

The new Atlantic

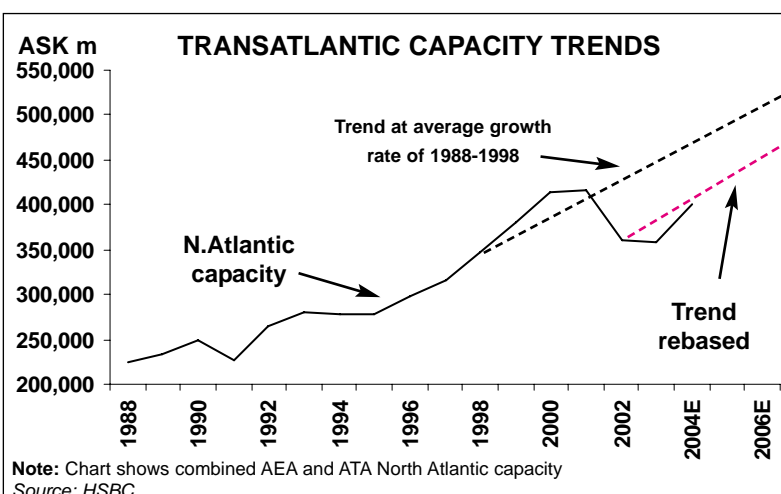
United's announcement at the beginning of October that it was going to concentrate on "more profitable" long haul routes is likely to be followed by the other legacy carriers as they seek some relief from the super-competitive US domestic market.

This inevitably raises concerns about a European reaction and market imbalance. HSBC airline analysts, in a detailed report entitled "Ripples across the pond", worry that "North Atlantic market profitability could be reduced in 2005 by 10-20% for each percentage point of total capacity growth above the 4.4% trend rate" (see graph below).

The airlines themselves are unlikely to see the market that way. With load factors in the mid 80s for the last three months, their expectation will be that they can add capacity next year without too much yield dilution, considering that North Atlantic traffic is still about 2% below pre-September 11 levels. Moreover, HSBC's profitability impact forecast seems too pessimistic to us, possibly because of an over-estimate of the marginal costs of supplying new capacity on the Atlantic.

As with the domestic US and intra-European markets, the transatlantic market will be impacted at least as much by structural changes as cyclical factors. These include:

- Expansion on the part of the US legacy airlines but also consolidation as competitors are finally removed through Chapter 7 bankruptcy;
- Changes among the European network carriers, with Atlantic operations being consolidated at four hubs (Heathrow, CDG, Schiphol and Frankfurt) and in three airlines (BA, Air France/KLM and Lufthansa), while the other European flag-carriers retreat further to niche city-pairs.
- Extension of LCC-type strategies to the North Atlantic, for example through BA.com distribution and Aer Lingus's new simplified, no-restrictions, one-way pricing system.
- Emergence of specialist Atlantic operators, like PrivatAir with its all-business product and franchise agreement with Lufthansa or new long-haul LCCs, for example, SkyLink, which plans to start up out of Washington/Baltimore to European cities.



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Independence Air: Chapter 11 soon?

Continued high fuel prices and weak yields are beginning to take their toll even on LCC-type airlines in the US, with ATA becoming the first to file for bankruptcy on October 26. Not even the best of the airlines can make a profit at \$50 a-barrel oil prices in the current domestic revenue environment, as indicated by JetBlue's warning that it will incur a net loss in the fourth quarter.

Recent weeks have seen renewed speculation about Independence Air, formerly Atlantic Coast (ACA) and now a unit of FLYi Inc, which has seen very low load factors and horrendous cash burn since launching its regional-into-LCC transformation in June (see *Aviation Strategy*, July/August 2004). There are fears that the Washington Dulles-based CRJ operator could be forced to file for Chapter 11 in January, when \$80m of aircraft lease payments become due (excluding \$18m that is currently expected to be paid by Delta).

Independence Air was extremely well funded to start with, with cash reserves of \$345m at the end of June. But the reserves dwindled to \$198m by September 30 and, in analysts' estimates, are likely to fall to \$100-125m by year-end.

The company posted a significantly larger than expected net loss of \$82.7m for the third quarter. The operating loss margin was 88.6% - one analyst thought it was probably the worst margin ever reported by an airline.

In addition to the revenue environment and fuel (FLYi had no hedges in place), the airline blamed the losses on continued high transition costs associated with the departure from United Express and the re-branding and launch of the new operation (currently 39 cities and 600 daily departures, with 87 CRJs). Also, FLYi currently has an overhead supporting a much larger operation (3Q costs were \$228m, revenues \$120m).

FLYi has also attracted less traffic than it had predicted, due to unexpectedly intense competi-

tion from United and others. Because of that and its own significant capacity addition, its load factors remained in the mid-40s through September, subsequently recovering to the low-50s.

Consequently, the airline has announced several liquidity-preserving measures. First, it is negotiating with lessors about reducing and/or deferring aircraft lease payments. It is also pursuing the sale or refinancing of certain of its owned aircraft and parts (including four CRJs).

