO David Neeleman likes to say that he personally meets every single employee. And Virgin America was earlier reportedly seeking a "campus-like setting".

It can be taken for granted that Virgin America will have a major presence on the New York-San Francisco route. The problem with the transcontinental market generally is that it has become the nation's hottest bastion of competition, seeing a 31% year-overyear increase in daily flights this summer. The excess capacity has resulted in dismal yields. There is no relief in sight because the markets are so important for the legacy carriers and LCCs alike.

The probable reason Virgin America has chosen to build its initial base in California is that the West Coast aviation environment

Analysis

currently looks more welcoming than the East Coast. Alaska Airlines has consistently outperformed its peers on the yield front in recent years. In a June 30 research note, JP Morgan analyst Jamie Baker noted that yields in the West Coast Corridor (California-Northwest) have increased by 25% since late 1997, compared to an overall domestic decline of roughly 15%. This was despite very similar capacity trends in that period.

This does not reflect lack of competition in the West - it is Alaska's home turf, plus Southwest, America West, United and American all have a big presence there - but rather a much lesser degree of new competitive activity than in the East. While historically air fares have been the lowest in the West and the highest in the East, in the past five years LCC growth has focused on the East - the rise of JetBlue and AirTran, Southwest's expansion, etc. All of that has put significant pressure on fares in the East, with new Southwest and JetBlue markets seeing 30-50% reductions.

Furthermore, the competitive situation in the East is going to get worse, with the legacy carriers fighting back, Southwest expanding in Philadelphia, JetBlue growing rapidly all over the region and Independence Air and United starting a major battle in Washington/Dulles. If US Airways disappears, its routes and assets will be quickly snapped up by competitors.

Therefore Virgin America may well focus its initial efforts on north-south flying along the West Coast, while keeping an eye on East Coast developments in the hope of spotting an entry opportunity there at some point. North-south flights in the East would be highly desirable given that Virgin Atlantic operates transatlantic service to many cities in that region. With headquarters in New York, Virgin America would be well positioned to develop corporate accounts in the East that would also strengthen its transcontinental service.

Virgin America will have to be majorityowned and operated by US nationals - the law allows non-nationals to hold a maximum of 49% of equity or 25% of the voting power. The Bush administration is ready to relax the rules, but Congress is unlikely to budge because of pressure from labour groups and concerns about aviation security.

Therefore Virgin America will have to raise significant capital from US investors. The airline was earlier believed to be targeting around \$300m in total start-up funds; if so, the US investors' share would be over \$150m. On the positive side, the markets are flush with cash; on the negative side, the airline sector is not popular.

Potential investors will be interested in how the existing Virgin LCCs are performing. Branson's track record in that respect is mixed. Virgin Blue completed a hugely successful IPO in Australia in December, but Virgin Express' performance has been disappointing (*Aviation Strategy*, April 2004).

Virgin America will probably succeed in raising the start-up funds, based on the group's success and Virgin being a respected global brand, but it will still need a solid business plan to convince investors.

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 or Tim Coombs +44 (0)20 7490 5215 info@aviationeconomics.com

US regional airlines: restructuring ahead for the sector?

fter a decade of extremely rapid RJ growth and continued healthy profits in the post-September 11 environment, the US regional airline sector has encountered turbulence. Profit margins are declining and there is uncertainty about growth prospects. One key player (Atlantic Coast) has already defected to the low-cost carrier (LCC) camp. Because of the major airlines' continued cost cutting and impending hub retrenchment, as well as likely industry consolidation, the regional sector may see its own significant restructuring over the next few years. What options do the regionals have? Which airlines will remain tied to the major carriers and which will take the LCC route?

It was not supposed to be like this. Regional airlines were supposed to be significant beneficiaries of their partners' restructuring. Demand for RJs accelerated in the aftermath of September 11, as United and other large network carriers scrambled to deploy more 50-seat RJs to replace mainline jets in markets were traffic had declined. The RJ was set to play a key role in aiding legacy carriers' financial recovery, whether in or out of bankruptcy.

Regional airlines were poised to continue to thrive also because of the protections afforded by their "fixed-fee" or "fee-perdeparture" contracts with the major carriers. Previously regarded as the industry's safest and most predictable business model, the fixed-fee agreement eliminates risk associated with fuel prices, load factors and fares, and guarantees profit margins.

The long-term agreements were designed to give regional airlines - particularly the largest ones like Mesa and SkyWest (and formerly ACA) - the earnings stability they needed to finance significant RJ expansion. All in all, those airlines looked like they had got it made, thanks to their ability to finance aircraft and provide low-cost, right-sized lift.

As many as three US regional airlines

have gone public since September 11 (though some raised less than expected and their post-offering stock performance was poor). As part of their long-term plans, Continental and Northwest spun off regional subsidiaries ExpressJet (April 2002) and Pinnacle (November 2003). Earlier this summer, Wexford Capital, owner or manager of funds that control Chautauqua and Shuttle America, completed an IPO for Republic Airways Holdings. That is a new holding company for Chautauqua (which operates 50-seat RJs for AMR, US Airways, Delta and United) and Republic Airline, a new carrier scheduled to begin 70-seat RJ operations for United in October.

Even though many regional airlines continue to post healthy profits and grow rapidly, the outlook for the sector has worsened considerably in the past 18 months or so. Much has happened that points to structural change, but there would appear to be two key catalysts: UAL's Chapter 11 strategy regarding regional partners (from spring 2003) and a new round of cost cutting and hub retrenchment by the legacy carriers (from autumn 2004, following this year's fuel price hike).

UAL's actions were significant in that they showed that the fixed-fee model does not work so well when a major carrier is in financial trouble. UAL had been expected to leave alone the United Express contracts, but it chose not to as it was under significant pressure to cut costs. Its Chapter 11 status enabled it to reject the long-term agreements and demand new ones that incorporated rate reductions.

The new contracts meant reduced profit margins for the regional carriers. Some of the airlines also complained that the economic terms would deteriorate over time or that they were offered shorter contracts than they were comfortable with.

In addition to imposing tougher contract terms, the major carriers now also increas-

Analysis

ingly encourage competition - or "play one regional against another", as ACA noted when it walked away from United Express. Last year both Delta and Northwest invited bids from a large number of operators for new RJ flying, after previously allocating growth to old-established partners.

Such policies have made life harder and created additional uncertainty for the oldestablished regionals, but they have meant growth opportunities for new or smaller airlines. Over the past year, Trans States, Chautauqua, Republic and Shuttle America have been signed up as new United Express partners, Mesa has been brought back and Air Wisconsin has had its RJ agreement expanded (all of that mostly to replace ACA, which reinvented itself as Independence Air in June). The Republic IPO, which had been on hold for more than two years, may have been possible only because of the new United Express EMB-170 contract secured in March.

If the United Express changes caused much hassle and turmoil, a new round of cost cutting and retrenchment by the majors could have serious repercussions for RJ growth opportunities over the next few years. This will especially be the case if the legacy carriers end up closing many smaller hubs, where they currently rely extensively on RJs. A liquidation of a major carrier, such as US Airways, would of course have dramatic impact in terms of creating overcapacity in the regional sector.

Profit outlook

The industry-wide shift from revenue sharing to fixed-fee contracts in the late 1990s meant a reduction in regional airline operating margins from typically 16-20% (or over 20% in some cases) to 10-14%. The regionals were happy to obtain a lower but stable and predictable earnings stream, but they had been under pressure to do so because the majors wanted control of their partners' capacity and fares.

Since September 11, operating margins have typically declined by another 4-5 percentage points (mainly due to contract revisions), with 10% being currently the typical target in fixed-fee contracts.

