

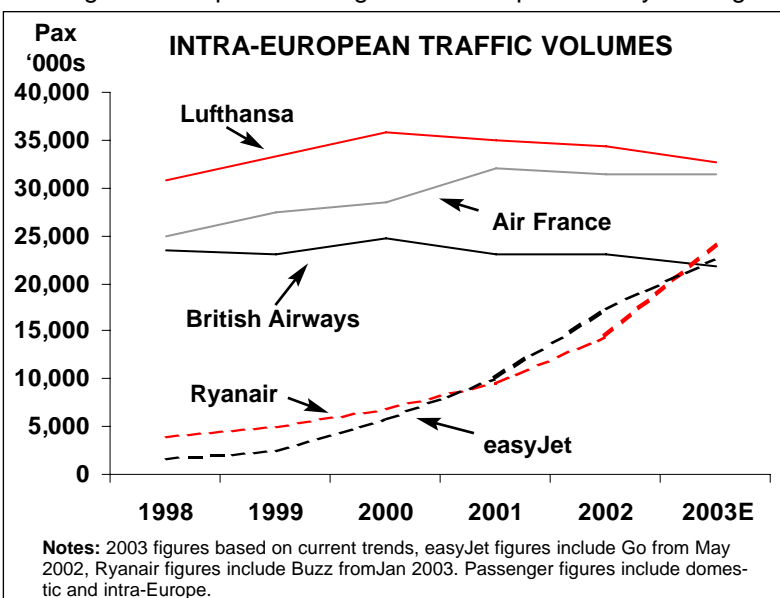
Regional aid and airlines: the real issues

Michael O'Leary, the Ryanair CEO, various French municipalities and British second-home owners are among those outraged by the implications of the Strasbourg Court decision declaring the airport's payments to the low-cost carrier an illegal subsidy. What are the real issues uncovered by this?

Acting on a complaint by Air France subsidiary Brit Air, the Strasbourg Administrative Court on July 24 cancelled two contracts, which bound the Chamber of Commerce and Industry of Strasbourg and Lower Rhine to Ryanair. Brit Air had filed its complaint in December 2002, the Chamber of Commerce is the airport operator.

Having failing to obtain a stay on the judgement, Ryanair stopped operating London-Strasbourg on August 24, terminating a service that was generating about 240,000 passengers a year, compared to about 30,000 a year with Brit Air, and immediately started up services to Baden Baden, 40km across the border in Germany. Ryanair has appealed the Strasbourg decision, says it is confident that it will be reversed, at which point it will resume its Strasbourg services.

Ryanair is clearly determined to play hard, lambasting Air France's projectionist actions and threatening to withdraw services from any French airport where its agreements are challenged and to pull out of its Charleroi hub in Belgium where it is facing an EC investigation into possible illegal subsidies provided by the region-



www.aviationeconomics.com

CONTENTS

Analysis

Regional aid and airlines: the real issues 1-4

The new wave of long-haul all-business airlines 5-6

Briefing

Atlantic Coast Airlines: Goldilocks, a low-cost strategy for 50-seaters 7-10

East Africa's aviation resurgence: East African Airlines, Air Tanzania, Kenya Airways and Ethiopian Airlines 11-15

Databases 16-19

Airline traffic and financials

Aircraft available

Regional trends

Orders

PUBLISHER

Aviation Economics

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

Tel: +44 (0) 20 7490 5215

Fax: +44 (0) 20 7490 5218

e-mail: info@aviationeconomics.com

al government of Wallonia, with a decision due in November.

In fact, the Strasbourg Court decision came as a surprise to local observers since the commissioner representing the French government on the Administrative Court had on June 28 recommended that the case against the Chamber be dropped. These courts often follow the advice given to them by the government commissioner.

The government commissioner had argued that the funds made available to Ryanair by the Chamber of Commerce were to promote the Strasbourg region, mostly on the Ryanair website. However, the Court ruled that these funds were not used for that purpose but were used mainly for the benefit of Ryanair and that this constituted financial aid to the airline.

In a somewhat complex arrangement, the Chamber of Commerce had committed to pay Ryanair a one-time sum of €150,000 for the launch of each new daily service from Strasbourg and €216,000 or €224,000 per year for each daily service operating from Strasbourg. In addition, the Chamber also had guaranteed the payment to Ryanair, by a combination of the Strasbourg Urban Community, the Alsace Region and the Department of Lower Rhine, of an annual sum of €492,000 for each daily service operated from Strasbourg. Based on two daily services between Strasbourg and London Stansted, the Chamber's commitment to the airline amounted to €1.4m a year.

In its decision, the Court made a reference to EC Market Access Regulation 2408/92 (in effect the European air transport liberalisation legislation). The Court also quoted Articles 87 and 88 of the Treaty of Rome, relating to competition issues, which *inter alia* require that the European Commission is notified of subsidies before their execution. It was then up to the EC to approve the contracts or otherwise, said the Court, noting that the Chamber had failed to notify the EC.

The EC finds itself in a very awkward situation here (the EC being in this case represented not just by the Transport and Competition Directorates but also by the Regional Policy, Enterprise and Environment Directorates).

EC policy

The EC in general, has a pro-consumer role and is supportive of low-cost carriers providing affordable travel at high load factors which are seen to represent an efficient travel mode. It is against subsidies that distort markets, but cannot be seen to be attacking commercial, private airlines like Ryanair when it in the past has authorised €20bn-plus of state aid to ailing flag-carriers.

It has a fundamental role in promoting regional development, even more critical now that most of the EU has adopted the single currency, so restricting national governments' ability to influence economic activity through monetary policy.

Ryanair in some cases has acted as a catalyst for effective regional development. The regional airports, forlorn and totally underutilised pre-Ryanair, and the local French and Italian authorities, certainly recognise Ryanair's role in boosting tourism. For example, the town of Pau in the French Pyrenees raised local funds to persuade Ryanair to continue Buzz's service there following the take-over of the former KLM subsidiary. (The competing airport of Tarbes which has lost traffic to Pau takes a very different view of Ryanair.)

Another example: City of Derry airport located in the north west of Northern Ireland now has twice-daily 737 connections to London, a service that was inconceivable before Ryanair struck a deal with the airport's local authority owners. As well as promoting tourism to Donegal and the Causeway Coast, the air link is credited with facilitating new business activity in the region, making the millions of euros of regional aid that the EU and the UK aid have pumped in work more effectively. (The counter-argument, which sounds parsimonious, is that the local authority is financing Ryanair to export local consumer spending from Londonderry to London.)

Ryanair argues that the Strasbourg decision undermines the ability of publicly owned airports to act like, and compete with, privately owned airports. The so-called subsidy, it implies, is just the public sector equivalent of the incentives that private airports offer to new entrant airlines - in terms of deep discounts

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

Editor:

Keith McMullan
kgm@aviationeconomics.com

Associate Editor

Heini Nuutinen

Subscription enquiries:

Julian Longin
jil@aviationeconomics.com

Tel: +44 (0)20 7490 5215

Copyright:

Aviation Economics
All rights reserved

Aviation Economics
Registered No: 2967706
(England)

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

ISSN 1463-9254

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

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

from rack rates, advertising support, yield-related charges, etc. Also, Ryanair can point out that it guarantees exceptional levels of traffic to the regional airport as its side of the transaction.

The question of openness arises here. The use of taxpayers' money in whatever form surely has to be revealed and made public knowledge, and is in some circumstances notifiable to the EC, as pointed

out by the Strasbourg Court. Yet Ryanair makes non-disclosure a key clause of its airport agreements - Michael O'Leary compares the confidentiality of his airline's relationship with an airport to that of the confessional box. In reality, however, it is difficult to keep a major public agreement secret - see, for instance, *Aviation Strategy*, July/August 2001 on Ryanair and Charleroi.

So how important are the airport "subsidies" to Ryanair's business model? In a recent teleconference with analysts Michael O'Leary seemed to imply that the Strasbourg airport income was not critical for Ryanair's profitable operation of the route but it was essential if Ryanair were to meet its operating profit margin target of over 20%.

The Ryanair model is driven by an integrated series of strategies, all designed to complement each other and leading to the all-important goal of minimising and continuously reducing unit costs. For instance, Ryanair's airport policy not only brings it low or non-existent airport charges but also reduced spending on advertising (which is carried by the airport or tourism bureau). The high volumes of traffic Ryanair guarantees ties in with its main promotional tool - the offer of ultra-low or free fares - as well as enhancing its negotiating power with other potential airports. Quick turn-arounds at the uncongested airports are a vital part of its strategy of high aircraft and crew utilisation. Take away the regional airport element of the Ryanair strategy, and the whole model would probably revert to producing industry-standard profit margins.

EUROPEAN PSO ROUTES*

	No of PSO routes	Min aircraft size	Frequency requirement	Timetable requirement	Fares requirement
France	28*	Usually 19 seat	Yes	Yes	Usually no max
Germany	5	18-30 seat	Yes	Yes	Max
Ireland	5	30-seat	Yes	Yes	Min & max, special fares
Italy	6**	140-seat	Yes	Yes	Max
Norway	13***	30-seat	Yes	Yes	Max
Portugal	10****	Jet specified	Yes	Usually yes	Max, special fares
Scotland	4****	8-18-seat	Yes	No	Max
Spain	13*****	None	Yes	Usually yes	Max

Notes: * = Of which 18 to/from Corsica, ** = All to/from Sardinia, *** = 13 tender units comprising 61 individual routes, **** = Of which 6 to the Azores and 3 to Madeira, ***** = 4 groups comprising 12 individual routes, ***** = All within Canary islands *Source: Air Transport Group, Cranfield University*

PSO subsidies

The challenge for the EC is not to rule on legal technicalities but to assess where airport or route subsidies or quasi-subsidies fit into the deregulated intra-European aviation market. It also has to recognise that aviation like all other industries benefits from aid intended to foster regional development.