On the revenue side, FLYi has made one major change to its business strategy: abandoning the plan to sell tickets only through its web site and 800 number, and making tickets available through the global distribution systems, beginning with Galileo in early November. This will increase costs, but the airline decided that it was necessary to attract business traffic.

FLYi is also reducing capacity in some major business markets, including Atlanta, Boston and New York, where it has operated hourly services. It is switching the capacity to the north-south winter markets.

That said, FLYi's top executives remain confident in the unusual business model. They insist that the plan needs a large number of RJs - after all, 78% of its Dulles markets compete with legacy carrier CRJs (rather than LCCs' 150-seaters). FLYi also has high hopes for the A319, which will give it access to attractive new markets and help boost connecting CRJ load factors. It has received the first two of 28 ordered A319s, but their introduction slipped past the planned November 3 startup due to certification delays.

FLYi could benefit if US Airways liquidates (80% route system overlap) or if United pulls back at Dulles. However, a Chapter 11 filing by Delta could saddle FLYi with lease payments on 30 328JETs that it has just started returning to Delta - potentially another Chapter 11 trigger for FLYi.

Icelandair: global investor

In October Icelandair surprisingly bought a 10% stake in easyJet as a pure investment play - the latest move in the interesting development of the Icelandic aviation business.

Icelandair is the main subsidiary of parent company Flugleidir, owned by the country's lead-

ing banks and institutional and private investors, which describes itself as an investment company focused on the travel business. As well as Icelandair, which accounts for about 53% of turnover and 61% of net profits, there are 11 other units in the company, covering charter operations,

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regional operations, wet leasing, airport handling and Flugleidir Investments, which was established this October.

Flugleidir defines its corporate objectives explicitly in terms of shareholder returns: its target total shareholder return (TSR) is 19.5% per annum for the next five years, measured in dividends paid and increases in share value. It has, in fact, achieved an average TSR of just over 20% per annum over the past five years, although of course with significant annual variations.

Dividend policy is again stated clearly: Flugleidir will pay out 30-40% of its net profit to shareholders over each business cycle (7-10 years). Its share price performance (listed on the Icelandic Stock Exchange) has been astounding by airline standards, or indeed any other standard - from a recent low of ISK1.75 in 2002, the price had soared to ISK9.8 by late October 2004.

The current stockmarket valuation is ISK20.9bn (\$303m), implying an historic p/e ratio of about 20, on a par with the most successful LCCs. This November Flugleidir's board plans to raise its capital stock by an additional 230m shares priced at ISK8.8-10.2.

This year's results will show a significant improvement on 2003 when net profit totalled ISK1.12bn (\$16m) - pre-tax profit is estimated to be up by ISK1bn in the first nine months. But the stockmarket ratings also imply expectations of further aggressive expansion.

Flugleidir's philosophy

In some ways Flugleidir sounds as if has been designed by management consultants, albeit with successful results. As well as reporting financials in standard accounting format, internally Flugleidir uses the concept of Economic Value Added (EVA, a registered trademark of the consultancy, Stern Stewart).

EVA is defined as the sum returned to the company's operations after deducting a fee for the capital invested (including capitalised operating leases). The company uses a 9.3% capital charge, representing the weighted average cost of its debt and equity.

EVA is intended to focus the management's attention on the balance sheet, with each unit concentrating on so-called EVA drivers, designed to maximise EVA performance. More pragmatically, management bonuses are tied to EVA

FLUGLEIDIR'S SUBSIDIARIES RESULTS - 2003 (ISK '000s)

	Revenue	Pre tax result	EVA [®]
Icelandair	25,700	613	722
Loftleidir Icelandic	3,915	-231	-202
Icelandair Cargo	3,916	220	174
Iceland Travel (Group Tours)	4,165	119	153
Air Iceland (Regional)	2,925	227	194
Technical Services (Keflavik Airport)	2,501	69	45
Ground Services (Keflavik Airport)	1,938	82	48
Icelandair Hotels	1,673	-193	-225
Reykjavik Excursions	944	28	8
Icelandair Car Rental	615	68	54
Icelandair Shared Services	352	31	30
Total	48,644	1,033	1,001

Notes: Icelandair Tours and Flugleidir Investments set up in 2004; EVA= Economic Value Added (see text)

results.

With a tiny domestic market (Iceland's population is under 300,000), the core airline business is not a growth area - rather expansion is envisaged through wet-leasing and investment activity. Icelandair carried 1.1m passengers in 2003, a total that has been declining for five years. Operating seven 757s, Icelandair has two basic operations - a transatlantic hub at Reykjavik linking mostly Scandinavian and German points to six US cities, accounting for 36% of the traffic, and local Europe and US to Iceland traffic accounting for 64%. In recent years the hubbing traffic has been declining while the local traffic has been growing slowly.