There is variation in trends, depending on individual airlines' circumstances. While SkyWest and ExpressJet are in the process of moving down from 14-15% margins to the 10% level, Mesa is actually moving up from 5-7% margins in 2002 and 2003 to 8-9% this year (it has traditionally accepted lower margins, in addition to being one of the lowest-cost producers).

If profitability is the criteria, the regional sector is still a very good place to be in. The first-quarter 2004 operating margins of SkyWest (13.7%), ExpressJet (13.4%) and Mesa (8.6%) compare very favourably even with the margins of the most profitable LCCs - JetBlue (11.3%), AirTran (4.3%) and Southwest (4.1%). And of course, ACA, which achieved 11-12% margins in 2002 and 2003 as a regional airline, is now going to plunge into losses for at least two years as an LCC.

The problem is that the regional airline margins may come under renewed scrutiny when the legacy carriers return to serious cost cutting, which is expected this autumn. It will be tough for the majors to find additional savings, so regional airlines (along with lessors, lenders and other partners) may again have to contribute.

In a recent research note, JP Morgan analyst Jamie Baker mentioned the possible scenario of US Airways disappearing and, as a result, Mesa and Chautauqua having significant excess RJ capacity. As those two are currently the lowest-cost producers, they could "siphon opportunities tentatively held by ExpressJet, Pinnacle and SkyWest, or at a minimum cause those operators to reexamine their departure rates (yet again)". Baker suggested that this could mean another 5-percentage point reduction in operating margins.

It would still be a profit, but it might be unacceptable from the aircraft financing perspective. Even at the current 10% margins albeit also with much uncertainty associated with major carrier bankruptcies - regional airlines have found it tough-going to secure permanent financing for all of their RJ deliveries.

Analysis

Growth prospects

Like LCCs, US regional airlines have significantly increased their market share since the early 1990s (the start of the regional jet revolution) and particularly since September 11. According to Bombardier, the sector's domestic passenger share surged from 9% in 1990 to 13% in 2000 and by another three points to 16% in 2002. (In terms of domestic ASMs, the regionals' share is less than 10%.) Between April 2000 and April 2003, RJ seat capacity doubled, while major carriers' domestic narrowbody seat capacity fell by 23% and LCCs' seat capacity rose by 31%. RJs now account for about one quarter of the US domestic fleet.

The widely held view is that demand for 50-70 seat RJs will continue to grow strongly in the short term (for a few more years) but that after that the RJ market will saturate. But there is considerable disagreement as to when that point might be reached.

The still-significant RJ firm order backlog certainly indicates continuation of strong growth for the sector for a couple of years. In a mid-June research note, Merrill Lynch analyst Mike Linenberg predicted capacity growth of 22.3% in 2004 and 20.1% in 2005 for the regional sector (including the majors' fully owned subsidiaries).

However, what will happen beyond the two-year time horizon is anyone's guess. A major carrier liquidation or hub eliminations by several carriers could bring the RJ saturation point much closer than previously envisaged. Smaller networks need less feed.

The current RJ growth spurt was made possible by the relaxation of scope clauses as part of renegotiated pilot deals, particularly at United and US Airways. However, nearterm prospects for additional loosening of scope are not encouraging. Baker made the point that while bankruptcy could pry open scope, a near-bankruptcy situation - such as that faced by Northwest and Delta - may do the opposite. This is because the airlines will need to maximise wage savings, and reigning in RJ flying could help. The future will see more competition for RJ flying and no guarantee of growth opportunities. The best-positioned regional airlines are the lowest-cost producers and those linked to solvent partners (no airline currently meets both those criteria), as well as those able to finance RJs.

Mesa is expected to see the sector's fastest growth rates over the next few years (ASM growth could be 68% this year), largely thanks to expanded service with US Airways. However, there is now significant risk of US Airways having to return to Chapter 11 and not making it through this time. The other key partners - United and Delta - are in or near bankruptcy, respectively. But Mesa is still considered well positioned for growth thanks to its low cost structure and apparent ability to finance aircraft.

While SkyWest should achieve 25-30% annual ASM growth in 2004 and 2005, beyond that it has not got significant RJ growth lined up. Its main partners, United and Delta, are struggling and it is very keen to secure new partners. Its main strength is ability to finance aircraft (based on an extremely strong balance sheet), but it may have to work on its cost structure.

ExpressJet has 15-20% annual ASM growth lined up in 2004 and 2005 with its sole partner Continental, but beyond that it has only eight RJs on firm order. It has come a long way - the world's largest operator of RJs, with 229 in the fleet at the end of March. The problem is that Continental is not considering additional RJ growth - in early 2003 it actually deferred RJ deliveries, rather than parking mainline aircraft. With a not too exciting cost structure, ExpressJet faces a challenging future. It is believed to be trying to come up with a new business plan this summer.

Pinnacle is poised for extremely strong growth in the next two years (possibly 54% this year), having been Northwest's favoured partner in terms of RJ allocation in the long lead-up period to the IPO. However, there are no firm deliveries scheduled beyond 2005. When initiating coverage of Pinnacle in March, UBS analyst Robert Ashcroft suggested that once some Northwest cost allocation problems are solved, Pinnacle will

Analysis

have a low-enough underlying cost structure to attract non-Northwest business.

Mesaba's future looks uncertain because it has not placed any RJs in service for four years. One reason may have been earlier labour problems. The airline continues to operate Avro RJ85s for Northwest.

Republic Airways will grow extremely rapidly this year and in 2005, as Chautauqua expands its 50-seat RJ fleet (it had 83 RJs at the end of March) and Republic Airline launches EMB-170 operations. However, like most other US regionals, the company has no commitments beyond 2005. That said, Chautauqua/Republic is believed to have the regional sector's lowest cost structure. It is therefore well positioned to capture new business.

Move to larger RJs?

While the 50-seat RJ will continue to play a major role (after all, 66% of the US domestic markets have less than 100 daily passengers), cost pressures have meant that regional airline growth will increasingly focus on larger RJs. In the first place, it will mean 70-seaters. But the best-positioned carriers will be those that also get the opportunity to operate 90-seat or larger RJs.

Mesa leads the pack also in that respect. Although Baker noted in an earlier report that it has not yet ordered "the ultimate killer app - the Embraer 190", 70-seat and 90-seat CRJs constitute two-thirds of its order backlog. Baker estimated that Mesa's 90-seat CASM (adjusted for all-coach configuration) is within 0.3 cents of the slightly larger EMB-190 and a full 3 cents superior to the 50-seat RJ.

The 90-seat RJs will be important not just to reduce costs-per-ASM but because they will open up a new world of opportunities for regional airlines, including independent LCC-type operations. As is well known, JetBlue identified 900 potential low-fare markets suitable for the 100-seat EMB-190 (markets with daily volumes of 200-500 oneway passengers).

Mesa is lucky in being able to introduce the 90-seat RJs at America West, where

N	IESA'S F	FLEET
Model	Current	Order Backlog
145LR	36	
1900D	41	
CRJ-200ER	16	
CRJ-200LR	34	
CRJ-701ER	15	
CRJ-900	21	24
DHC8	14	
Total	177	24

SKYWEST'S FLEET

Model	Current	Order Backlog
120ER	55	
120RT	25	
CRJ-100ER	16	
CRJ-100LR	5	
CRJ-200LR	90	10
CRJ-701ER	5	27
Total	196	37

Source: ACAS, fleets as at end June 2004

there are no scope clause restrictions. Otherwise, scope clause trends in respect of larger RJs are not encouraging. American's revised pilot contract placed 70-seaters at the mainline. While United's early 2003 contract allowed 70-seaters for the first time, it requires regional partners to offer some of the jobs to furloughed mainline pilots. US Airways has a similar "jets-for-jobs" programme.

The potential problem at Northwest and Continental is that, with their large DC9-30 and 737-500 fleets respectively, they may certainly want to operate the largest RJs themselves.