In this regard, the EC might consider the Ryanair situation in the wider context of European route subsidies. Under Article 2408/92, as referred to by the Strasbourg Court, certain subsidies are perfectly legal in the European Economic Area (EEA, ie the EU plus Iceland, Norway and Switzerland) if they are designated as a Public Service Obligation (PSO). The idea behind PSOs was to provide subsidies for services to peripheral points which could not be served on a commercial basis. PSOs have always been applied on domestic routes (with the nominal exception of Dublin-Derry) but could also be used for cross-border services.

Certain technical rules apply - the subsidised route has to be put up for tender at least once every three years, notified to the EC and the call for tender advertised in the *Official Journal*. The winner is the airline that offers the required service level (capacity, frequency aircraft type, etc.) at the lowest subsidy level.

That is the theory. In practice PSOs are operated on different criteria according to differing regional and socio-economic policies in the member states. The public interest criteria that regional or national authorities use when

“Public service obligations in Europe: a comparative study” August 2002, by Cranfield University. Data and information from this report were used in this article. However, the opinions expressed are Aviation Strategy’s.

imposing a PSO are very vague. Consequently, there is a wide variation in the usage of PSOs within the EEA. There is also a wide variation in the transparency of the PSO administration. At the one extreme, Norway, which operates 13 mini-networks to tiny, isolated communities, is fully open about traffic, services and subsidy amounts. At the other, Greece has over 20 PSO routes mainly to the Aegean islands operated by Olympic Aviation, a subsidiary of Olympic Airways, but detail on this operation is lost in the intrigues of internal Greek politics and Olympic's convoluted finances.

It is sometimes difficult to see a fundamental distinction between a Ryanair-type agreement and a PSO type. Indeed, at least one German airport with a Ryanair agreement has advertised its "call for tender" in a section of the *OJ* rarely visited by airlines, specifying the traffic volumes it had already presumably agreed with Ryanair, a total that no other airline could hope to match.

France itself is the European leader when it comes to route subsidies: PSOs are applied to 46 domestic routes, about 11% of domestic capacity (compared to just 0.7% in Germany), most linking regional points to Paris. The most important subsidised routes (the amount of the subsidy is not openly available) are to/from Corsica. Notably, Air France operates a 5-6 daily A320 services on the Ajaccio-Paris PSO route that carries nearly 400,000 passengers a year. And there are another five routes with passenger volumes of over 100,000 passengers a year. The subsidy is administered by the Corsican authorities, and part-financed by a ticket tax on all departing passengers from French airports. The imposition of PSOs on Paris routes means that slots have to be preserved for these services at Orly. So about 30% of slots at Paris Orly are ring-fenced for PSO and other domestic services, which creates part of the impediment to easyJet building a hub there. (However, there would be no legal reason why easyJet should not apply for a French PSO.)

Italy operates a similar regime: PSO routes link Sardinia with Rome and Milan. The main PSO route is Cagliari-Rome, operated with 12 daily MD80 or A321 frequencies by Alitalia. Traffic on the route is in excess of 800,000

passengers a year.

The other Sardinian routes are split between Alitalia, Volare and Meridiana. Alitalia is in the process of buying out Meridiana and has signed an extensive codeshare with Volare, actions that have attracted the attention of the Italian and EC competition authorities. Some of the Sardinian routes were until a couple of years ago operated on a commercial basis but became PSOs when the Italian government imposed new conditions on the operation of the services, including minimum size of aircraft, timetable requirements, maximum fares and special fares for Sardinians.

In the UK PSOs have been limited to services linking remote communities in the Highlands and Islands of Scotland to Glasgow. However, this year Scottish Enterprise and Invest Northern Ireland, the regional development agencies, have received central government funding (about €12m in total) with the general aim of improving air access. These funds could be used for new PSO services or airport investment.

The Northern Irish situation illustrates a variation of the regional aid theme. Northern Ireland is very well connected to London with multiple daily frequencies from two Belfast airports to four London airports. However, a perceived problem has arisen because of the change in the operators on the route. easyJet (incorporating Go) has displaced BA and bmi on Belfast-London, with BA withdrawing completely and bmi downsizing and switching from Belfast International to Belfast City airport. Whereas BA and bmi used to offer multiple frequencies into Heathrow, easyJet operates to Luton, Stansted and Gatwick with the result that the opportunity for connecting at Heathrow onto continental European points has been greatly reduced for Belfast originating or destined passengers. One proposal now is for a subsidy for direct services from Belfast to continental European points.

In brief, regional subsidies or support of whatever form, and whether designed as PSOs or not, comprise an integral part of the European aviation market. The Strasbourg ruling against Ryanair is only one part of the larger, complicated picture facing the EC. Ryanair could help the EC resolve its problem simply by being a little bit less aggressive.

The new wave of long-haul all-business airlines

The impending retirement of Concorde services has provided a fresh impetus to the concept of the all-business class long-haul airline. A number of such airlines are either now flying or are expected to fly soon. Historically, the model has never been sustainable in the airline industry, with initially promising projects like MGM Grand Air ending in failure. Who are the newest players and how will they fare?

Blue Fox

In planning since 2000, the UK-based start-up has been hampered by the usual suspects - economic downturn, September 11, Iraq War and SARS. The carrier had planned to use specially configured 767-300ERs on twice-daily London Stansted-JFK flights, offering a 50-inch pitch, DVDs and onboard chefs, targeting business executives who were price-sensitive and did not work for large corporations or banks with their own corporate programmes.

A quite high-profile chairman, Norman Tebbit, a senior minister in the Thatcher government, was appointed, but the chances of Blue Fox ever flying have been dealt a blow with the loss of Mike McTighe, the proposed COO, who has joined Air Atlanta Europe, the newly created UK operating subsidiary of Air Atlanta Icelandic, as its managing director.

Bluetail

In August 2002, German and US entrepreneurs announced that were seeking to launch a business-class only airline in the second-half of 2003 using a 777, initially on transatlantic services between German and US cities.

Bluetail's plan involves leasing the 777, stripping the first-class and economy-class seats from the aircraft and replacing them with business-class seats in order to accommodate 100-120 passengers. Additional space created by the conversion will allow aircraft configuration with extras such as communications and office equipment, sleeping quarters and a bar. The airline needs around €22m in basic start-up capital; if aircraft financing is fully

accounted for, the total requirement is almost €100m.

Privatair

Swiss-based Privatair is probably the most advanced of the premium carriers. On behalf of Lufthansa, it started an all-business-class transatlantic service, using a 48-seat Boeing Business Jet (BBJ) on Düsseldorf-New York Newark service in June 2002. This replaced Lufthansa's own A340 operation on the route. The BBJ service is priced at standard Lufthansa business-class fares and operates as a normal scheduled flight under LH flight numbers. Privatair has since launched two more services for Lufthansa, Munich-New York Newark which started in May this year, and Düsseldorf-Chicago which began in June, both using A319s in a business jet configuration, leased from CIT Aerospace.

Lufthansa has said that the Düsseldorf-New York service's load factors and yields are meeting targets, customer satisfaction is good and that the operation is profitable. Lufthansa chose the new services after exhaustive route studies, with an essential ingredient being "a business centre at one end and another at the other end" of the route.

The Düsseldorf-Chicago service is a new route for the carrier, whereas Munich to Newark doubles Lufthansa's business class capacity to New York from Munich as it already flies daily to Kennedy Airport with an A340-300 with 42 business seats.

Lufthansa's expansion of its executive service has prompted renewed interest in the concept from other carriers. Privatair says it has been contacted by 30 airlines about similar operations, and has entered into serious route and pricing studies with six of them. Inevitably, one such carrier is believed to be Virgin Atlantic.

Primaris

Las Vegas-based Primaris is planning to offer first-class-only transcontinental and international service from the autumn of 2003. Targeting business travellers not just with the promise of better space and service, but also with discounts.

Primaris will offer first-class fares for 50% to 70% less than the unrestricted fares of the incumbent airlines. With a declared break-even load factor of 60%, the airline is configuring its 757s to accommodate 100 seats in a two-by-two configuration offering 45" seat pitch. Letters of intent have been signed with lessors Pembroke Group and Aviation Capital Group for ten 757-200s. At this time the airline is still awaiting authorisation to conduct operations as an air carrier. It has applied for an FAA Air Carrier Operating Certificate and US DoT authority to conduct interstate and foreign scheduled air transportation.

Premium Airways

Premium Airways plans to start operations in January 2004, initially operating twice-daily flights between JFK and Paris CDG with two 757-200 aircraft configured with 80 business class seats. The company is in the process of applying for slots at the two airports. With all-business class configuration, Premium intends to offer JFK-CDG return tickets at \$3,150, CDG-JFK returns at €2,250 - roughly a 50% reduction compared to its competitors.

Founder Jerome Maillet says the company hopes to provide more details about the airline in mid-September, including disclosing the identity of its investors. Maillet argues that, although the North Atlantic is one of the most competitive markets in the world, the competition "essentially pertains to the economy cabin where elastic demand has driven fares to incredibly low levels". Business class fares, he argues, are among the highest fares in the market on a per miles flown basis (and on the contrary the average economy ticket is priced very low per miles flown). Premium says its break-even load factor will be 38%.

Royal Jet

Gulf Air is to launch a weekly premium service from Abu Dhabi to Geneva in Switzerland using a Boeing Business Jet (BBJ). The BBJ aircraft has been configured to provide a three-class service for VIPs and corporate passengers and will be operated by Gulf-based Royal Jet.