Loftleidir, the charter and wet leasing arm, was loss-making in 2003 but increased its fleet from four 757s to five 757s and two 767s. Loftleidir is allied to AWAS in a venture that markets 757/767s globally. This brings Loftleidir into competition with another Reykjavik-based wet lessor, Air Atlanta, which owns, including its UK subsidiary, 34 747, 757 and 767 cargo and passenger aircraft. Air Atlanta has just taken over domestic carrier Islandsflug, which itself is involved in the wet leasing business with a total fleet of 19 aircraft. It has also just increased its stake in the UK charter airline, Excel Airways, which operates ten 737-800s and two 767s, to 71%.

Icelandair and Air Atlanta will also be competing for investment opportunities. easyJet looks to have been a good move - the share price before Icelandair entered the market was £1.32; by early November it stood at £1.70 and ABN-Amro has now raised the target price from £1.40 to £1.95.

Battered and bruised - but the lessors are back

The world's aircraft lessors have been through their toughest ever period. Burdened by shrinking demand and a fixed supply of aircraft, the lessors have had to swallow plunging lease rates in order to keep their metal in the skies, while writing down business done with the more financially insecure airlines. But - at last - the cycle is upturning, and the irrepressible lessors are again optimistic.

Could the last few years have possibly been worse for the world's aircraft lessors? The traditional cycle in the leasing industry was already starting to head down in 1999 and 2000, but September 11, Gulf War II, SARS and rising fuel prices resulted in thousands of newly stored aircraft, lease rates plunging by up to 60% since 2001, and lessees having the upper hand in negotiations with lessors.

Rental relief was commonplace, as lessors took the pragmatic decision that keeping their portfolio in the skies at much reduced rates in the short- and medium-term was preferable to airlines refusing to honour contracts for unrealistic monthly rates.

One trend to emerge during the slump has been the rise of the sale and leaseback, as airlines have attempted to improve their cash flow by selling aircraft to the lessors and renting them back. Many lessors have been keen to do this, since few of them have placed new orders with the manufacturers since September 11 and they consider acquiring aircraft from airlines as being less risky than buying new aircraft (since the aircraft come with a ready-made lessee).

But while the lessors have been reluctant to order aircraft, this has presented an opportunity for others. LCCs and other start-ups - who traditionally had found it difficult to lease aircraft at decent rates because of their low credit scores - have been treated as royalty by both manufacturers and lessors eager for new business. At the same time, the LCCs knew the window for them to strike good

deals for 737s and A320 family aircraft wouldn't last forever, so they were aggressive in getting the deals they wanted, knowing the lessors were in a tricky situation. In recent years, it is the successful LCCs that have set the lowest unit prices for new aircraft, not the lessors. They are then able to further improve their financing costs by signing sale and leaseback deals with the lessors - as, for example, Ryanair and easyJet have with RBS Aviation Capital and SALE.

The turning point

But while LCCs have accounted for a major part of new business written at some lessors, the majority of the industry has been waiting for more established airlines to come back into the leasing market - and at long last this is starting to happen.

Many of the network airlines (which shifted much of their capacity to leases over the last couple of years in order to reduce balance sheet exposure and gain fleet flexibility) now appear to be willing to lease a larger proportion of their needs permanently, and as passenger demand picks up, they are starting to sign new leases.

Geographically, demand appears to be rising in regions such as China, India, the EU expansion countries and the CIS countries (for replacement of Soviet-produced aircraft). In China, the Civil Aviation Administration of China (CAAC) is considering banning the import of all passenger aircraft into the country that are older than 10 years, with a 15-year limit for freighters. If implemented, this will provide a boon to the lessors fighting for a share of a market where demand is forecast to rise anyway. Elsewhere, regional feed airlines appear to be hungry for aircraft, while there is increasing demand for freighters to replace ageing fleets of 727s and DC8s.

With traffic recovering through the year, lease rates have begun to nudge up over the

last few months, though this is not even spread among all aircraft types. The biggest improvements are coming for the most popular aircraft types, whose lease rates fell the least since September 11 anyway (737NGs, A320s and A330s). But it's not just a narrow-body-inspired industry recovery. The 7E7 will replace A300s, A310s, 757s and 767s in many fleets, and both lessors and airlines are competing for the earliest available delivery slots, in 2008.

According to leading figures in the industry, there are very few A320s, 737NGs, A330s or 777s available for lease at the moment - the first time demand has outstripped supply for any model since early 2001, resulting in rises in lease rates for these models of up to 10% so far this year. However, other aircraft - such as the 737 classics and 757s - are still way behind their 2001 lease rate levels.

As for the overall fleet, the number of parked aircraft has decreased by 5% over the last year, but still stands at around 1,900 aircraft - though what proportion of these will return to the market is debatable. Up to three-quarters of the parked fleet are Chapter 2 aircraft, and if they do return it won't be to "First World" airlines.

And the future?

Though the worst is over for the lessors, few of them escaped the last three years unscathed. Write downs have hit profitability at many lessors, and those companies that were heavily exposed to the US airlines that went into Chapter 11 (United, US Airways, Hawaiian etc.) have had to take some very hard financial knocks.