Future structural changes

US regional airlines have basically four potential strategic options: remaining in fixed-fee feeder operations for the majors, merging with other regional airlines, linking up with LCCs or becoming LCCs themselves. Of course, those basic strategies could be combined in a number of ways - the most obvious one would be a hybrid regional/LCC.

Analysis

The companies most likely to stay in the fixed-fee feeder business are the lowestcost producers (in a sector full of low-cost producers), as well as those that do not harbour ambitions about operating 90-seat aircraft. Republic may be the first of a new breed of regional airlines that are super-efficient, with 70-seat RJ fleets right from the outset and the lowest labour costs, and welldiversified in terms of partners.

Mesa's unsuccessful hostile bid for Atlantic Coast late last year highlighted some potential benefits from regional airline mergers - better earnings, access to new partners and improved ability to finance aircraft. However, the majors are not keen to see their regional partners grow too large. The downside was illustrated by the difficult UAL/ACA breakup - the two were just too dependent on one another, with ACA providing 40% of United's regional lift and United Express accounting for 85% of ACA's revenues.

Extensive regional consolidation is unlikely because sector dynamics favour diversification and multiple partners on both sides. In any case, it would have to be on the majors' terms because feeder contracts essentially give them veto powers over partners' mergers. That said, regional airlines are expected to pursue aviation-related acquisitions on an opportunistic basis, because many of them hold significant cash reserves.

Links between regional carriers and LCCs would seem logical but are not likely on a major scale in the foreseeable future. This is because most LCCs do not like the economics of 50-70 seat RJs and, like JetBlue, would probably prefer to operate 90-100 seaters themselves (rather than pay a profit margin to a regional). However, there are likely to be small-scale opportunities, as illustrated by the Frontier-Horizon CRJ-700 codeshares.

Independent operation as an LCC is a potentially attractive option for many regional airlines, which already have the key LCC attributes (low-cost, efficient, lean and nimble). They also have the balance sheets and resources to fund the transition. As LCCs, they could operate the largest RJs and be in full control of their capacity, fares and schedules. There are significant growth opportunities in the LCC sector.

However, there are contractual impediments to either shedding feeder commitments or continuing as a feeder while introducing some large jet service. For example, Northwest's and Delta's mainline pilot contracts prohibit the use of regionals that also operate large jets. That is a pity because a gradual, multi-year transition from regional to LCC might appeal to the airlines more than an ACA-style abrupt switch.

While most of the airlines now include the LCC option in their contingency planning, Mesa is by far the most likely candidate. Its provisional plan calls for 737 operations out of Pittsburgh in the event that its largest partner US Airways disappears. While SkyWest has continued to insist that it will stick with feeder operations, analysts point out that both of its partners (United and Delta) will shrink and that it may not find new partners. Jamie Baker suggested that it should exit the Delta programme and go independent with EMB-190 operations on the West Coast, where the competitive environment is less harsh than in the East.

All of this means that the US regional sector is likely to become more diverse, with feeder service being provided under different business models. This is in refreshing contrast with the previous trend - the late 1990s switch to fixed-fee contracts - which made the sector homogenous and rather boring.

By Heini Nuutinen

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*

Briefing

SAA looks to future after hedging crisis

South Africa Airways (SAA) has undergone a roller coaster ride in the last year, after reporting a record operating profit yet becoming technically insolvent after a hedging strategy went disastrously wrong.

South Africa's flag carrier was established in 1934 and currently operates to more than 20 destinations in Africa and 40 in the rest of the world. Transnet - the South African government's transport holding company - owns 95% of SAA, and the airline's employees own the other 5%, under an ESOP. (In 1999 Transnet sold 20% of the airline to SAirGroup, but in February 2002 - after the Swiss group's collapse - the stake was sold back to the South African government.)

Almost 40% of Transnet's revenue comes from SAA, but Transnet has 80,000 employees in total and also controls South Africa's rail network and its ports. It is considered by many analysts to be inefficient and bureaucratic, which handicaps it in its task of overcoming decades of chronic under-investment in transport infrastructure by the country's former apartheid governments. This is a viewpoint that many cabinet ministers in the African National Congress-led government of Thabo Mbeki also subscribe to.

In May, the government affirmed that it wanted private sector involvement in a number of state-owned enterprises, including SAA. The first step may be the unravelling of SAA away from the control of Transnet, perhaps followed by closer links with a foreign airline partner. However, even though the government has a policy of privatisation (since 1997 the country has made Rand 34bn from selling national assets), at the moment the state is not contemplating an IPO or trade sale for SAA, which would be unpopular with the voters and trade unionists that gave a landslide majority to the ANC. If SAA is eventually put up for sale, likely bidders would include Singapore Airlines and Lufthansa, which were reported to be interested in bidding for SAA back in 1999. In any case, a float cannot be on the agenda until SAA's financial woes are sorted out.

Rand/dollar miscalculation

SAA's hedging policy was designed to protect the airline from fluctuations in the Rand against the US Dollar, given that approximately 50% of SAA's operating costs (excluding aircraft leases) are Dollar-denominated.

Historically, the Dollar has tended to rise against the Rand, and fixing the Rand against the Dollar through hedging contracts earned SAA more than \$300m in the 2001/02 financial year. However, after SAA locked itself into further fixed Rand/Dollar positions (some of which last for up to 10 years), the airline saw the Rand unexpectedly strengthen against the US currency, improving from 13.6 Rand to the Dollar in December 2001 to around Rand 6.2 at present. This resulted in massive hedging contract losses of around \$930m in the 2002/03 financial year, forcing the South African government to issue a guarantee for \$543m of the airline's debts to key lenders.

The hedging crisis and the government's arrangement of a guarantee helped delay the release of 2002/03 accounts (the financial year at SAA runs to March 31st) for two months, until August 2003. Then in March 2004, SAA announced it was going to sell its hedge book (its total currency positions are reported to be worth \$1.3bn) to a consortium of international merchant banks, though no further details were given.

Worryingly, the massive hedging losses only came to light after a new accounting standard (AC133) was made mandatory in South Africa. It forced all companies with large hedging positions to account for the current market valuation of those hedges in their balance sheets. SAA insists that the full extent of its loss when its positions are closed will be less than the accounting loss quoted at the end of 2002/03, but under the new standard it had to book the market value of the hedges as at financial year-end. If SAA is correct, it may be

Briefing

able to write-back to its balance sheet some hedging gains in the financial year just ended although it is highly unlikely to be as much as the losses booked in March 2003. Whatever SAA says, there is no doubt that the hedging fiasco has severely dented both SAA's reputation and balance sheet. The strengthening of the Rand against the Dollar significantly hurt many other of South Africa's external-facing business, but none of them had as much exposure to risky hedging policies as SAA.

When SAA released its 2002/03 results, the hedging losses overshadowed the airlines' biggest-ever gross operating profit - of Rand 545m (\$74.7m), compared with a Rand 834m operating loss in the previous financial year - see chart, below. (Except for the North American routes, where frequencies were cut back, SAA was not affected by September 11 in the 2001/02 financial year - though its insurance costs did rise by Rand 200m a year).

In the 12 months to March 31st 2003, SAA reported airline revenue of Rand 16.3bn (\$2.2bn) - 20% up on 2001/02, and due partly to tourists' perceptions that South Africa is a relatively safe destination (in global terms) and



partly to one-off events such as the Cricket World Cup. 12% of SAA's turnover comes from cargo, which is a solid if unspectacular revenue stream. At the net level the hedging loss resulted in a Rand 5,977m (\$819m) loss, compared with a Rand 2,144m net profit in the 12 months to March 31st 2002. Net asset value at March 31st 2003 was a negative Rand 1.4bn, compared with a positive Rand 6bn in March 2002. The underlying operating profit was achieved through a close control on costs, which lagged the rise in revenue. The introduction of Airbuses (from January 2003) helped reduced unit costs, but labour costs increased by 11.5% after flight deck crew received a 15% pay rise and other staff received an average increase of 9%. Yield increased by 13.8% in 2002/03 as a result of fare rises and improved revenue management, and passengers carried rose by 6% to 6.5m.