Success/failure indicators

The timing of the launch of these all business

class airlines may be problematic. Although capacity has never been cheaper and there is a ready supply of personnel, these pluses are outweighed by excess capacity, a preponderance of cheap fares and weak demand especially at the high yield end of the market. Certainly, passengers do respond to low fares, but business passengers also particularly value frequency and the ability to book a flight to other destinations within one airline. The lack of scale and scope economies will work against these new entrants.

The proposed round trip fare for Premium Airways, \$3,150, means that the airline will rely on attracting expense-account travellers. This fare represents a 50% discount to the published business class fares of the traditional carriers, but it should be noted that with corporate discounts, many business travellers pay considerably less than the published fare. Currently several airlines are discounting published C Class transatlantic fares by as much as 50%. Websites such as www.first-class-air.com are selling C Class round-trip fares to Europe starting at \$3,000. Until recently such discounting of C and F fares has been rare, but in today's environment, Premium Airlines may well not be able to enjoy the sort of price advantage it seems to expect.

The Privatair business model would appear to have more advantages with the backing and cooperation of a major European airline. As the contracted and integrated service, Privatair has no direct competition from the major airline, and has use of its lounges, FFP, marketing clout etc. The problem for Privatair is that Lufthansa will be keen to operate its own services, re-instating A340 operations when demand recovers.

Whereas full service carriers have limited weapons at their disposal to tackle low-cost carriers, their armoury is somewhat greater when they come to respond to the threat posed by all-business class airlines. More importantly, the threat of the loss of high-yielding business class traffic will make the traditional carriers very keen to nip the concept in the bud.

Pricing is one such tool, and it will be interesting to see whether Air France, American Airlines, Continental and Delta will allow themselves to be undercut, or will they match Premium Airways at least on some seats? The traditional flag carriers also have very powerful and well-established frequent flier programmes, which will almost certainly be used to encourage passengers to remain loyal.

Atlantic Coast Airlines: Goldilocks, a low-cost strategy for 50-seaters

Atlantic Coast Airlines, one of the largest regional carriers in the US, recently announced what has to be one of the most intriguing airline strategy changes devised in the post-September 11, 2001 environment. If implemented and successful, Project "Goldilocks" could also have potentially significant impact on the East Coast competitive landscape.

In brief, ACA wants to give up its United Express business, which currently generates 85% of its revenues. It wants to transform itself from a regional fee-for-service provider into a low fare carrier with a large independent hub operation at Washington Dulles. It intends to utilise its 50-seat RJs in smaller markets and to acquire larger narrowbody jets for higher-density and transcontinental routes.

The most striking thing about the proposal is that it would dramatically increase in the risk profile of the business. ACA would be switching from the industry's safest, most predictable business model (the "fixed-fee" or "fee-per-departure" feeder agreement) to what has to be the riskiest form of existence. Low-fare carriers in the US have had a dismal survival record.

The largest US regional airlines have remained profitable through the current industry slump because of the protections afforded by their fixed-fee contracts, which guarantee at least small profit margins. The airlines collect the same fees regardless of what load factors and fares are.

While working with a partner that is in Chapter 11 bankruptcy is obviously not ideal, ACA is still expected to post a healthy pretax profit margin for 2003 similar to last year's 12%. Of the non-regional carriers, only Southwest and JetBlue have earned better margins than that over the past two years.

The announcement came after months of frustrating negotiations with United, which sought cost cuts and concessions from its regional partners as part of its Chapter 11 restructuring. However, Goldilocks does not appear to be a negotiating ploy; ACA's leadership firmly believes that the strategy change is in the best interests of shareholders and (barring a hostile takeover) is deter-

mined to implement it.

Why, then, would ACA want to make such a controversial switch? Is this further evidence that the low-fare business model will soon dominate the industry? Or has United's bankruptcy fundamentally changed the attractiveness of the regional business model?

There is considerable interest in ACA's proposals also because of the potential implications for the rest of the industry. In the first place, ACA is throwing a big spanner in the works of UAL's reorganisation - how will the major airline cope with the loss of its key partner and RJ provider at Chicago and Dulles?

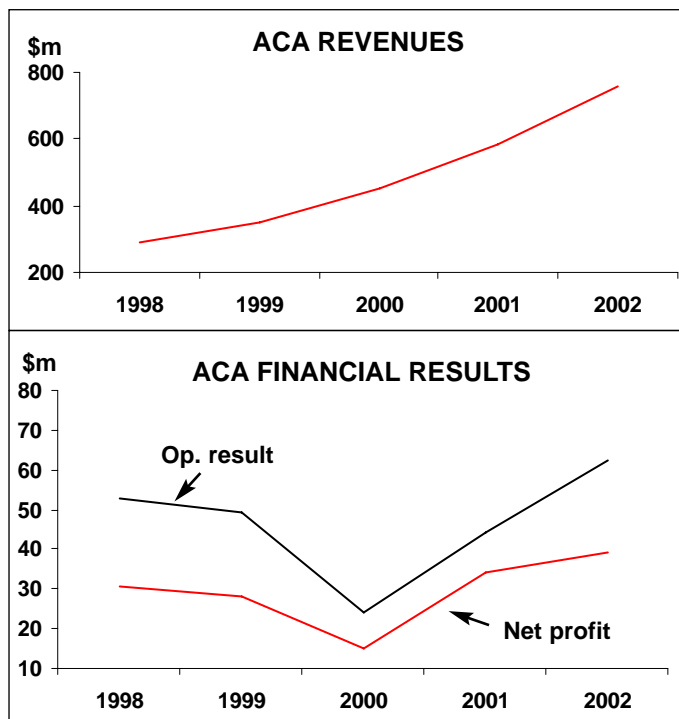
The possibility of a new low-fare airline emerging to dominate a major East Coast hub is big news indeed. Does ACA have the potential to become Washington DC's equivalent of JetBlue? Could it inflict serious damage to US Airways' planned RJ operations? Or would the DC-area incumbents (including Southwest at Baltimore) mount strong competitive responses?

Not least of all, there is interest in the economics of ACA's proposed venture. This is believed to be the first time anyone has attempted to be a low-fare short-haul carrier with a fleet of RJs, when 150-seater aircraft have tended to be the norm in such operations.

However, there is considerable scepticism about the economics of the proposed venture. If there were doubts about JetBlue doing it with 100-seaters (*Aviation Strategy*, July/August 2003), how could ACA do it with 50-seaters?

With the economics untested, the investment community has been sharply divided on the plan. Several Wall Street analysts, including Blaylock's Ray Neidl, JP Morgan's Jamie Baker and UBS' Robert Ashcroft, have said outright that they believe ACA will be unsuccessful. They are mainly concerned about the RJs' high unit costs, with Baker arguing that "50-seat economics are particularly ill-suited for low-fare operation".

By contrast, Raymond James' analyst James Parker and Merrill Lynch's Michael Linenberg have rated ACA's chances of success as high. Linenberg reminded investors that RJs have sub-



stantially lower per-trip costs than larger jets, which makes them optimal for small and medium sized markets. He also noted that the timing could not be better for ACA to utilise its resources in that way, given the weakened financial state of the majors.

Some logistical issues

ACA's tentative schedule calls for Goldilocks to be launched in the second quarter of 2004.

However, the RJ part of the plan can only materialise if and when United formally rejects ACA's feeder agreement, which has another seven years to run. This could take place in three ways: when UAL liquidates, when it emerges from Chapter 11 or by mutual agreement between UAL and ACA on how to phase out the aircraft. United has now officially delayed its planned Chapter 11 exit to the first half of 2004 (meaning late spring or early summer).

Under bankruptcy rules, United has the option of either assuming ACA's existing contract or rejecting it. It is not likely to assume the contract, because that would mean having to honour all the terms, including higher profit margins and previous RJ growth commitments. The latter may no longer be possible in light of the new growth oppor-

tunities granted to SkyWest, Mesa, Air Wisconsin and Trans States as part of new concessionary contracts.

James Parker pointed out in a recent research note that United will have to submit a plan for reorganisation 90 days prior to exiting bankruptcy, and that it will have to state how and when it will replace ACA. Parker suggested that the two sides would most likely agree to a phase-out of RJs and stations beginning in April 2004.

There is obviously a risk that ACA could be stuck with the United contract longer than desired. However, the flip side of that would be that it would continue to earn strong profit margins from the United business, which would help fund the new narrowbody operation. ACA has indicated that it could launch that part of Goldilocks first and fold the RJs in later.

Why this path?

ACA said that Goldilocks was the culmination of an extensive evaluation of different business platforms and changes in the airline industry going back to July 2001. The initial aim was to ensure continued growth opportunities in 2003-2004 and beyond, but after United's Chapter 11 filing in December 2002 it was also for contingency planning purposes.

In the end, it was a combination of being attracted by the low-fare carrier platform, becoming disillusioned by the fixed-fee model and losing faith in UAL's long-term prospects.

ACA felt that this was an ideal time to move into the segment of the industry that it believed would succeed in the long term. As CEO Kerry Skeen explained it: "I don't think anyone will dispute that the low-fare platform is the best place to be, to have earnings and to be able to grow earnings".

ACA also believes that the likely industry consolidation in the next 10 years will have a negative effect on the regionals, specifically in terms of reducing the number of hubs. It has noted a trend in contract talks of the majors playing one regional against another, suggesting continued problems with the major partners.

Regarding the UAL talks, the airline gave a long list of reasons why it could not agree to the terms of a new contract, but in essence it was because of the trend of the fixed-fee economics deteriorating over time. Also, ACA is taking a rather dim view of UAL's chances of successfully exiting

bankruptcy, achieving long-term stability and avoiding labour problems.