Among the casualties of the slump has been Abbey National's leasing business - IEM Airfinance - which it bought from ING for \$38m in May 2001. New Abbey CEO Luqman Arnold decided to refocus the loss-making financial services company on core retail banking, and in February 2003 Abbey announced it was exiting the aircraft industry. However, it couldn't find a buyer for the entire portfolio at a price that was acceptable and instead, in October 2003, Abbey passed management of its fleet of 30 aircraft to Boullioun,

THE LESSORS' FLEETS						
Company	Owned	Managed/ part-owned	Total	Boeing orders	Airbus orders	Total orders
GECAS	1,200	300	1,500	57	54	111
ILFC	650	101	751	108	249	357
BCC	337	224	561			
CIT			328	13	39	52
debis			250		29	29
GATX	162	70	232		2	2
AWAS			176			
Pembroke	29	119	148	14		14
Babcock			144			
Boullioun			121	2	18	20
RBS			113			
ACG			100			
ORIX			68			
SALE			60		14	14
Bavaria			30			
Guggenheim			20			
Oasis			20			
Sunrock			18	2		2
Total	2,378	814	4,640	196	405	601

while mandating the lessor to sell off the aircraft when possible.

But perhaps the biggest effect of the aviation slump has been the thwarting of Boeing's attempt to make Boeing Capital Corporation (BCC) a real competitor to GECAS and ILFC. Now, BCC is a "lender of last resort" to Boeing's clients (see profile, below).

The Big Two - ILFC and GECAS - maintain their grip on the leasing industry. They account for almost 50% of the market, and still have huge power in securing discounts for large orders from the manufacturers - even if they haven't exercised that power much recently. For the Big Two, and the other more established players, a downturn in the aviation cycle is something they have all been through before - the last one occurred in the early/mid-1990s, (during which GPA went under) and though the current downturn has been the deepest ever, the big boys had the experience, financial strength and backing of their parent companies to survive the dip.

Although the industry is benefiting from an upturn in demand, the financial effects of the cycle turnaround are yet to filter down into the lessors' results, due to an inherent lag in contracts - i.e. though lease rates are improving, the majority of the lessors' existing contracts

are at the rock-bottom lease rates prevalent over the last couple of years, and they will only gradually be replaced by higher margin contracts over the next few years.

Looking to the future, with the upcycle likely to last through the next three to five years, it may be time for lessors to start ordering again. The leasing industry has 601 outstanding orders with the major manufacturers (two-thirds of which are for Airbus aircraft), although ILFC on its own accounts for 357 of those. New orders from lessors have been thin on the ground in 2004, particularly for Boeing aircraft. According to AWAS's September 2004 Industry Overview, this is partially due to "a halt on lessor orders across the board, a 'lessor satiation' of Boeing orders and aggressive Airbus pricing and marketing". But if the big airlines have learnt their lessons, their mega-orders of the 1990s are unlikely to occur again, and a greater reliance on leasing is likely to result in the lessors having to place large orders themselves. The order situation can change overnight, and it's possible that when one lessor makes a big order, others will quickly follow.

General Electric Capital Aviation Services (GECAS)

Still the world's largest aircraft lessor by far, US-based GECAS owns around 1,200 aircraft and manages another 300 for approximately 230 airline customers. The company has a network of 10 offices around the world, the latest, in Moscow, opened in August to exploit leasing opportunities among the CIS airlines.

In 2003 GECAS's net profit was \$506m - 11% up on 2002 despite the downturn in the aviation industry. And this year GECAS is forecasting a net profit of \$525m, based on growth in five key areas - secured debt (via its subsidiary PK AirFinance, which was bought from Credit Lyonnais in 1999), engine leasing, regional jets, cargo aircraft and LCCs (its customers include easyJet, Jet Blue, AirTran and Air Asia).

Part of its resilience through the aviation downturn has been due to the strength of its parent, General Electric, but GECAS has also

managed its portfolio effectively during the last couple of years. For example, 70% of its fleet are narrowbodies - which are easier to place than widebodies - compared with 54% of the total global fleet. (And regional jets account for more than 20% of GECAS's portfolio). Additionally, just 26% of GECAS's fleet is more than six years' old, compared with 47% of the global fleet. As of July this year, GECAS had placed all of its 106 scheduled new aircraft deliveries in 2004, and all but three of the 60 scheduled deliveries for 2005. This is much better than the industry-wide 40% of deliveries to all lessors in 2004 that have yet to be placed with airlines, and 75% of deliveries in 2005, according to UBS Warburg. All but two of the 79 aircraft in the GECAS portfolio that are rolling off the end of contracts during 2004 have been placed with new clients, as have 60% of the 71 aircraft rolling off contract in 2005.

GECAS has also been helped by its policy of cutting back aircraft orders before the downturn in the aviation cycle. Today it has 111 outstanding orders (almost evenly split between Airbus and Boeing aircraft) - well below that of its main rival, ILFC.