Worries about SAA's hedging policy led to the appointment of Maria Ramos, the government's treasury director general, as CEO of Transnet in September 2003, after the previous incumbent - Mafika Mkwanazi - resigned. In October 2003, as the mounting hedging

losses became apparent, Richard Forson -SAA's CFO, who made a major contribution to SAA's performance over the previous few years - took responsibility for the hedging policy and resigned. Weeks later, Transnet launched an investigation into both its and SAA's treasury operations, accompanied by the suspension (on full pay) of Johan van Schoor, SAA's head of treasury.

The hedging scandal affects not just SAA, but also has serious implications for the whole country, as a weakening in Transnet's balance sheet can affect South Africa's credit rating, and hence the interest rates that the state can borrow at. In April 2004, Transnet was forced to recapitalise SAA by a massive Rand 6.1bn (\$947m), and the ongoing crisis has led SAA president and CEO Andre Viljoen's announcement that he will step down at the end of August. It seems that Forson's resignation did not satisfy SAA's critics sufficiently.

Part of the justification for the risky derivatives contracts was to hedge the Rand cost of the Dollar payments SAA has to pay

Briefing

for 41 Airbuses it ordered back in 2002, which is part of a 10-year fleet modernisation programme (see table, opposite). Just two years' previously, SAA leased 21 737-800s, an interim measure, as SAA's entire ageing Boeing fleet is to be replaced by the Airbuses.

The first of these deliveries was an A340-300E - the enhanced version of the -300 model - that arrived in March 2004 and was immediately put into service on the Johannesburg-New York JFK route. Of the 40 outstanding orders, five are A340-300Es, 11 A319s, 15 A320s and 9 A340-600s. Two A340-300Es will be delivered in the remainder of 2004 and the last three in the first quarter of 2005, and the A340-600 order will be completed by 2005 as well. The A320s will be delivered as the existing 737-800 leases expire, with completion by 2011. The A319s will begin delivery in August 2004, with all deliveries due by the end of 2005. The 41 Airbuses are worth an estimated \$3.5bn, but SAA's capital commitment is just \$1.7bn over the 10-year period as many of the aircraft will arrive on leases (three-quarters of SAA's fleet is on operating lease). In February, SAA agreed a deal for the sale and leaseback of nine of the A319s, from Royal Bank of Scotland Aviation Capital.

Star move

The bulk of these new aircraft will arrive as SAA starts to see the benefits of its membership of Star. Since the collapse of SAirGroup SAA has operated outside a global alliance, and ever since then the airline has been weighing up the attractiveness of the rival camps - though SAA executives insisted that continuing as a standalone airline relying on bilateral agreements was also a possibility. However, this was never a realistic option once the financial losses arising from SAA's disastrous hedging policy became apparent. The revenue boost from joining a global alliance was impossible to resist, particularly as the lucrative business travel market to and from South Africa is increasingly attracted to the network benefits of global alliances.

It soon became apparent to SAA's management that oneworld was not a realistic option for SAA given the dominance that SAA and British Airways have on profitable routes between South Africa and the UK, so the choice was between Star and SkyTeam. SAA has close ties with members of both alliances - it codeshares with Star's Lufthansa and bmi, and with SkyTeam's Delta and Air France.

In March 2004, it became known that SAA had decided to join Star - though the official notification was not released until June and the airline will actually not join the alliance until 2005. SAA's entry to Star also has to be formally investigated by the South African Competition, which will examine the impact of SAA membership on other South African airlines. However, it is expected that the Commission will approve the move, despite any objections from SAA's competitors.

The airline is an important addition to Star as it locks into the alliance feed traffic from SAA's African network, filling in a key geographical gap. Equally, SAA's membership deals a blow to SkyTeam, temporarily halting its momentum now that it has overtaken oneworld in terms of total ASKs offered by its members. Neither oneworld nor SkyTeam have an African member.

Already SAA is expanding its relationships with its Star partners - it is building on its existing Johannesburg-Frankfurt route by launching a Cape Town-Frankfurt service in August. There's also little doubt that SAA will cancel some - if not most - of its existing codeshare deals with airlines in rival alliances. The current codeshare with Delta gives SAA's passengers access to 29 US cities via Atlanta and New York, and this is sure to be replaced by a close partnership with United and its hub at Washington DC. The Atlantic routes between South Africa and the US are crucial to SAA the airline has a 70% market share on the sector and in 2002/03 the routes delivered \$44m of profit to SAA.

It will be interesting to see how the Star linkup affects SAA's battle with British Airways on another important long-haul sector, UK-South Africa. After a revised bilateral between South Africa and the UK (which does not change the SAA/BA/Virgin stranglehold), SAA acquired two slots at London Heathrow and increased its frequencies between the two countries. And, in June 2004, SAA announced a codeshare and FFP deal with Virgin Atlantic (to start in October), which will deal a significant blow to

Briefing

SAA's domestic rival Nationwide, whose existing interline deal with Virgin is being dropped.

By the time all the new aircraft arrive, SAA aims to have secured itself an even greater dominance in the African market, in which it believes has significant potential now that the Yamoussoukro Treaty is being implemented (see Aviation Strategy, September 2003). Intra-African passenger traffic is experiencing double digit growth at present, and aviation is slowly becoming an affordable alternative to poor rail and road transport for the more affluent. In 2002/03 passengers carried on SAA's African network increased by 14%. Additionally, there is growing leisure and business traffic between Africa and the neighbouring continents, particularly northwards to Europe and eastwards to the Middle East and Asia.

African hubs

Core to SAA's strategy on the continent is the establishment of hubs in east and west Africa, to complement the airline's Johannesburg base. The east of Africa is particularly important, as countries such as Ethiopia, Tanzania and Uganda have some of the fastest-growing GDP rates in the continent. Dar-es-Salaam is the choice for the eastern hub, and in December 2002 SAA bought 49% of ailing flag carrier Air Tanzania for \$20m. Air Tanzania operates three 737s and two Dash 8s, which apart from one 737 have all been transferred from SAA's fleet. The airlines codeshare on routes between the two countries, and Air Tanzania has been reinvigorated following SAA's buy-in. The airline relaunched in March 2003 and restarted a number of routes that had previously been dropped, including Dar-es-Salaam to Johannesburg. SAA also strengthened its east African presence via codesharing with Ethiopian Airlines, which began in November 2003. Ethiopian flights replaced SAA's own Johannesburg-Addis Ababa service, which it axed in September "due to low demand" after operating the route for just seven months. SAA and Ethiopian are also linking their FFPs.

The west African hub, however, is proving more problematical. The Nigeria government's attempts to set up a successor to the collapsed Nigeria Airways (with which SAA had a troubled relationship) have so far come to nothing. In 2003 a new airline, Nigerian Global, was slated to become the replacement flag carrier. SAA was one of a number of foreign airlines that talked with the government about Nigerian Global, and SAA was contemplating investing \$50m and transferring 15 aircraft to the start-up, which would have been 49% owned by the Nigerian government (after it transferred Nigeria Airways' assets to the

SAA'S FLEET Fleet Orders A319 11 A320 15 A340-300 15 5 A340-600 9 737-200A 10 737-800 19 747-400 8 Dash 8 Q300 6 CRJ200ER 6 Total 64 40

new airline). In the end, Nigerian Global came to nothing, although the airline was legally formed and even took delivery of an A310.