Skeen said: "Now that the risk profiles are changing dramatically for that type of business, coupled with a reduction in economic benefit, it is very compelling for us to use CRJs in this manner".

Goldilocks' business model

The initial Goldilocks business would consist of three elements. First, the airline would operate 87 50-seat CRJ-200s in about 36 low-to-medium density markets from Dulles. They would fly initially 275 departures daily on routes of up to 1,000 miles, with an average trip length of 300-400 miles.

Second, ACA plans to keep its Cincinnati and Boston-based Delta Connection operations, which currently utilise 32 328JETs. It has discussed the matter with Delta and does not foresee problems in the short term at least.

Third, ACA hopes to utilise 130-200 seat narrowbody aircraft in coast-to-coast and other primary markets currently served by United. That fleet would grow from 3-4 aircraft initially (operating 50 daily frequencies) to about 20 within 12-18 months.

The intention is to retire the remaining J-41s when the United service ends. ACA does not anticipate taking any of the 34 CRJs remaining on firm order. The impression gained is that, under the May 2003 CRJ deferral deal with Bombardier, ACA need not take any of the 34 aircraft in the event that it does not sign a new agreement with United.

ACA has said that it would consider other codeshare relationships. However, its top executives also concede that the business model does not really support other codeshares because it is designed to be a very simple operation.

In contrast with United, whose objective at Dulles is to get feed to international and key domestic routes, ACA will aim to cater more for local traffic (aiming for a 50/50 mix). This will require higher frequencies and more attractive scheduling than is currently the case with United, which operates only one daily flight bank at Dulles. Essentially, ACA expects to revert back to the Dulles schedule of eight daily banks that it had before it converted to fixed-fee service with United in 2000.

Like Southwest and JetBlue, ACA hopes to stimulate traffic. It estimates that 75% of its planned connecting markets do not have low-fare service today. It plans to offer 30-40% lower aver-

age fares and 60-70% lower unrestricted fares than what is currently available in those markets.

Key strategic advantages

ACA has many prerequisites in place to make Goldilocks a success. First, it has identified good markets that are evidently underserved and overpriced. Second, it is already an established operation and will have considerable critical mass at Dulles from day one. Third, it has strong cash reserves to tap for start-up funds and to help sustain losses initially.

ACA will enjoy the unique advantage of being able to create almost overnight a formidable presence at Dulles with 87 CRJs. While implementation may be a challenge, scale should aid in the efforts to develop a brand. ACA calculates that, in terms of departures, it will immediately be the largest airline in the DC area, operating 275 daily flights compared to US Airways' 183 and Southwest's 156.

The ACA executives made the interesting observation that the only US low-fare carriers that have consistently produced double-digit operating margins since 2001 (Southwest and JetBlue) are both the largest carriers in their main cities. By comparison, AirTran and Frontier, which have not produced double-digit margins (though AirTran is beginning to), are only number two carriers in Atlanta and Denver respectively.

The metropolitan DC area is the nation's fifth largest local traffic market with 42m annual passengers. Dulles (13m) is the 25th largest local market, which ACA believes is understated because it has never really been stimulated by lower fares; only AirTran and JetBlue are present in a few larger markets, and many people drive to Baltimore for Southwest's low fares. Also, Dulles has had inferior service levels compared to National and Baltimore.

ACA is making the case that Dulles is geographically the most convenient airport for the vast majority of DC area residents. The intention is to pull the traffic back to Dulles that would have naturally gone there in the first place, rather than provoke US Airways or Southwest by trying to steal their traffic.

Being able to develop the low-fare operation on one's home turf will be a major strength. ACA has 46 gates, a maintenance base and other key facilities at Dulles - the sort of infrastructure that

would be difficult for a newcomer to replicate.

Questions have been raised about ACA's ability to take over functions such as scheduling, pricing and revenue management, but the leadership points out that it only gave up those activities three years ago when it went 100% fixed fee. In 1998 and 1999 the company achieved operating margins of 18.1% and 14.1% respectively. It has been in business for 14 years, and most of the pre-2000 senior management talent is still there.

ACA is hoping that the Goldilocks announcement will deter other potential new entrants from Dulles (among others, Branson was earlier believed to be targeting that airport for his planned US start-up). However, ACA is not worried about new entrants because they could only start with a few aircraft.

According to James Parker, US Airways' current market coverage overlaps 95% of ACA's planned markets, but Southwest serves only 23% of the city pairs. Head-to-head competition with Southwest and many other low-cost carriers would be limited by the fact that they could not profitably serve ACA's 50-seat markets with 150-seaters.

The biggest near-term uncertainty is in respect of United's plans. United has so far insisted that Dulles will remain an important hub in its global network. However, it will have to cover Chicago first.

ACA had a substantial \$221m of cash on June 30 and expects \$250-265m at the end of June 2004 (assuming continuation of United Express operations until that point). This would make Goldilocks an even better funded venture than JetBlue, which had \$140m of seed money. It would have ample resources to take it through several initial quarters of operating losses.

However, it is worth noting that ACA will have the challenge of financing larger aircraft and that its hitherto extremely strong balance sheet is likely to weaken as a result.

Goldilocks' economics

ACA expects to achieve unit costs of 15-16 cents per ASM with Goldilocks CRJs, which would be substantially below the 22 cents that the major carriers are apparently paying to the regionals (in Parker's estimates). The regional's profit margin and differences in utilisation account for much of the gap.

After taking control of the schedule, ACA

expects to be able to boost daily RJ utilisation from the current nine to 11 hours. As a result, facility utilisation and labour productivity will also rise. The addition of larger aircraft will provide a further efficiency boost. Goldilocks will rely on web-based reservations and ticket sales. ACA already has competitive pay scales, an extremely productive workforce and not many restrictive work rules.

Skeen said that ACA's rationale was exactly the same as JetBlue's was with the recent ERJ-190 decision - to operate high-frequency service in smaller markets that could not be served profitably with larger aircraft.

For example, a typical Goldilocks market of 350 miles might generate \$12,000 a day in local revenues. CRJ's costs are \$2,800 per departure, so ACA could operate 4.3 daily CRJ departures. The addition of \$10,000 daily connecting revenues would enable ACA to operate a total of eight daily CRJ departures. By comparison, a 125-seater could profitably operate less than two daily flights in that market.

The key thing to understanding the Goldilocks concept and economics is that ACA's RJs and competitors' 150-seaters will not generally be present in the same markets. However, ACA's leadership suggested that in the relatively limited number of head-to-head markets with Southwest, ACA was likely to offer \$15-20 higher fares - a difference so small that people would probably just choose the more convenient airport.

Parker, whose company sponsored investor meetings for ACA in Boston and New York in mid-August, suggested in a research note that the unit cost difference between a 737 and a 50-seat RJ on a 224-mile route would be six cents or \$13.44 per seat/\$19.50 per passenger. Therefore ACA would need to charge \$20 more per passenger in average fare to offset the higher CASM.

Parker feels that Goldilocks' biggest risk is on the revenue side of the equation. The higher RJ unit costs will require fares "at the upper end of the low fare range" (again, assuming RJs in head-to-head competition with 150-seaters).

In Parker's best-case scenario, Goldilocks would earn a 15% pretax margin on \$945m revenues within 2-3 years of 87 RJs and 20 narrowbodies being fully on stream. In his worst-case scenario, there would no profit within 2-3 years, Goldilocks is shut down and ACA reverts to a revenue sharing agreement under a major airline code at Dulles, which would produce at least a modest profit margin.

By Heini Nuutinen

East Africa's aviation resurgence

East Africa is experiencing an upsurge in start-up activity and a growing battle between Kenya Airways, the region's traditional aviation giant, and South African Airways (SAA), which wants to establish an East African hub. Why is a region that suffered terrorist attacks in 2002 becoming the focus of such aviation activity?

On the face of it the increased interest in East Africa is surprising given that Africa's economy slowed last year. In 2002 Africa's GDP grew by 3.1%, compared with 4.3% in 2001, according to the OECD and the African Development Bank, but that general slowdown disguises wide regional variations across the continent. GDP growth was actually highest in East Africa, and the region's most important countries in terms of aviation - Kenya, Ethiopia, Tanzania and Uganda - saw respective GDP growth in 2002 of 1.6%, 5.0%, 5.7% and 5.7%, with forecast growth for 2003 of 2.8%, 6.0%, 5.9% and 6.3%.

Yet although East African GDP is growing fast, populations are large, and low income per capita does not translate into major domestic or intra-African aviation markets. Additionally, says the World Bank, Africa's airlines face distinct disadvantages compared with carriers in the rest of the world. Aviation fuel costs are up to 50% more expensive in Africa, while aircraft lease rates are some 15-30% higher.

What Kenya Airways, SAA and a host of start-ups see in the region is its potential not for intra-African passengers but for pan-continental traffic. For many years that has meant tourism, largely from Europe and Asia and attracted to game reserves such as the Masai Mara and the many beaches along the east coast. But now airlines see the possibility for more than just tourism - they aim to exploit East Africa's geographical position as well. Specifically, they see the region as an ideal hub to connect:

- Africa with the Middle East and Asia on an east-west axis, and
- Southern and Central Africa with Europe on

a north-south axis.

The geographical advantages of East Africa have long been realised, but airlines have traditionally struggled to exploit them given the region's relative poverty in global terms and, more importantly, the regulated and immature aviation industry.

Until the 1990s liberalisation and deregulation was not an issue in Africa, but from the early 1990s global institutions such as the World Bank and IMF have "encouraged" liberalisation as the price of providing further loans and/or debt relief. As a result, privatisation and economic liberalisation programmes have started to have an impact in certain countries, and as a consequence selected governments have been more willing to reduce regulation of air fares, lessen the propensity for political appointees at state airlines, and move towards allowing national airlines to make wholly-commercial decisions.