GECAS has not escaped pain altogether. It has taken big financial hits from leases to some of the world's troubled airlines over the last 24 months, and has taken write-downs on some of its key contracts. The latest jolt came in September when GECAS suspended financing for 30 Embraer ERJ-170 regional jets destined for US Airways after the carrier yet again filed for Chapter 11 bankruptcy protection. GECAS is substantially exposed to the fortunes of USAirways, to which it currently leases more than 120 aircraft. And GECAS had to offer \$1bn+ of debtor-in-possession financing to Air Canada in order to protect its operating lease exposure there, while in March GECAS agreed to cancel part of the outstanding leasing payments owed to it by Varig in order to help the Brazilian airline to continue flying.

International Lease Finance Corporation (ILFC)

ILFC has a portfolio of more than 650 air-

craft and manages another 101, placed with more than 150 airline clients through the world. In contrast to GECAS, ILFC has continued to place orders through the aviation downturn. It has taken advantage of the fact that it has been the largest single placer of orders through the period, and hence has enjoyed substantial discounts from manufacturers. While this has stretched ILFC in the short-term, as the market improves this could prove to be an inspired move.

Though there have been some deferrals, at present ILFC is committed to a massive 357 new deliveries through to 2010, with an estimated purchase price of more than \$20bn. At the same time, ILFC had placed all of its 2004 and 2005 deliveries, so it has little short-term risk.

ILFC is a subsidiary of US insurance and financial services giant AIG, but like GECAS, US-based ILFC has been exposed to the financial crises at the weaker large airlines. Yet with more than 80% of its fleet placed with non-US airlines, it has been less affected than many of its rivals. It has no exposure to United or USAirways, but in 2003 had to restructure terms for the lease of 12 aircraft to Air Canada. Other leases were renegotiated with Hawaiian Airlines, Avianca, Aero Lloyd and Aeris.

On the other hand, ILFC does have significant exposure in Asian markets, which was a problem during the SARS crisis in 2003. Around a third of its aircraft are with Asian carriers (its customers include Cathay Pacific and Dragonair) - most of them widebodies - and accounting for around 20% of total revenue.

China alone accounts for 11% of ILFC's revenues, and represents the largest single market for the lessor after France. ILFC is targeting this market hard, and in September the company announced it was supplying 23 new A319s to China Southern, for delivery between that month and the end of 2007, while in October a deal was signed to deliver six new 737-700s to China Eastern, for delivery in 2005.

ILFC's lease margin has been declining for the last three years, and it continued to fall during the first half of 2004. However, with lease rates creeping back up, the margin

should start to rise again. Net profit fell slightly in 2003, to \$506m from a net profit of \$528m in 2002, even though revenues rose to \$3bn last year compared with \$2.8bn in 2002. In the first half of 2004, revenues rose by 7% to \$1.6bn, while net profit rose 6% to \$256m.

Boeing Capital Corporation (BCC)

BCC has undergone a complete strategic about turn. The company was formed out of a financing offshoot acquired as part of Boeing's merger with McDonnell Douglas in 1997, which then expanded into providing finance for all types of assets, from office equipment to oil rigs. This initially proved lucrative, but the economic shocks of the early 2000s hit the unit's financial results, and earlier this year Boeing decided to refocus BCC on solely supporting its aircraft sales efforts where needed (which is more in line with Airbus's strategy, where financing is offered only when no other source is available to an airline).

In June, BCC sold its non-commercial aviation business to GE Commercial Finance for \$2bn, leaving BCC with a portfolio of aircraft worth around \$9.2bn. \$1bn of the proceeds are being used to buy back outstanding debt.

Now that BCC is a "lender of last resort" for its parent, its profile in the leasing industry will be less prominent. However, it still has a substantial portfolio - as of mid-2004, BCC had a wholly owned portfolio of 337 aircraft, with an interest in another 224.

42% of its aircraft are more than five years' old, and like its larger rivals, BCC has been affected by the financial wobbles at some of its biggest customers. It is heavily exposed to US customers - 71% of its portfolio by value is with US airlines. BCC restructured leases for 14 aircraft with Hawaiian Airlines in September, but there are potential further worries ahead. United is BCC's second-largest customer, with leased aircraft worth \$1.2bn. With 757 production now ending, BCC is also exposed to a potential further reduction in the model's lease rates - and 757s account for \$1.6bn worth of BCC's portfolio. And there could be an even greater

problem if 717 production is dropped.

But it's not all bad news at BCC. Like others, the company is targeting the CIS market, and it opened a Moscow office in September. This will provide finance for the aircraft Boeing expects to sell over the next few years now that Russia is entering the WTO (and which should lead to a reduction in import taxes), as the US manufacturer expects few of its new CIS clients to buy aircraft outright.

BCC saw revenues rise 5% in the first half of 2004, to \$480m, with a net loss of \$17m in January-June 2003 turning into a pre-tax profit of \$89m in 1H 2004. Excluding the divested operations, net income was \$59m in 1H 2004, compared with a \$33m net loss in January-June 2003.