After that, another start-up - Nigeria Eagle Airline (NEA) - was planned. Again, SAA talked to the Nigerian government about becoming NEA's "technical partner". In fact it was reported that SAA was the only other foreign airline interested in becoming a strategic partner in the airline, which would cost at least \$100m to launch. The plan was for SAA to own 30% of NEA, with another 30% earmarked for an IPO. However, in late June 2004 the involvement of SAA in this project was reportedly stopped by the Nigerian government after - according to the Nigerian aviation minister - a squabble over the relative equity stakes of SAA and Nigerian investors. There are also reports that the Nigerian government demanded - and was refused - that SAA allow Nigerian investors to buy up to 10% of the South African airline as the price for its involvement in NEA.



Briefing

Whatever the real reasons, SAA involvement in a Nigerian airline now appears dead, although the Nigerian government says it will still launch NEA by the end of the year regardless. It will have to look for expertise from another foreign airline however, and unconfirmed reports from the Nigerian press claim that Virgin Atlantic is interested in the NEA project. Nigerian Global may also be resurrected, this time with the help of private backers from Switzerland and elsewhere.

SAA therefore has to look elsewhere for a west Africa hub. The most likely candidate is Dakar, capital of Senegal. SAA has gradually introduced a stop in Dakar to some of its longhaul flights. Initially two out of seven weekly flights northbound to New York JFK called in at Dakar (aircraft from South Africa northbound to the US have to have a fuel stop) as did three of the southbound flights, but the stop was so popular that now all northbound flights refuel at Dakar, rather than the Cape Verde Islands.

It is evident from the Nigerian situation that SAA may not have it all its own way in carving up the African market. There is some concern in Africa over the strength of SAA relative to the continent's other carriers, many of which are in financial trouble or have collapsed entirely. SAA says its is sensitive to the criticism and plans to keep national brands such as Air Tanzania, particularly as SAA faces competition from Kenya Airways, which is also building up its east African presence and which bought 49% of Tanzanian airline Precisionair in March 2003. Kenya Airways is a long-time critic of SAA (see Aviation Strategy, September 2003), and has previously tried to set up a pan-east African airline that could provide a strong competitor to SAA across the continent.

But whatever the concern about SAA, there is much more worry in the continent about increasing competition from European and US airlines - more than two-thirds of international traffic to/from Africa is carried by non-African airlines. In that regard, SAA could position itself much more aggressively as a "Black Knight" that can preserve Africa's aviation assets.

Outside Africa, SAA is looking to increase its presence in Asian markets, particularly India and China. SAA operates to Hong Kong, with codeshared flight into China through Cathay, but SAA would like to operate direct routes on its own. Though SAA dropped its loss-making Johannesburg-Bangkok route at the end of October 2003, this may be reinstated after SAA formally joins Star. A route to Singapore to connect with Star member SIA is also likely, as are services to Bombay and New Delhi sometime in 2005.

In the domestic market, however, SAA's dominant position is coming under attack. SAA's feeder network is operated partly by South African Express (whose operations were merged into SAA in April 2004) and South African Airlink (which SAA owns 10% of). Airlink operates 13 BAe Jetstream 41s, four ERJ-135LRs and an F28, and has 15 more ERJ-135LRs on order. Some - if not many - of SAA's domestic feeder routes are believed to be loss making. But SAA is facing a fare battle initiated by Comair's LCC subsidiary Kulala.com, which launched in 2001 and operates three 737-400s domestically. These aircraft are being transferred to Comair's British Airways franchise operations in South Africa (BA owns 18% of Comair), to be replaced at Kulala.com by four MD-82s. Comair concentrates on point-to-point services out of its Johannesburg hub with 18 727s and 737s.

Another domestic competitor is Nationwide Airlines, which has a fleet of 13 Boeing aircraft and operates scheduled and cargo flights both within South Africa and regionally. In February 2004 another LCC - the curiously named 1time - launched operations between Cape Town and Johannesburg with two DC-9s and two MD-82s, with fares it claims are up to twothirds cheaper than SAA. SAA is responding to the threat of these airlines by cutting fares, with an inevitable erosion to its yield, but the flag carrier believes it can withstand the LCCs by offering passengers "all the frills at no-frills prices". However, the LCCs will continue to challenge SAA, and 1time intends to launch further domestic routes through 2004.

Since 2001 SAA has also been battling a legal complaint by Nationwide Airlines that the flag carrier has allegedly been carrying out anti-competitive behaviour through paying travel agents to sell SAA tickets even if competitor fares are cheaper. In June 2004 the Competition Appeal Court dismissed SAA's appeal against a previous decision by the Competition Tribunal that SAA could not post-

Briefing

pone the hearing of an anti-competitive case against it. Once the Competition Tribunal hears the full case, if it decides against SAA it can impose a fine equal to 10% of the airline's annual turnover, which is a huge sum. Comair has also complained about anti-competitive practices by SAA.

In response to rising fuel prices, in May 2004 SAA introduced a fuel surcharge of 28 Rand (\$4.24) per domestic trip and \$10 per international trip. Though there was nothing unusual in that - Comair, Kulala.com and BA also introduced surcharges - SAA looked incompetent when just a week later it increased the domestic levy to 40 Rand (\$6.06).

But it's not just domestically that SAA is facing LCC competition. In October another LCC - Stansted-based CivAir - will launch flights between London and Cape Town, to be followed two months later by a route to Durban. Again, SAA's existing fares will be undercut by a third. With the 2010 football World Cup being awarded to South Africa, it's inevitable that LCCs and major airlines will ramp up services to the country. In July 2004 Virgin Atlantic announced that it was planning an African LCC, with a senior executive saying: "The market for the development of a low-cost, pan-African airline is a real possibility for the future."

Time to refocus

In September 2003, in response to the company's perceived strategic and financial weakness, Transnet revitalised the five-member SAA board, with two members leaving and six new appointments, including Prof. Rigas Doganis, the well-respected aviation academic and consultant. In November, the management team was overhauled, with the creation of a deputy CEO position - which is held by Oyama Mabandla, an ex-UBS banker, until he steps into Viljoen's shoes in September - and the appointment of six executive VPs. Though the revamped team has had little time to affect the financials, analysts will be taking a close look at the underlying operating figures when the results for the year to March 31st 2004 are released. With the effects of SARS and Gulf War II (which SAA says has had "a significant negative impact), prospects for an increased operating profit are not great, but much attention will be on the effort to cut costs. Major cutting of labour costs is off the agenda at SAA, as the government believes that maintaining state jobs is crucial to South Africa's economy (the unemployment rate is more than 30%). SAA employed 10,800 people at the end of the 2002/03 financial year, virtually identical to a year earlier. The relationship between unions and management is generally good, although in March 2003 the airline did attempt to "modernise" labour contracts. Good relations have led to a tangible improvement in service levels, which has led to SAA being given a series of industry awards.

However, cost-cutting progress is expected in other areas, particularly as yield erosion is expected in the domestic market. For example, SAA has been focusing on IT spend, where in 2002/03 costs jumped a massive 38% to Rand 623m after SAA hired EDS following the ending of the previous agreement with Atraxi Africa, which was owned by SAirGroup.

Analysts will also be studying SAA's cash flow position. In 2002/03, SAA had a positive cash flow from operating activities of Rand 840m, down by just Rand 14m on the previous financial year. But heavy investment in aircraft and other items of Rand 5.8bn was not matched by an equivalent amount of new financing, so cash and cash equivalents fell substantially over the year, to Rand 793m as at March 31st 2003. This will be boosted by Transnet's Rand 6.1bn injection in April 2004, but the cash position as at March 31st 2004 will tell much about how SAA has fared operationally over the previous 12 months.

The 2003/04 financial results were scheduled to be unveiled in May, but - like the previous year - these have been delayed until August at the earliest, probably because SAA wants to announce the details of the hedge book sale at the same time (thus removing the liabilities from the airline's balance sheet, allowing management to refocus on operational and strategic matters). As new CFO Triphosa Ramano said: "Instead of running an airline we essentially became 'South African Airways Financial Services Group' ". Once the hedging losses are taken off the books, SAA will have a clear run at cementing its position as the number one airline in Africa.