Another impetus has been given by the Yamoussoukro Treaty, an agreement by African countries to liberalise aviation that was signed way back in 1988 but which was not formally ratified until 1999. It is these two factors - economic reform pushed by global institutions and a political will to implement Yamoussoukro - that have been the impetus for the aviation gold rush in East Africa we are seeing today.

Yet it is not all good news for East Africa's aviation industry. As can be expected, the push for liberalisation varies widely across countries and issues, so while many governments have moved relatively fast to start the flag carrier privatisation process, other governments are moving slowly to remove competition restrictions on flights between important city pairs, or to even think about pan-regional interests rather than their own national aviation interests.

Importantly, there is stubborn and growing resistance to the way aviation deregulation and liberalisation is being carried out. Some African politicians and economists

argue strongly that the clamour for aviation liberalisation in the region is led by those western countries that benefited tremendously from protecting their own national airlines for many decades - yet they are the first to want East Africa's infant aviation industry to open up to full market forces, even if that has the consequence of seeing some of the region's airlines disappear.

In one sense whether that point of view is correct or not is irrelevant since, whatever its impact, aviation liberalisation is occurring regardless in East Africa.

Uganda

One of the most liberalising countries in East Africa is Uganda, and start-up airlines there are finding it relatively easy to launch operations. This is partly due to the April 2000 collapse of flag carrier Uganda Airlines after 24 years of operation following the Ugandan government's failed attempt to sell the airline. SAA had been interested in acquiring Uganda Airlines, which flew to a range of destinations across Africa, but pulled out after months of negotiations. Unconfirmed reports from the Ugandan side said that the deal collapsed following insistence from SAA that Uganda Airlines operated as a SAA franchisee, an unacceptable condition to the government.

The collapse of Uganda Airlines created a vacuum in the country that start-ups - encouraged by Uganda's moves towards economic liberalisation - attempted to exploit. Entebbe-based AfricaOne was launched in early 2002 by Tanzanian investors and UK-based African cargo specialist DAS Air Services, to serve Dubai and four African destinations with three DC-9s. Apparently backed with around \$35m of capital, it had ambitious plans for long-haul routes to Europe out of Uganda using A310s, A330s and 767-300ERs, to be followed by further operations based in western and southern Africa.

But the airline's long-haul plans were rather too ambitious, and AfricaOne ran into trouble closer to home. Plans for Lagos-Entebbe flights were delayed by problems

with the existing Nigeria-Uganda bilateral - a delay that cost AfricaOne \$4m, the airline claimed - and AfricaOne collapsed when two of its DC-9s were repossessed by the Boeing Capital Corporation in April 2003.

Another Ugandan start-up, East African Airlines (EAA), has been more successful. Launched in December 2002, the airline operates a 737-200 and a 767-300ER out of Entebbe on three African destinations, including Johannesburg, and is trying to get permission to fly to other African airports. EAA's strategy is to feed traffic into major airlines flying to/from East Africa, and although it had a partnership deal with the short-lived AfricaOne it also has a codeshare agreement with Air Zimbabwe and with Kenya Airways on the trunk route between Nairobi and Entebbe. EAA is also planning to launch long-haul routes of its own, initially to India.

Tanzania

Air Tanzania was founded in 1977 and serves eight African destinations out of Dar-es-Salaam with three 737s. As part of Tanzania's privatisation programme encouraged by the World Bank, a minority stake in the airline was put up for sale in 2002. In December 2002, SAA acquired a 49% stake for \$10m, and is committing another \$10m to revamping the airline. In reality, the airline has been virtually reformed since SAA took a stake, being legally reconstituted as Air Tanzania Corporation (ATCL).

It is still undergoing significant change - a number of lapsed routes have been restarted, SAA is transferring aircraft to Tanzania and SAA is also negotiating a deal for a 737-800 for the Air Tanzania fleet. With SAA undergoing a major fleet replacement programme, with 38 Airbuses replacing Boeing aircraft, it is possible that Air Tanzania will convert to an all-Airbus fleet.

Essentially Air Tanzania was acquired to provide an East African hub for SAA as part of a new and aggressive strategy to expand SAA's operations in other parts of the continent. SAA insists that Air Tanzania will retain its brand and identity, but the move is worry-

ing other airlines in East Africa, some of which distrust SAA's long-term motives. As Brian Presbury, the former CEO of Kenya Airways, says, "SAA has a poor track record in the region" - a none-too-subtle reference to SA Alliance Air, the collaboration between SAA and the Tanzanian and Ugandan governments that collapsed in October 2000 with losses of more than \$40m.

The comment also indicates the growing rivalry between SAA and Kenya Airways. In response to SAA's investment in Air Tanzania, in March 2003 Kenya Airways bought 49% of Tanzania's Precision Air - 33% from the Tanzania Venture Capital Fund and 16% from the airline's founder, Michael Shirima, who retains 51%. Precision Air operates a fleet of six ATR 42s and Let 410s on domestic Tanzanian routes and to Mombasa and Nairobi in Kenya, a total of 15 destinations. Precision Air focuses mostly on providing services for tourist passengers, although Kenya Airways' long-term strategy for the airline is unknown.

Kenya

Kenya Airways was launched in 1977 to fill the void left by the collapse of East African Airways, the pan-regional airline owned jointly by the governments of Kenya, Tanzania and Uganda. In 1996 Kenya Airways became the first African airline to undergo privatisation, at the same time signing a strategic alliance with KLM. Today the Dutch airline has a 26% stake in Kenya Airways, foreign institutional investors have 30%, local investors and employees 21% and the Kenyan government the remaining 23%.

Based at Nairobi, Kenya Airways operates to more than 20 destinations, though at present the only non-African routes are to Mumbai, Amsterdam, London Heathrow and Dubai. Flights to Bangkok and Hong Kong are planned to commence in early September. The airline has been profitable for the last decade, although it reported US\$7m pre-tax profits for the year to March 2003, a 48% reduction compared with 2001/02 despite a 9% increase in revenue to

\$352m. Operating profits fell a third in 2002/03, to \$10.7m, as the airline's performance over the year was hit by the build-up to Gulf War II, the SARS crisis, weak global and local economies (Kenya has the weakest economy among the major East African nations) and the attempted missile attack on an Israeli Arkia Airlines' 757 that was taking off from Mombasa airport in November 2002. That terrorist attack cost Kenya Airways at least \$1.4m, the airline estimates, (compared with the \$7.7m cost of September 11).

The Mombasa incident, along with ongoing security concerns, led the UK government to suspend flights to Kenya during May-June 2003, with other governments warning against travelling to the country. This particularly affected tourism, although Kenya Airways operated as normal through the period.

Since ditching the last of its A310s in April 2002, Kenya Airways has had an all-Boeing fleet, which now stands at 16 aircraft, 11 of which are 737s. Four 737-700s have been delivered over the last year and two more ageing 737-200s will have to be replaced sometime over the next two or three years. Kenya Airways has considered replacing them with 70-seat turboprops, but has put off a decision for a while.

The new 737s are adding extra capacity on intra-East African routes, and total ASKs at the airline rose by 10% in 2002/03. However, load factor fell by 2% during the year, as RPK growth did not keep up with capacity increases. International traffic rose during the year, but this was cancelled out by a 4% decrease in domestic passengers due to terrorism fears, a weak national economy and worries over possible violence before the 2002 Kenyan general election (in which the country's ruling party was voted out of government after 40 years' rule).

For long-haul, Kenya Airways operates five 767-300ERs, and in March 2002 it announced an order for three 777-200ERs - for delivery from 2004 onwards - replacing its earlier commitment to the proposed 767-400ER. Kenya Airways had been the only airline to order the aircraft, and Boeing cancelled its development in 2001.

Cargo aircraft may also be added to the fleet at some point as Kenya Airways is keen to develop Nairobi as a hub for cargo traffic. Kenya Airways owns 60% of Kencargo Airlines International, a Nairobi-based airline that was launched in April 2001 in association with KLM and Martinair, which each have 20%. The airline only operates a single Antonov 12 at present and primarily is a sales and marketing entity for the three airlines' existing cargo capacity.

Looking ahead to 2003/04, the airline is confident that revenue and profits will improve as tourism, business travel and aid from the IMF returns to Kenya following the apparent end of terrorism threats and the election of a new government, although that hasn't stopped the airline from hiring McKinsey and launching a cost-cutting programme and other measures during the first half of the 2003/04 financial year.

As well as looking to improve its own performance, Kenya Airways has also been at the forefront of efforts to restructure the aviation industry in East Africa. In 2002 it withdrew its interest in the privatisation of Air Tanzania (see above), instead proposing a new airline in East Africa that would involve the governments and airlines of Kenya, Tanzania and Uganda. The Tanzanian government was not interested in Kenya Airways' proposal, and instead carried on with the part-privatisation of Air Tanzania.

Despite the Tanzanian government's decision, Brian Presbury, CEO of Kenya Airways at the time (he was replaced by Titus Naikuni in April 2003), argued that the need for a pan-East African airline was still necessary. He said that small national East African airlines were not viable economically, and that governments needed to think about more than just having their own national airline and protecting their domestic markets. But some in the region are concerned about the relative dominance of Kenya Airways in East Africa, while other African aviation analysts point out that since pan-regional airline consolidation has not been feasible in Europe, why should East Africa be any different?

That viewpoint is refuted by Kenya's Airways' management, even more so given

some of the local difficulties it is facing. Kenya Airways is known to want to set up a shuttle service between Kenya, Tanzania and Uganda, but has faced problems in getting permission from the respective governments.