CIT Aerospace

CIT Aerospace is part of the CIT Group, a large US commercial and consumer finance company. The aerospace subsidiary has a portfolio of 328 aircraft worth approximately \$5.1bn with more than 90 customers. 72% of the fleet are narrowbodies, and with 16% of its aircraft being built before 1990, the average age of the total fleet is 7.1 years.

CIT has kept its utilisation rate high through the downcycle, and as of end 2003, 1.3% of its portfolio was not placed with clients (compared with 100% in December 2001).

In 1999, 86% of CIT's portfolio were Boeing aircraft, but today that has dropped to 55% as demand for Airbus aircraft has increased. CIT's portfolio exposure to the North American market is 21% - its third largest market after Europe (42%) and Asia (22%), but considerably less than some of its rivals.

Nevertheless, CIT is exposed to business with Air Canada, United and Avianca, though it is difficult to gauge the hit on profitability as CIT Aerospace does not report standalone figures (being part of the CIT Capital Finance group, which also does business in the rail, power, energy and infrastructure industries). However, in a presentation to analysts given in June, CIT Aerospace was the only part of CIT Capital Finance that was not forecasted

to hit the group Return on Equity target of 15% in 2004.

On the positive side, CIT believes improved demand out of Europe is leading the recovery in the leasing industry, helped by a weak dollar and EU expansion eastwards. CIT's regional aircraft business is also performing well, and the group is believed to be considering substantial orders in the 70-100 seat aircraft range. It currently has 52 aircraft on order, including 30 A320 family aircraft and 13 737s.

CIT has been helped by the fact that just 20 of its placed portfolio rolled-off contracts this year; roll-offs will be 31 in 2005 and 28 in 2006. CIT is receiving 19 new aircraft in 2004, of which all have been placed with customers, with 18 aircraft arriving in 2005 and 20 in 2006.

debis AirFinance

Schiphol-based debis has a portfolio of 250 owned and managed aircraft, placed with 80 airlines. debis has 29 A320 family aircraft on order for delivery between 2004 and 2007. In the second quarter of 2004 debis delivered 14 aircraft to nine airlines, while also receiving three new A320s and an A321, and selling two 737-200s and two Fokker 50s.

It's difficult to assess debis's financial position, as 35% of the lessor is owned by financial services giant DaimlerChrysler Services, 10% by DaimlerChrysler Aerospace and 55% by a consortium of four German banks. However, buried deep in Daimler Chrysler AG's Form 20-F for 2003 is a statement that the group results include a €100m loss for its minority share in debis. This equates to at least a €222m loss at debis for 2003 (depending on whether or not the reported loss includes DaimlerChrysler Aerospace's proportion).

GATX Air

San Francisco-based GATX Air is part of the NYSE-quoted finance and leasing company GATX Corporation (which Warren Buffet owns 9% of) and which includes businesses

as diverse as locomotive leasing and shipping. In the first-half of 2004 the aircraft leasing unit earned revenue of \$67.9m (compared with revenue of \$69.4m in January-June 2003), and made a net profit of \$4.6m (compared with a net loss of \$2.4m in 1H 2003).

That result came after a net write-down of \$5.9m relating to Air Canada debt, but nevertheless GATX Air has had a good start to 2004, with 97% of its fleet placed with customers as at the end of the half-year. The company owns a fleet of 162 aircraft and manages more than 70 for third parties. GATX is a narrowbody specialist, with 123 of its owned fleet being either 737s or A320 family aircraft, though it only has a pair of A320s on outstanding order.

AWAS

Seattle-based AWAS changed its name from Ansett Worldwide Aviation Services in July in order to escape any negative connotations associated with the bankrupt Ansett airline. AWAS was acquired by Morgan Stanley in 2000, and today owns a portfolio of 176 aircraft placed with 78 customers around the globe. All but 28 of its fleet are Boeing aircraft, including 78 737s and 26 767s. Today's fleet is slightly down on the total at the end of 2003, when it had 180 aircraft. Just three new aircraft were delivered to AWAS during 2004, and it currently has no outstanding orders.

Although the results of the aircraft financing business are included in Morgan Stanley's Institutional Securities business segment, the 2003 annual report stated that: "Other revenues - consisting primarily of net rental and other revenue associated with the company's aircraft financing business - decreased by 27% compared with 2002, reflecting the drop in lease rates."

And the second quarter 2004 financial results (covering the period March-May) included "a \$109m pre-tax asset impairment charge related to the company's aircraft financing business, which reduced net income by \$65m". However, the SEC-filed 10-Q added that the "decline in lease rates...improved somewhat towards the end of 2003 and in the first half of fiscal 2004...At

May 31st 2004 the number of aircraft that were off-lease or not committed to a lease transaction had decreased significantly from the prior year".

One of the markets AWAS is looking towards is China. It has placed eight aircraft there so far, although this number was boosted by a contract for two 767-300ERs for Air China, which were delivered in August this year. The rest of its Chinese fleet is all 737 equipment, with three at China Eastern.