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%	4,280 19,981	13,401
									-			
	Jan-Mar 04	598	657	-59	-43	-9.9%	-7.2%	8,333	5,761	69.1%	3,592	9,984
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
	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
	Jan-Mar 04	4,512	4,470	42	-166	0.9%	-3.7%	68,551	48,746	71.1%		50,400
America West											10 454	12 000
America West	Year 2002 Apr-Jun 03	2,047 576	2,246 559	-199 17	-430 80	-9.7% 3.0%	-21.0% 13.9%	43,464 11,223	33,653 8,854	73.6% 78.9%	19,454 5,185	13,000 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
	Jan-Mar 04	577	559	18	1	3.1%	0.2%	11,832	8,539	72.2%	4,897	11,827
Continental	Year 2002	8,402	8,714	-312	-451	-3.7%	-5.4%	128,940	95,510	73.3%	41,014	40,713
	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
	Jan-Mar 04	2,269	2,404	-135	-124	-5.9%	-5.5%	32,621	23,678	71.7%	9,735	57,000
D . K .												75 400
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
	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
	Jan-Mar 04	3,292	3,680	-388	-383	-11.8%	-11.6%	55,300	39,027	70.6%	25,343	69,900
Northwest	Year 2002	9,489	10,335	-846	-798	-8.9%	-8.4%	150,355	115,913	77.1%	52,669	44,323
	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
	Jan-Mar 04	2,603	2,711	-108	-223	-4.1%	-8.6%	35,133	26,883	76.5%	12,500	39,230
•												
Southwest	Year 2002	5,522	5,104	417	241	7.6%	4.4%	110,859	73,049	65.9%	63,046	33,705
	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
	Jan-Mar 04	1,484	1,438	46	26	3.1%	1.8%	29,582	18,977	64.2%	15,995	31,522
United	Year 2002	1/ 296	17 122	-2 927	-2 212	-10.0%	-22 5%	228 560	176,152	72 5%	69 595	78,700
United		14,286	17,123	-2,837	-3,212	-19.9%	-22.5%	238,569		73.5%	68,585	
	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
	Jan-Mar 04	3,732	3,943	-211	-459	-5.7%	-12.3%	56,181	42,287	75.3%	15,923	
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
	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
	Jan-Mar 04	1,701	1,844	-143	-174	-8.4%	- 3.3 %	23,771	16,220	68.2%	12,700	26,854
		625	530	105	55	16.5%	8.7%	13,261	11,000	83.0%	5,752	3,823
JetBlue	Year 2002	635			~~							
JetBlue	Apr-Jun 03	245	199	46	38	18.8%	15.5%	5,271	4,498	85.3%	2,210	
JetBlue					38 29	18.8% 19.7%	15.5% 10.6%	5,962	4,498 5,229	85.3% 87.7%	2,414	4,475 4,650
JetBlue	Apr-Jun 03	245	199	46								
JetBlue	Apr-Jun 03 Jul-Sep 03	245 274	199 220	46 54	29	19.7%	10.6%	5,962	5,229	87.7%	2,414	4,650

*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.

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		USAIII	USam	USAIII	USalli						0005	
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	23,730	78.1%		71,350
	Oct-Dec 03	3,933	3,855	78	35	2.0%	0.9%	33,380	25,329	75.9%		71,900
Alitalia	Oct-Dec 03	3,933	3,000	70		2.0%	0.9%	33,360	25,529	15.9%		71,900
	V	4 745	F 007	000	04.0	F F0/	47.00/	54 000	20.204	70.00/	04 707	00.00
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%	40.004		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	46,95
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	25,54
	Year 2002	5,123	4,852	272	174	5.3%	3.4%	55,633	40,647	73.0%	24,956	25,96
	Jan-Mar 03	1,128	1,183	-55	-24	-4.9%	-2.1%	13,200	9,458	71.6%	5,717	20,000
		1,120	1,165	-33	-24 60	-4.9% 6.2%	4.5%			73.8%		
	Apr-Jun 03							13,516	9,982		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	33,26
	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	1,622	1,696	-76	-62	-4.7%	-3.8%	17,261	13,077	75.8%		33,448
	Jul-Sep 03	1,878	1,725	152	104	8.1%	5.5%	18,905	15,874	84.0%		32,85
	Oct-Dec 03	1,838	1,801	36	10	2.0%	0.5%	17,969	14,378	80.0%		31,80
	Jan-Mar 04	1,677	1,645	32	-24	1.9%	-1.4%	17,963	14,455	80.5%		
	Year 2003/04	7,157	7,011	146	29	2.0%	0.4%	72,099	57,784	80.1%		31,077
Lufthansa												
YE 31/12	Year 2001	14,966	14,948	18	-530	0.1%	-3.5%	126,400	90,389	71.5%	45,710	87,97
	Year 2002	17,791	16,122	1,669	751	9.4%	4.2%	119,877	88,570	73.9%	43,900	94,13
	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	11.170	12,020	
	Year 2003	20,037	20,222	-185	-1,236	-0.9%	-6.2%	124,000	90,700	73.1%	45,440	94,79
					-1,230		1.6%			72.5%		
	Jan-Mar 04	4,742	4,883	-141	70	-3.0%	1.0%	31,787	23,030	12.5%	11,414	93,47
SAS							a					
YE 31/12	Year 2001	4,984	5,093	-109	-103	-2.2%	-2.1%	51,578	31,948	64.6%	23,060	22,65
	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	30,37
	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	34,85
	Oct-Dec 03	1,910	1,797	113	-80	5.9%	-4.2%	11,931	7,344	61.6%	7,512	34,54
	Year 2003	7,978	8,100	-122	-195	-1.5%	-2.4%	47,881	30,402	63.5%	31,320	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	1,54
	Jul-Sep 02	272	149	123	113	45.2%	41.5%	3,138	.,=01	0.10/0	4,300	1,67
	Oct-Dec 02	201	149	53	47	45.2 % 26.4%	23.4%	0,100		86.0%	3,930	1,76
	Year 2002/03	910	625	285	259	31.3%	23.4 % 28.5%			84.0%	15,740	1,70
	Apr-Jun 03	280	220	57	46	20.4%	16.4%			78.0%	5,100	2,13
	Jul-Sep 03	407	237	170	148	41.8%	36.4%				5,571	2,20
	Oct-Dec 03	320	253	67	51	20.9%	15.9%				6,100	2,35
easyJet									_			
YE 30/09	Year 2000/01	513	455	58	54	11.3%	1 0.5%	7,003	5,903	83.0%	7,115	1,63
	Year 2001/02	864	656	111	77	12.8%	8.9%	10,769	9,218	84.8%	11,350	3,10
	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

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		21638	
	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
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	275	117	392	274	131	405	797
2004-Jan	257	98	355	264	133	397	752

AIRCRAFT SOLD OR LEASED

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
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	408	94	502	1,119	212	1,331	1,833
2004-Jan	14	22	36	99	23	122	158

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.