Presbury said: "Kenya Airways is still struggling with some of these bilateral issues. There has to be a recognition that putting up the barriers is no good for anyone. It's in everyone's interests that African carriers share resources, otherwise some carriers will fail."

Kenya Airways also wants Kenya's own aviation infrastructure to be improved. Currently, Nairobi is not an FAA Category One status airport, so services to the US are not allowed despite a partnership agreement with Northwest signed back in 1998. However, the Kenyan government has now made the Kenya CAA more independent, so the airline is hopeful that improvements to Nairobi airport will be made.

This is doubly important now that Kenya Airways has its own domestic carrier, Kenya Flamingo Airlines. The airline operates Saab 340s and was launched in 2000 in order to replace domestic Kenya Airways services out of Nairobi. Kenya Flamingo Airlines switched to a low-cost operation in May 2002, at the same time reducing its fares by up to 30%.

However, this does not appear to be a success and there has been strong opposition from Kenyan travel agents to Flamingo's use of internet bookings. As a result Kenya Airways is re-examining the business strategy for Flamingo, although it insists it is still committed to a low-cost concept. Given Africa's high infrastructure costs, it is not certain whether the low-cost carrier (LCC) business model can be established in the continent. The most successful example so far appears to be South Africa's kulala.com - launched in July 2002 as a LCC subsidiary of Comair - although SAA claims that kulala.com "has not eroded our market at all".

At present, domestic rivals to Kenya Airways include privately-owned East African Safari Air which has begun a scheduled twice-weekly service between Paris

and Nairobi, operating via Rome. The service is using a Boeing 767-300 leased from ILFC and it will offer direct connections to Kilimanjaro and Zanzibar.

Another domestic carrier, Airkenya-Aviation operates seven Bombardier and Shorts aircraft within the country. Airkenya also has a regional subsidiary based in Nairobi called Regional Air, a British Airways franchise partner that uses four 737-200s on routes to 18 African destinations. In June 2003 Airkenya was bought by an unknown Kenyan consortium with a promise that the airline will undergo a restructuring programme.

Ethiopia

Operating since 1946, Ethiopian Airlines is still 100% owned by the government. Based at Bole Airport, Addis Ababa, the airline operates to 50 African destinations: six in Asia, five in Europe, six in the Middle East and two in the US (Newark and Washington Dulles).

Ethiopian Airlines has a fleet of 22, mostly Boeing aircraft. In 2002 it placed orders for three 737-700s and three 767-300ERs to replace old aircraft, which will be delivered over 2003-05. The airline also announced it would lease up to a further six more 737s and 767s in a deal worth more than \$500m in total. The order was secured against fierce competition from Airbus, which has been trying hard to break into the African

market, which traditionally has given more than 70% of new aircraft orders to Boeing. Ethiopian Airlines may also order up to three 777s in order to complete its fleet renewal plans. The airline has also implemented construction of a cargo terminal and maintenance hangar at Bole Airport, both due to be finished within two years.

In the year to 30 June 2002, the airline reported an operating profit of \$16.9m and a net profit of \$9.8m, in 2001 the figures were \$8.3m and \$6.6m respectively compared with a \$19.2m operating loss and a \$3.8m net loss in the 2000 financial year. Ethiopian Airlines is aiming to build on the fact that it is one of the few East African airlines with an extensive route network outside the continent. More than three-quarters of Ethiopian Airlines' passengers fly on its international routes and the airline believes there is room to expand its network on an east-west axis, particularly to India and East Asia. The airline is being aided by a new terminal that has just opened at Addis Ababa, funded by the Kuwaiti government. Ethiopian Airlines is launching an internet booking capability and also hiring external consultants to advise on restructuring, with an aim of building a 15-year strategic plan.

Ethiopian Airlines will be under further pressure in future as Ethiopia has reviewed its air transport laws to allow private airlines into the cargo business. Parliament has recently amended the Privatisation of Air Transport (PAT) law, allowing private companies to engage in air cargo transport.

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

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Alaska	Year 2001	2,141	2,263	-121.8	-39.5	-5.7%	-1.8%	28,837	19,712	68.4%	13,668	10,742
	Apr-Jun 02	477	480	-2.2	-2.5	-0.5%	-0.5%	7,932	5,427	68.4%	3,616	10,222
	Jul-Sep 02	620	597	24	11	3.9%	1.8%	8,380	5,911	70.5%	3,978	10,465
	Oct-Dec 02	430	484	-60	-94	-14.0%	-21.9%	7,657	5,092	66.5%	3,367	
	Year 2002	2,224	2,313	-89	-119	-4.0%	-5.4%	31,156	21,220	68.1%	14,154	10,142
	Jan-Mar 03	519	597	-79	-56	-15.2%	-10.8%	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
American	Year 2001	18,963	20,823	-1,860	-1,762	-9.8%	-9.3%	161,030	176,143	69.4%	99,235	102,093
	Apr-Jun 02	4,479	5,080	-601	-495	-13.4%	-11.1%	70,724	53,125	71.4%	24,340	100,100
	Jul-Sep 02	4,494	5,815	-1,321	-924	-29.4%	-20.6%	73,899	53,236	72.0%	24,952	99,700
	Oct-Dec 02	4,190	4,869	-679	-529	-16.2%	-12.6%	67,964	47,428	69.8%	22,857	93,500
	Year 2002	17,299	20,629	-3,330	-3,511	-19.2%	-20.3%	277,121	195,927	70.7%	94,143	93,500
	Jan-Mar 03	4,120	4,989	-869	-1,043	-21.1%	-25.3%	64,813	44,800	69.1%	21,021	92,200
	Apr-Jun 03	4,324	4,237	87	-75	2.0%	-1.7%	68,678	51,095	74.4%		
America West	Year 2001	2,066	2,380	-316	-148	-15.3%	-7.2%	42,709	30,696	71.9%	19,576	13,827
	Apr-Jun 02	533	534	-1	-15	-0.2%	-2.8%	11,024	8,351	75.8%	5,080	11,973
	Jul-Sep 02	510	552	-42	-32	-8.2%	-6.3%	11,504	8,619	74.9%	5,165	12,320
	Oct-Dec 02	522	560	-38	-32	-7.3%	-6.1%	11,154	8,160	73.2%	4,906	
	Year 2002	2,047	2,246	-199	-430	-9.7%	-21.0%	43,464	33,653	73.6%	19,454	13,000
	Jan-Mar 03	523	569	-46	-62	-8.8%	-11.9%	11,027	7,841	71.1%	4,655	
	Apr-Jun 03	576	559	17	80	3.0%	13.9%	11,223	8,854	78.9%	5,185	11,309
Continental	Year 2001	8,969	9,119	-150	-95	-1.7%	-1.1%	135,962	98,393	72.4%	44,238	44,273
	Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%	10,727	41,116
	Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581	40,925
	Oct-Dec 02	2,036	2,094	-56	-109	-2.8%	-5.4%	31,496	22,382	70.6%	9,651	40,500
	Year 2002	8,402	8,714	-312	-451	-3.7%	-5.4%	128,940	95,510	73.3%	41,014	40,713
	Jan-Mar 03	2,042	2,266	-224	-221	-11.0%	-10.8%	30,699	21,362	68.9%	9,245	
	Apr-Jun 03	2,216	1,978	238	79	10.7%	3.6%	30,847	24,841	75.9%	10,120	
Delta	Year 2001	13,879	15,124	-1,245	-1,216	-9.0%	-8.8%	237,914	163,693	68.8%	104,943	77,654
	Apr-Jun 02	3,474	3,601	-127	-186	-3.7%	-5.4%	60,709	42,355	73.4%	27,427	75,700
	Jul-Sep 02	3,420	3,805	-385	-326	-11.3%	-9.5%	59,287	44,037	74.3%	27,713	76,000
	Oct-Dec 02	3,308	3,670	-362	-363	-10.9%	-11.0%	56,776	40,419	71.2%	27,290	75,100
	Year 2002	13,305	14,614	-1,309	-1,272	-9.8%	-9.6%	228,068	172,735	71.9%	107,048	75,100
	Jan-Mar 03	3,155	3,690	-535	-466	-17.0%	-14.8%	53,435	36,827	68.9%	24,910	72,200
	Apr-Jun 03	3,307	3,111	196	184	5.9%	5.6%	51,552	38,742	75.2%	25,969	69,800
Northwest	Year 2001	9,905	10,773	-868	-423	-8.8%	-4.3%	158,284	117,682	74.3%	54,056	50,309
	Apr-Jun 02	2,406	2,452	-46	-93	-1.9%	-3.9%	39,848	29,902	78.9%	13,627	46,260
	Jul-Sep 02	2,564	2,556	8	-46	0.3%	-1.8%	40,321	31,787	78.8%	14,365	45,466
	Oct-Dec 02	2,339	2,951	-612	-488	-26.2%	-20.9%	37,115	27,611	74.4%	12,779	44,323
	Year 2002	9,489	10,335	-846	-798	-8.9%	-8.4%	150,355	115,913	77.1%	52,669	44,323
	Jan-Mar 03	2,250	2,576	-326	-396	-14.5%	-17.6%	36,251	26,653	73.5%	12,284	42,781
	Apr-Jun 03	2,297	2,370	-73	227	-3.2%	9.9%	34,434	26,322	76.4%	12,800	39,442
Southwest	Year 2001	5,555	4,924	631	511	11.4%	9.2%	105,079	71,604	68.1%	64,447	31,014
	Apr-Jun 02	1,473	1,284	189	102	12.8%	6.9%	29,074	20,314	69.9%	16,772	33,149
	Jul-Sep 02	1,391	1,300	91	75	6.5%	5.4%	28,342	19,180	67.7%	16,256	33,609
	Oct-Dec 02	1,401	1,313	88	42	6.3%	3.0%	28,296	17,835	63.0%	15,554	33,705
	Year 2002	5,522	5,104	417	241	7.6%	4.4%	110,859	73,049	65.9%	63,046	33,705
	Jan-Mar 03	1,351	1,305	46	24	3.4%	1.8%	28,000	17,534	62.6%	15,077	33,140
	Apr-Jun 03	1,515	1,375	140	246	9.2%	16.2%	28,796	20,198	70.1%	17,063	32,902
United	Year 2001	16,138	18,481	-2,343	-2,145	-14.5%	-13.3%	265,291	187,701	70.8%	75,457	96,142
	Apr-Jun 02	3,793	4,278	-485	-341	-12.8%	-9.0%	60,315	44,896	74.4%	17,501	79,800
	Jul-Sep 02	3,737	4,383	-646	-889	-17.3%	-23.8%	64,147	48,335	75.4%	18,900	79,900
	Oct-Dec 02	3,468	4,462	-994	-1,473	-28.7%	-42.5%	59,988	43,158	71.9%	16,823	77,000
	Year 2002	14,286	17,123	-2,837	-3,212	-19.9%	-22.5%	238,569	176,152	73.5%	68,585	78,700
	Jan-Mar 03	3,184	3,997	-813	-1,343	-25.5%	-42.2%	55,751	39,980	71.7%	15,688	70,600
	Apr-Jun 03	3,109	3,540	-431	-623	-13.9%	-20.0%	51,692	39,809	77.0%	16,381	60,000
US Airways	Year 2001	8,288	9,355	-1,067	-1,969	-12.9%	-23.8%	107,347	73,944	68.9%	56,114	43,846
	Apr-Jun 02	1,903	2,078	-175	-248	-9.2%	-13.0%	23,516	17,658	75.1%	13,000	33,902
	Jul-Sep 02	1,752	1,933	-181	-335	-10.3%	-19.1%	24,075	17,276	71.8%	11,994	33,302
	Oct-Dec 02	1,614	2,217	-603	-794	-37.4%	-49.2%	20,631	14,096	68.3%	10,354	30,585
	Year 2002	6,977	8,294	-1,317	-1,646	-18.9%	-23.6%	90,700	64,433	71.0%	47,155	30,585
	Jan-Mar 03	1,534	1,741	-207	1,635	-13.5%	106.6%	19,579	13,249	67.7%	9,427	27,397
	Apr-Jun 03	1,777	1,710	67	13	3.8%	0.7%	20,929	15,789	75.4%	10,855	26,587