Babcock & Brown

Babcock & Brown was founded in 1977 in San Francisco, but today is headquartered in Sydney and arranges structured finance around the world in a number of areas, including property, aircraft, energy and infrastructure.

The company manages a portfolio of 144 aircraft - mostly narrowbodies - with an average age of seven years. The company is expanding its fleet, which has increased by a quarter since the end of 2001 (though it has no orders at present), and 99% of its aircraft are currently on lease to 47 clients.

In October 2004 Babcock & Brown listed on the Australian Stock Exchange, raising US\$390m to strengthen its balance sheet in an IPO that valued the company at US\$1.1bn. Pre-IPO, 80% of the company was owned by management and 20% by German bank HypoVereinsbank (HVB), though HVB is now reported to be selling a 3% stake to UBS, which is making a strategic investment. This year Babcock & Brown is forecasting a net profit of US\$72m, rising to US\$110m in 2005.

Boullion Aviation Services

Seattle-based Boullion has a fleet of 121 owned or managed aircraft - all but a handful of which are A320s or 737NGs - and placed with approximately 50 airlines. Boullion has 18 A320 family aircraft and two 737s on order, for delivery by 2006 and valued at \$1.5bn.

But despite a modern fleet, the lessor is about to undergo its third change of owner-

ship in six years. Deutsche Bank bought Boulliou from Sumitomo Trust and Banking in 1998, before selling it on to fellow German bank WestLB in 2001. However, this summer Boulliou was put up for sale yet again, as part of WestLB's new strategy to concentrate on the banking business and dispose of all non-core subsidiaries. This strategic rationale isn't particularly convincing given that WestLB is to retain its 35.5% stake in another lessor - Singapore Aircraft Leasing Enterprise (SALE) - ownership of which was transferred from Boulliou directly to WestLB before the sale of Boulliou was announced.

And with the collapse in aircraft values over the last couple of years, the decision to sell couldn't have come at a worse time for West LB. It's reported that WestLB places a gross value of \$300m-\$400m on Boulliou - well below the \$1.2bn it paid to Deutsche in 2001. Potential bidders may include debis, Aviation Capital Group and RBS Aviation Capital - existing lessors who might be looking for acquisitions in order to close the gap with GECAS and ILFC.

In October 2003 Boulliou was contracted to manage UK bank Abbey National's \$950m portfolio of 30 aircraft, most of are were A320 family aircraft and 737s, though with a mandate to "look for opportunities to sell the aircraft" when possible.

RBS Aviation Capital

Lombard Aviation Capital was launched in 2001 after the Royal Bank of Scotland enhanced its small aircraft portfolio with the acquisition of Irish-based IAMG. It acquired 30 leased aircraft and delivery slots from GECAS in 2002 and 11 737-800 delivery slots (plus options for 10 more aircraft) from Delta in 2003. In December 2003, RBS agreed a seven-year sale and leaseback deal with Ryanair for 10 737-800s being delivered in 2004, and this year agreed a similar deal with easyJet for 20 A319s.

The company was renamed RBS Aviation Capital last year, and the Dublin-based company currently has a portfolio of 113 aircraft, all of which are currently placed with clients. It is a narrowbody specialist, with 87 737s or

A320 family aircraft, and with an average fleet age of less than four years. Although it has been the most aggressively expansionist of the lessors in recent times, it currently has no aircraft on order.

ORIX Aviation

Orix Aviation is based in Dublin and is owned by Tokyo-based ORIX, one of the largest financial services companies in Japan that owns more than 200 subsidiaries throughout the world.

But Orix's size didn't protect it from a six-year low in its share price in mid-2003 after it announced it would have to book a \$25m loss from lease exposure to United and Air Canada. In the event, for ORIX's fiscal 2003 year (ending March 31st 2004), the company included a provision for "doubtful receivables and probable loan losses" of \$23m for aircraft leasing, though it is not possible to separate out specific figures for aircraft leasing from ORIX's accounts.

Orix Aviation owns or manages a fleet of 68 aircraft, placed with 15 airlines around the world. All but 12 of its portfolio are 737s and A320 family aircraft, and currently all of its fleet apart from two A320s, three 737-500s and a single 777 are with clients. No aircraft are on order.

Singapore Aircraft Leasing Enterprise (SALE)

SALE, which was set up by Boulliou and Singapore Airlines in 1993, has 60 aircraft placed with 30 airlines, with total assets of around \$2.5bn. Its average fleet age is five years, one of the best in the global leasing industry. It has 14 A320s on order, for delivery by the end of 2006, and is still adding to its fleet through purchase and leaseback deals with airlines. All the aircraft it is receiving this year have been placed with clients.

As well as West LB and Singapore Airlines, which own 35.5% each, the other shareholders are Singaporean state investment bodies Temasek Holdings and GIC (14.5% each). SALE insists there will be no

change to its operation following the transfer of Boullioun's stake to West LB.