Databases

		Intra-E	urope	FRAFF	North At	lantic		Europe-	Far Eas		Total lo	ng-haul		Total Int	
	ASK					LF	ASK	RPK	LF	ASK	RPK	LF	ASK	RPK	LF
	bn				bn	%	bn	bn	%	bn	bn	%	bn	bn	%
1996	165.1	100.8			126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997 1998	174.8 188.3				138.2 149.7	78.3 77.1	130.4 135.4	96.9 100.6	74.3 74.3	419.0 453.6	320.5 344.2	76.5 75.9	621.9 673.2	450.2 484.8	72.4 72
1998	200.0				149.7	76.1	135.4	100.6	74.3	453.6 492.3	344.2 371.0	75.9 75.4	727.2	404.0 519.5	72 71.4
2000	200.0				179.4	78.1	137.8	103.1	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2000	212.9				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				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				171.3	79.7	131.7	101.2	76.8	497.2	390.8	78.6	742.6	551.3	74.2
Apr 04	17.7				15.2	83.1	12.6	9.6	76.3	43.3	34.7	80.0	64.2	49.1	76.5
Ann. chng	7.2%					6.9	15.7%	42.3%	14.3	9.2%	20.4%	7.4	9.9%	20.1%	6.5
Jan-Apr 04	66.4	40.7	61.4	67.6	53.2	78.7	48.2	37.6	78.1	168.2	132.8	78.9	246.9	182.2	73.8
Ann. chng	3.8%	8.1%	2.4	4.9%	11.2%	4.5	8.2%	14.2%	4.1	6.1%	10.8%	3.3	6.2%	11.2%	3.3
ource: AEA															
S MAJC	RS' S	CHED	ULED	TRAF	FIC										
		Domest			North Atl	antic	I	Pacific		L	atin Am	nerica	-	Total Int'	I
	ASK	RPK	LF	ASK	RPK	LF	ASK	RPK	LF	ASK	RPK	LF	ASK	RPK	LF
	bn	bn	%	bn	bn	%	bn	bn	%	bn	bn	%	bn	bn	%
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
	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
	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
	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
May - 04	85.1	63.8	75.0	14.8	12.0	81.2	8.7	7.4	85.6	7.8	5.0	64.8	31.2	24.5	78.3
Ann. chng an-May 04	8.0% 437.7	8.5% 302.7	0.3 72.7	29.3% 62.8	27.6% 49.1	-1.1 78.2	31.8% 41.2	61.6% 34.5	15.8 83.7	16.2% 40.3	12.1% 28.1	-2.4 69.7	26.4% 144.3	32.3% 111.7	3.5 77.4
Ann. chng	437.7 6.1%	302.7 8.7%	1.7	62.8 11.9%	49.1 19.2%	78.2 4.8	41.2	34.5 23.7%		40.3 14.9%	26.1 16.6%	1.0	10.5%	19.9%	6
-					erican, Am									15.370	0
					Southwes							, _ 2.00, 1			
	~	-1-			D			~	-l - "	D . 1	b c a c c c	0 41	1		
peing		ate			Buyer	ir			der		ivery	Other	inform	nation/e	engine
U	12	July			Lauda A	ir		1 x 73	7-800	200)5			nation/e	engine
irbus	12 22 -				-	ir		1 x 73 1 x A3	7-800	200 1Q0)5	CFM5			engine
oeing irbus mbraer lote: Prices in	12 22 - 30 -	July June June nly firm o			Lauda A Eurofly Finnair le airlines/l	essors a		1 x 73 1 x A3 12 x E	87-800 819	200 1Q0 200	95 05 05-07	CFM5	6-5B7		engine
irbus mbraer	12 22 - 30 - n US\$. O DRLD	July June June nly firm o		ID ESC	Lauda A Eurofly Finnair le airlines/l	essors a		1 x 73 1 x A3 12 x E d. So	7-800 319 RJ170 <i>urce: Mar</i> Dome	200 1Q0 200 hufacture	15 05 05-07 rs Inte	CFM50 plus 8	6-5B7 options	Total	
irbus mbraer ote: Prices in	12 22 - 30 - n US\$. O DRLD - D	July June June nly firm o TRAFI	FIC AN	ID ESC	Lauda A Eurofly Finnair le airlines/I B FORE national	essors a	F Tota	1 x 73 1 x A3 12 x E d. So	7-800 319 RJ170 <i>urce: Mar</i> Domes growt	200 1Q4 200 hufacture	05 05 05-07 7s Inte gro	CFM50 plus 8 ernationa wth rate	6-5B7 options	Total growth rat	le
irbus mbraer ote: Prices in	12 22 - 30 - n US\$. O DRLD D ASK	July June June nly firm o TRAFI pomestic RPK		ID ESC Interi ASK F	Lauda A Eurofly Finnair le airlines/I G FORE national	essors a CAS	T Tota K RPI	1 x 73 1 x A3 12 x E d. So	A7-800 A19 ERJ170 <i>urce: Mar</i> growth ASK	200 1Q4 200 hufacture stic h rate RPK	15 05 15-07 rs Inte gro	CFM50 plus 8 ernationa wth rate K RI	6-5В7 options I PK	Total growth rat	e RPK
ote: Prices in	12 22 - 30 - DRLD D ASK bn	July June June nly firm o TRAFI pomestic RPK bn	FIC AN	ID ESC Interi ASK F bn	Lauda A Eurofly Finnair le airlines/I B FORE national PK Lf bn %	ESSORS A	T Tota K RPI n bn	1 x 73 1 x A3 12 x E d. So al x LF %	A7-800 A19 ERJ170 <i>urce: Mar</i> growth ASK %	200 1Q4 200 hufacture stic h rate RPK %	05 05-07 75 Inte gro 3 S	CFM50 plus 8 ernationa wth rate K RF %	6-5B7 options I PK A %	Total growth rat ASK I % °	e RPK %
ote: Prices in CAO WC	12 22 - 30 - DRLD D DRLD D ASK bn 1,468	July June June nly firm o TRAFI pomestic RPK bn 970	FIC AN	ID ESC Intern ASK F bn 2,070 1,	Lauda A Eurofly Finnair le airlines/I G FORE hational CPK Lf bn % 444 69.	ESSORS A ECAS S bi 8 3,5	T Tota K RPI n bn 37 2,41	1 x 73 1 x A3 12 x E d. So al c LF % 4 68.3	A7-800 A19 ERJ170 <i>urce: Mar</i> growth ASK % 4.1	200 1Q4 200 hufacture stic h rate RPK % 5.4	05 05-07 75 Inte gro 3 ASI % 8.5	CFM50 plus 8 ernationa wth rate K RF % 9.0	6-5B7 options	Total growth rat ASK 1 % 0 5.6 7	е RPK % 7.8
rbus nbraer ote: Prices in	12 22 - 30 - DRLD D ASK bn	July June June nly firm o TRAFI pomestic RPK bn	FIC AN	ID ESC Intern ASK F bn 2,070 1,	Lauda A Eurofly Finnair le airlines/I B FORE national PK Lf bn %	ESSORS A ECAS S bi 8 3,5	T Tota K RPI n bn 37 2,41	1 x 73 1 x A3 12 x E d. So al c LF % 4 68.3	A7-800 A19 ERJ170 <i>urce: Mar</i> growth ASK %	200 1Q4 200 hufacture stic h rate RPK %	05 05-07 75 Inte gro 3 S	CFM50 plus 8 ernationa wth rate K RF % 9.0	6-5B7 options	Total growth rat ASK I % °	e RPK %
rbus nbraer ote: Prices in CAO WC 1995 1996	12 22 - 30 - DRLD D DRLD D ASK bn 1,468	July June June nly firm o TRAFI pomestic RPK bn 970	FIC AN	ID ESC Intern ASK F bn 2,070 1, 2,211 1,	Lauda A Eurofly Finnair le airlines/I G FORE hational CPK Lf bn % 444 69.	essors a ECAS 5 bi 8 3,5 5 3,7	T Tota K RPI n bn 37 2,41 51 2,60	1 x 73 1 x A3 12 x E d. So al c LF % 4 68.3 2 79.4	A7-800 A19 ERJ170 <i>urce: Mar</i> growth ASK % 4.1	200 1Q4 200 hufacture stic h rate RPK % 5.4	05 05-07 75 Inte gro 3 ASI % 8.5	CFM50 plus 8 ernationa wth rate K RF % 9.0	6-5B7 options	Total growth rat ASK 1 % 0 5.6 7 5.0 7	е RPK % 7.8
rbus mbraer ote: Prices in CAO WC 1995 1996	12 22 - 30 - DRLD D DRLD D ASK bn 1,468 1,540	July June June nly firm o TRAFI pomestic RPK bn 970 1,043	FIC AN	ID ESC Intern ASK F bn 2,070 1, 2,211 1, 2,346 1,	Lauda A Eurofly Finnair le airlines/I FORE hational CPK Lf bn % 444 69. 559 70.	essors a ECAS b 8 3,5 5 3,7 3 3,9	T Tota K RPI n bn 37 2,41 51 2,60 30 2,76	1 x 73 1 x A3 12 x E d. So d. So 4 68.3 2 79.4 3 70.3	7-800 319 ERJ170 <i>urce: Mar</i> growtł ASK % 4.1 4.9 2.9	200 1Q4 200 stic h rate RPK % 5.4 7.4	05 05-07 75 Inte gro 3 8.5 6.8	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1	6-5B7 options	Total growth rat ASK %	е RPK % 7.8 7.8