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

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France	Year 2001/02	11,234	11,017	217	141	1.9%	1.3%	123,777	94,828	76.6%		70,156
	Apr-Jun 02	3,276	3,124	163	157	5.0%	4.8%	31,687	24,435	77.1%		
	Jul-Sep 02	3,264	3,122	142	57	4.4%	1.7%	33,806	26,366	78.0%		71,290
	Oct-Dec 02	3,396	3,392	4	2	0.1%	0.1%	32,581	24,558	75.4%		
	Jan-Mar 03	3,240	3,373	-133	-106	-4.1%	-3.3%	32,070	23,906	74.5%		
	Year 2002/03	13,702	13,495	207	130	1.5%	0.9%	131,247	99,960	76.2%		
Apr-Jun 03	3,442	3,453	-10	5	-0.3%	0.1%	31,888	23,736	74.4%			71,936
Alitalia	Jan-Jun 01	2,348	2,504	-156	-228	-6.6%	-9.7%	26,437	18,953	71.7%	12,565	24,023
	Year 2001	4,745	5,007	-262	-818	-5.5%	-17.2%	51,392	36,391	70.8%	24,737	23,667
	Jan-Jun 02	2,462	2,574	-63	-49	-2.6%	-2.0%			69.7%		21,366
	Year 2002	5,279	4,934	-89	101	-1.7%	1.9%	42,224	29,917	70.8%	22,041	22,536
	Jan-Mar 03	1,097	1,226	-187		-17.0%		10,503	6,959	66.3	4,993	21,984
BA	Year 2001/02	12,138	12,298	-160	-207	-1.3%	-1.7%	151,046	106,270	70.4%	40,004	57,227
	Apr-Jun 02	3,127	2,886	241	61	7.7%	2.0%	35,020	24,679	70.5%	9,665	52,926
	Jul-Sep 02	3,323	2,931	392	240	11.8%	7.2%	35,608	27,301	76.7%	10,607	52,116
	Oct-Dec 02	3,025	2,939	86	21	2.8%	0.7%	34,815	24,693	70.9%	9,200	51,171
	Jan-Mar 03	2,721	2,988	-213	-216	-7.8%	-7.9%	33,729	23,439	69.5%	8,547	50,309
	Year 2002/03	12,490	12,011	543	117	4.3%	0.9%	139,172	100,112	71.9%	38,019	51,630
	Apr-Jun 03	3,023	2,957	59	-104	2.0%	-3.4%	34,962	25,102	71.8%	9,769	49,215
Iberia	Jan-Mar 02	1,070	1,076	-9	-5	-0.8%	-0.5%	13,502	9,429	69.8%	5,916	
	Apr-Jun 02	1,245	1,134	98	76	7.9%	6.1%	14,004	10,105	72.2%	6,726	
	Jul-Sep 02	1,229	1,103	132	104	10.7%	8.5%	14,535	11,419	78.6%	6,624	
	Oct-Dec 02	1,236	1,219	18	-17	1.5%	-1.4%	13,593	9,695	71.3%	5,689	25,544
	Year 2002	5,123	4,852	272	174	5.3%	3.4%	55,633	40,647	73.0%	24,956	25,963
	Jan-Mar 03	1,128	1,183	-55	-24	-4.9%	-2.1%	13,200	9,458	71.6%	5,717	
	Apr-Jun 03	1,348	1,265	83	60	6.2%	4.5%	13,516	9,982	73.8%	6,472	
KLM	Year 2001/02	5,933	6,018	-85	-141	-1.4%	-2.4%	72,228	56,947	78.7%	15,949	33,265
	Apr-Jun 02	1,639	1,599	40	11	2.4%	0.7%	18,041	14,326	79.4%		34,366
	Jul-Sep 02	1,844	1,523	140	86	7.6%	4.7%	19,448	16,331	82.7%		34,931
	Oct-Dec 02	1,693	1,760	-68	-71	-4.0%	-4.2%	19,063	14,722	77.2%		34,850
	Jan-Mar 03	1,487	1,521	-272	-483	-18.3%	-32.5%	20,390	15,444	75.7%		34,497
	Year 2002/03	7,004	7,147	-144	-449	-2.1%	-6.4%	87,647	69,016	78.7%	23,437	34,666
	Apr-Jun 03	1,621	1,483	-76	-62	-4.7%	-3.8%	17,261	13,077	75.8%		33,448
Lufthansa	Year 2001	14,966	14,948	18	-530	0.1%	-3.5%	126,400	90,389	71.5%	45,710	87,975
	Jan-Mar 02	3,556	3,513	43	-165	1.2%	-4.6%	26,451	19,409	71.0%	9,700	84,802
	Apr-Jun 02	4,968	4,601	285	138	5.7%	2.8%	30,769	22,835	70.8%	11,300	90,308
	Jul-Sep 02	4,431	4,254	454	369	10.2%	8.3%	32,409	25,189	71.1%	12,067	90,704
	Oct-Dec 02							30,282	21,476	70.9%	10,886	
	Year 2002	17,791	16,122	1,669	751	9.4%	4.2%	119,877	88,570	73.9%	43,900	94,135
	Jan-Mar 03	4,242	4,588	-346	-411	-8.2%	-9.7%	29,251	20,618	70.5%	10,391	
SAS	Year 2001	4,984	5,093	-109	-103	-2.2%	-2.1%	35,521	22,956	64.6%	23,060	22,656
	Jan-Mar 02	1,392	1,534	-142	-133	-10.2%	-9.6%	8,228	5,229	63.1%	5,091	
	Apr-Jun 02	1,965	1,608	242	106	12.3%	5.4%	8,773	6,240	71.1%	6,034	
	Jul-Sep 02	1,821	1,587	233	56	12.8%	3.1%	8,701	6,281	70.2%	5,586	21,896
	Oct-Dec 02	1,984	1,826	158	-34	8.0%	-1.7%	8,334	5,463	65.6%	5,155	
	Year 2002	7,430	7,024	78	-15	1.0%	-0.2%	34,626	23,621	68.2%	21,866	
	Jan-Mar 03	1,608	1,654	-224	-188	-13.9%	-11.7%	8,040	4,900	60.9%	4,477	30,373
Apr-Jun 03	1,906	1,705	201	8	10.5%	0.4%	8,563	5,614	65.6%	5,128		
Ryanair	Year 2000/01	442	338	104	95	23.5%	21.5%	6,657	4,656	69.9%	7,000	1,476
	Year 2001/02	642	474	168	155	26.2%	24.1%	10,295	7,251	81.0%	11,900	1,547
	Apr-Jun 02	189	153	47	40	24.9%	21.2%	2,852		83.0%	3,540	
	Jul-Sep 02	272	149	123	113	45.2%	41.5%	3,138			4,300	1,676
	Oct-Dec 02	201	149	53	47	26.4%	23.4%			86.0%	3,930	1,761
	Year 2002/03	910	625	285	259	31.3%	28.5%			84.0%	15,740	1,900
	Apr-Jun 03											
easyJet	Year 2000/01	513	455	58	54	11.3%	10.5%	7,003	5,903	83.0%	7,115	1,632
	Oct-Mar 02	285	279	6	1	2.1%	0.4%	4,266		84.2%	4,300	
	Apr-Sep 02	579	474	105	76	18.1%	13.1%	6,503			7,050	
	Year 2001/02	864	656	111	77	12.8%	8.9%	10,769	9,218	84.8%	11,350	3,100
	Oct-Mar 03	602	676	-74	-76	-12.3%	-12.6%	9,594	7,938	82.2%	9,347	

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

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
ANA	Apr-Sep 00	5,228	4,793	495	359	9.5%	6.9%	47,586	31,753	66.7%	24,958	
	Oct 00-Mar 01	5,376	5,186	190	-486	3.5%	-9.0%	46,278	29,168	63.0%	24,471	
	Year 2000/01	10,914	10,629	285	-137	2.6%	-1.3%	85,994	58,710	68.3%	43,700	14,303
	Apr-Sep 01	5,168	4,811	357	136	6.9%	2.6%	45,756	30,790	67.3%	25,876	
	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	
Cathay Pacific	Year 2000	4,431	3,752	679	642	15.3%	14.5%	61,909	47,153	76.2%	11,860	14,293
	Jan-Jun 01	2,031	1,898	133	170	6.5%	8.4%	32,419	23,309	71.9%	5,936	
	Year 2001	3,902	3,795	107	84	2.7%	2.2%	62,790	44,792	71.3%	11,270	15,391
	Jan-Jun 02	1,989	1,753	235	181	11.8%	9.1%	29,537		78.1%		14,300
	Year 2002	4,243	3,634	609	513	14.4%	12.1%	63,050		77.8%		14,600
JAL	Year 1999/00	14,442	14,039	403	177	2.8%	1.2%	119,971	88,479	70.2%	37,200	18,974
	Year 2000/01	13,740	13,106	634	331	4.6%	2.4%	129,435	95,264	73.6%	38,700	17,514
	Year 2001/02	9,607	9,741	-135	-286	-1.4%	-3.0%				37,183	
	Year 2002/03	17,387	17,298	88	97	0.5%	0.6%	145,944	99,190	68.0%	56,022	
Korean Air	Year 2000	4,916	4,896	20	-409	0.4%	-8.3%	55,824	40,606	72.7%	22,070	16,000
	Year 2001	4,309	4,468	-159	-448	-3.7%	-10.4%	55,802	38,452		21,638	
	Jan - Mar 02	1,113	1,060	54	23	4.9%	2.1%	13,409	9,799	73.1%	5,399	
Malaysian	Year 1999/00	2,148	2,120	28	-68	1.3%	-3.2%	48,158	34,930	71.3%	15,370	21,687
	Year 2000/01	2,357	2,178	179	-351	7.6%	-14.9%	52,329	39,142	74.8%	16,590	21,518
	Year 2001/02	2,228	2,518	-204	-220	-9.2%	-9.9%	52,595	34,709	66.0%	15,734	21,438
Qantas	Year 1999/00	5,710	5,162	548	324	9.6%	5.7%	85,033	64,149	75.4%	20,490	29,217
	Year 2000/01	5,473	5,099	374	223	6.8%	4.1%	92,943	70,540	75.9%	22,150	31,632
	Jul-Dec 01	3,050	2,904	125	84	4.1%	2.8%	48,484	37,262	76.9%	13,335	32,361
	Year 2001/02	6,133	5,785	348	232	5.7%	3.8%	95,944	75,134	78.3%	27,128	33,044
	Jul-Dec 02	3,492	3,181	305	210	8.7%	6.0%	51,009	40,779	79.9%	15,292	34,770
Singapore	Year 2000/01	5,729	4,954	775	892	13.5%	15.6%	92,648	71,118	76.8%	15,000	
	Oct 01-Mar 02	2,807	2,508	299		10.7%		46,501	33,904			
	Year 2001/02	5,399	4,837	562	395	10.4%	7.3%	94,559	69,995	74.0%	14,765	29,422
	Apr 02-Sep 02	2,278	2,134	144	289	6.3%	12.7%	49,196	37,799	76.8%	7,775	
	Year 2002/03	5,936	5,531	405	601	6.8%	10.1%	99,566	74,183	74.5%	15,326	30,243

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

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1998	187	125	312	67	55	122	434
1999	243	134	377	101	53	154	531
2000	302	172	474	160	42	202	676
2001	368	188	556	291	101	392	948
2002	366	144	510	273	102	375	885
2003 - March	314	144	458	300	110	410	868

AIRCRAFT SOLD OR LEASED

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1998	482	243	725	795	127	922	1,647
1999	582	230	812	989	170	1,159	1,971
2000	475	205	680	895	223	1,118	1,798
2001	286	142	428	1,055	198	1,253	1,681
2002	439	213	652	1,205	246	1,451	2,103
2003 - March	49	8	57	110	13	123	180

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

Aviation Strategy

Databases

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72
1999	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
2000	208.2	132.8	63.8	229.9	179.4	78.1	137.8	108.0	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2001	212.9	133.4	62.7	217.6	161.3	74.1	131.7	100.9	76.6	492.2	372.6	75.7	743.3	530.5	71.4
2002	197.2	129.3	65.6	181.0	144.4	79.8	129.1	104.4	80.9	447.8	355.1	79.3	679.2	507.7	74.7
July-03	19.0	13.6	71.6	20.4	17.2	84.2	10.8	8.6	79.2	44.2	36.2	81.9	66.4	52.2	78.6
Ann. chng	0.3%	1.5%	0.9	6.5%	6.5%	0.0	-7.6%	-10.1%	-2.2	1.6%	1.5%	-0.1	1.3%	1.9%	0.5
Jan-July 03	121.4	77.0	63.5	123.0	96.8	78.7	74.3	54.4	73.3	283.9	218.6	77.0	424.5	308.3	72.6
Ann. Chng	1.6%	-0.5%	-1.3	5.2%	3.2%	-1.5	-3.8%	-12.4%	-7.2	1.6%	-1.0%	-2.0	1.4%	-1.0%	-1.8

Source: AEA

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1995	900.4	591.4	65.7	130.4	98.5	0.8	114.3	83.7	73.2	62.1	39.1	63.0	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
2002	990.0	701.6	70.9	159.0	125.7	67.2	103.0	83.0	80.5	84.1	56.8	67.5	346.1	265.5	76.7
July - 03	85.2	69.8	81.9	14.0	12.0	85.6	7.7	6.5	83.8	7.3	5.9	80.6	29.1	24.4	83.9
Ann. chng	-4.6%	2.4%	5.6	-6.6%	-5.2%	1.3	-16.7%	-12.9%	3.7	-0.8%	7.5%	6.3	-8.2%	-4.7%	3.1
Jan-July 03	558.0	412.4	73.9	83.4	64.8	77.7	53.9	39.8	74.0	49.1	34.9	71.1	186.4	139.6	74.9
Ann. chng	-2.9%	0.1%	2.3	-7.8%	-10.2%	-2.0	-7.7%	-16.5%	-7.8	0.3%	3.7%	2.3	-5.8%	-9.1%	-2.7

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

JET ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Boeing	30 June	Southwest A/L	14 737-700s			
	31 July	Uzbekistan A/W	2 767-300ERs			
	1 Sept	JAL Group	7 767-300ERs		2004-06	CF6-80C2, op lease via Mitsubishi Corp.
Airbus	6 Aug	Thai Airways	3 A340-500s			
			5 A340-600s		2005 -	
	21 Aug	Frontier A/L	15 A319s		2004-08	

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

ICAO WORLD TRAFFIC AND ESG FORECAST

	Domestic			International			Total			Domestic growth rate		International growth rate		Total growth rate	
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK %	RPK %	ASK %	RPK %	ASK %	RPK %
1995	1,468	970	66.1	2,070	1,444	69.8	3,537	2,414	68.3	4.1	5.4	8.5	9.4	6.6	7.8
1996	1,540	1,043	67.7	2,211	1,559	70.5	3,751	2,602	79.4	4.9	7.4	6.8	8.0	6.0	7.8
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
1999	1,911	1,297	67.9	2,600	1,858	71.5	4,512	3,157	70.0	5.4	5.0	5.7	7.4	5.6	6.4
2000	2,005	1,392	69.4	2,745	1,969	71.8	4,750	3,390	70.8	4.9	7.2	5.6	6.0	5.3	6.5
2001							4,698	3,262	69.4					-2.4	-0.6
2002P							4,587	3,243	70.7					-1.9	0.4
*2003							4,865	3,502	72.0					6.1	8.0
*2004							5,145	3,730	72.5					5.8	6.5
*2005							5,415	3,954	73.0					5.3	6.0
*2006							5,702	4,191	73.5					5.3	6.0

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

Aviation Economics

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

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

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

For further information please contact:

Tim Coombs or Keith McMullan

Aviation Economics

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

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

e-mail:kgm@aviationeconomics.com

SUBSCRIPTION FORM

Please enter my Aviation Strategy subscription for:

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

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

Delivery address

Name _____

Position _____

Company _____

Address _____

Country _____ Postcode _____

Tel _____ Fax _____

e-mail _____

DATA PROTECTION ACT

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

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

Please invoice me

Please charge my AMEX/Mastercard/Visa credit card

Card number _____

Name on card _____ Expiry date _____

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

Invoice address (if different from delivery address)

Name _____

Position _____

Company _____

Address _____

Country _____ Postcode _____

PLEASE RETURN THIS FORM TO:

Aviation Economics

James House, LG

22/24 Corsham Street

London N1 6DR

Fax: +44 (0)20 7490 5218