ote: Prices in CAO WC	12 22 - 30 - DRLD D DRLD D D ASK bn 1,468 1,540 1,584	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,089	LF % 66.1 67.7 68.8 70.0	ID ESC Intern ASK F bn 2,211 1, 2,346 1, 2,428 1,	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71.	ECAS CAS 5 5 3,7 3 3,9 4 4,0	F Tota K RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85	1 x 73 1 x A3 12 x E d. So d. So 4 68.3 2 79.4 3 70.3 6 70.3	7-800 319 ERJ170 <i>urce: Mar</i> growtł ASK % 4.1 4.9 2.9	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5	05 05-07 rs Inte gro x ASI % 8.5 6.8 6.1	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1	6-5B7 options	Total growth rat ASK 6.6 5.0 4.8 6.3.4	е RPK % 7.8 7.8 5.1
ote: Prices in CAO WC 1995 1996 1997 1998 1999	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,089 1,147	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70.	ECAS CAS 5 5 3,7 3 3,9 4 4,0 5 4,5	F Tota K RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15	1 x 73 1 x A3 12 x E d. So d. So 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK 1 % 6 5.6 7 4.8 6 3.4 2 5.6 6	е RPK % 7.8 5.1 3.4
ote: Prices in CAO WC 1995 1996 1997 1998 1999	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7	T Tota NK RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,33	1 x 73 1 x A3 12 x E d. So d. So 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK 1 % 6 6.6 7 8.8 6 8.4 2 5.6 6 5.6 6	e RPK % 7.8 5.1 3.4 5.4 5.5
tirbus mbraer ote: Prices in CAO WC 1995 1996 1997 1998 1999 2000 2001	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7 4,6	T Tota NK RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,39 98 3,26	1 x 73 1 x A3 12 x E d. So d. So d. LF % 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8 2 69.4	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK 1 % 6 5.6 7 4.8 6 5.4 3 5.6 6 5.3 6 2.4 -	se RPK % 7.8 5.1 3.4 5.4 5.5 0.6
ote: Prices in CAO WC 1995 1996 1997 1998 1999 2000 2001 2002P	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7 4,6 4,5	T Tota Tota K RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,39 98 3,26 87 3,24	1 x 73 1 x A3 12 x E d. So d. So d. LF % 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8 2 69.4 3 70.7	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK 5.6 5.4 5.6 5.3 5.6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 7 5.3 6 7 5.3 7 6 5.3 7 6 5.4 7 7 8 8 8 7 8 7 8 8 8 8 7 8 8 8 8 8 8	Se RPK % 7.8 5.1 3.4 5.4 5.5 0.6 0.4
Iote: Prices in CAO WC 1995 1996 1997 1998 1999 2000 2001 2002P *2003	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7 4,6 4,5 4,8	T Tota Tota K RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,39 98 3,26 87 3,24 65 3,50	1 x 73 1 x A3 12 x E d. So d. So d. LF % 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8 2 69.4 3 70.7 2 72.0	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rate ASK I 5.6 7 5.6 (5.3 (5.3 (2.4 - 1.9 (5.1 8	RPK % 7.8 5.1 3.4 5.5 -0.6 0.4 3.0
lote: Prices in CAO WC 1995 1996 1997 1998 1999 2000 2001 2002P *2003 *2004	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS b 8 3,5 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7 4,6 4,5 4,8 5,1	T Tota Tota K RPI n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,39 98 3,26 87 3,24 65 3,50 45 3,73	1 x 73 1 x A3 1 x A3 12 x E d. So d. So d. So 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8 2 69.4 3 70.7 2 72.0 0 72.5	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK I 5.6 7 5.6 6 5.3 7 5.3 7 7.3	ее RPK % 7.8 5.1 3.4 5.5 0.6 0.4 3.0 6.5
Iote: Prices in CAO WC 1995 1996 1997 1998 1999 2000 2001 2002P *2003	12 22 - 30 - DRLD D ASK bn 1,468 1,540 1,584 1,638 1,911	July June June nly firm o TRAFI pomestic RPK bn 970 1,043 1,043 1,089 1,147 1,297	LF % 66.1 67.7 68.8 70.0 67.9	ID ESC Intern ASK F bn 2,070 1 2,211 1 2,346 1 2,428 1 2,428 1	Lauda A Eurofly Finnair le airlines/I FORE hational PK Lf bn % 444 69. 559 70. 672 71. 709 70. 858 71.	essors a ECAS 5 3,7 3 3,9 4 4,0 5 4,5 8 4,7 4,6 4,5 4,8	T Tota K RPH n bn 37 2,41 51 2,60 30 2,76 67 2,85 12 3,15 50 3,39 98 3,26 87 3,24 65 3,50 45 3,73 15 3,95	1 x 73 1 x A3 1 x A3 12 x E d. So d. So d. So 4 68.3 2 79.4 3 70.3 6 70.3 7 70.0 0 70.8 2 69.4 3 70.7 2 72.0 0 72.5 4 73.0	7-800 319 ERJ170 <i>urce: Mar</i> growth ASK % 4.1 4.9 2.9 3.4 5.4	200 1Q4 200 stic h rate RPK % 5.4 7.4 4.5 5.2 5.2 5.0	05 05-07 rs Inte gro % 8.5 6.8 6.1 3.5 5.7	CFM50 plus 8 ernationa wth rate K RF % 9.0 8.0 7.1 2.1 7.0	6-5B7 options	Total growth rat ASK I 5.6 7 5.6 6 5.3 6 5.3 6 5.3 6 5.3 6 5.3 6 5.8 6 5.3 6	Se RPK % 7.8 5.1 3.4 5.4 5.5 0.6 0.4 3.0

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

Antitrust investigations

- Turnaround strategies
- Merger/takeover proposals
- Corporate strategy reviews
- Privatisation projects
- Asset valuations

Credit analysis

- IPO prospectusesE&M processes
- Market forecastsCash flow forecasts

Competitor analyses

• State aid applications

• Distribution policy

Fax: +44 (0)20 7490 5218

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 theissue (Discounts available for multiple	I enclose a Sterling, Euro or US Dollar cheque, made payable to: Aviation Economics Please invoice me Please charge my AMEX/Mastercard/Vis credit card Card number
subscriptions - please call for details)	Name on card Expiry date
Delivery address Name Position	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
CompanyAddress	Invoice address (if different from delivery address) Name
Country Postcode Tel Fax	Country Postcode
DATA PROTECTION ACT information you provide will be held on our database and may be	PLEASE RETURN THIS FORM TO: Aviation Economics James House, LG 22/24 Corsham Street
sed to keep you informed of our products and services or for selected hird party mailings	London N1 6DR