It has 34 A320 family aircraft and 12 737s, and over the 12 months to the end of May 2004, SALE saw the proportion of business that it places with LCCs rise from 2.5% to 14%.

Others

Abu Dhabi-based **Oasis International Leasing** placed a rights issue for \$54m in October 2004 in order to raise capital for expansion - although it stated that it was also looking to expand into leasing sectors other than aircraft. Oasis was launched in 1997 by the Abu Dhabi investment company, BAe (which currently owns 11%) and the Gulf Investment Corporation, and in the first half of 2004 the company's net profits increased by just under 40% to \$1.2m. It currently has a portfolio of 20 aircraft, 11 of which are 737s or A320 family aircraft.

In September 2004, Singapore-based aerospace components company **A-Sonic** (formerly known as Janco Aviation) said it would launch an aircraft leasing business, concentrating on A320s and 737-300/400s, which are in demand from Asian LCCs.

BAE Systems' Asset Management operates a portfolio of 330 turboprop and regional jets, and manages another 63 aircraft for third parties.

Irish lessor **Pembroke** was launched in 1993 and is owned 50% by GATX and 50%

by Rolls-Royce. It specialises in managing aircraft for clients, and of its portfolio of 148 aircraft, just 29 are owned. It has 14 717s on order.

California-based **Aviation Capital Group** owns or manages a fleet of 100 aircraft. It is a subsidiary of US insurance giant Pacific LifeCorp, and in 2003 saw revenues increase 59% to \$103m. In August 2003 ACG launched successfully the first airline operating lease securitisation since September 11, with \$1bn of securities backed by revenues on 37 aircraft on lease to 25 airlines.

Launched back in 1958, Munich-based **Bavaria International Aircraft Leasing** is today owned by the Schorghuber group, a large German conglomerate. It has a portfolio of 30 aircraft, all of which are narrowbodies, and no outstanding orders.

As part of Airbus's "lender of last resort" policy, where it restricts financing to a maximum of 5% of total Airbus sales, in 2003 it launched Dublin-based financing company **Avion Capital**, as a joint venture with CIT Group, Credit Agricole Indosuez, and Kreditanstalt für Wiederaufbau.

Guggenheim Aviation Partners was launched at the end of 2003 by US-based Guggenheim Capital with a \$50m investment, and has a portfolio of around 20 aircraft, including 14 A320s, but with no known orders.

Dublin-based **Sunrock Aircraft Corporation** is a subsidiary of Japanese trading house Nissho Iwai Corporation. It has an all-Boeing fleet of 18 aircraft, and has two 737s on outstanding order.

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Air Canada: fundamentally reinvented?

Air Canada emerged from bankruptcy protection on September 30 after an 18-month restructuring process that reduced its cost structure and significantly strengthened its balance sheet. The Montreal-based airline says that it is confident that it can compete successfully with LCCs with the help of a simplified fare structure and many new strategies, including extensive use of 70-100 seat RJs. In fact, Air Canada claims to have "fundamentally reinvented" itself - it no longer considers itself a traditional legacy carrier but a "highly connected global network carrier offering the simplicity and ease of our low-cost competitors".

When presenting the new strategies to analysts on September 27, the management was extremely bullish about Air Canada's prospects - and there was no acknowledgment of the challenges that lie ahead. Subsequently, on October 19, the company staged an extravagant event, with the help of superstar Celine Dion, to "present the new Air Canada to the world". The question that came to mind was: has this airline really spent the past 18 months in bankruptcy, demanding major sacrifices from employees and other stakeholders?

But matters of style aside, is there substance behind the management's claims? Does Air Canada now have a business model that works in the new environment?

The restructuring is certainly producing some early promising financial results. After three and a half years of operating losses totaling C\$1.7bn, Air Canada staged a turnaround in the third quarter. The airline estimated in mid-October that it would post a C\$235m operating profit (before restructuring charges) for the three months ended September 30, following breakeven in the June quarter. That would be impressive in light of the record-high fuel prices and the continued extremely weak revenue environment in North America. (Air Canada's results will be out on November 15.)

However, the financial community is sharply divided on Air Canada's longer-term prospects at present. Numerous Canada-based analysts started covering the company immediately after it was re-listed (at C\$20) on the Toronto Stock Exchange on October 4, but the range of their initial one-year price targets is rather wide - from around C\$14 to C\$49.

There are three key concerns. First, the airline's cost cutting programme may not give it a sufficiently competitive cost structure. Second, it may not be able to retain a large-enough unit revenue (RASM) premium over LCCs. Third, there are doubts about the suitability of the RJ strategy, not helped by US Airways' second Chapter 11 filing and Independence Air's current difficulties (though none of that can be blamed on the RJ strategies).

Of course, Air Canada will have more time to get its act together than its counterparts south of the border. First, Canada is not as competitive as the US domestic market - Air Canada still enjoys a dominant position domestically, accounting for just under 60% of traffic. Second, Air Canada benefits from a strong global network and is likely to remain Canada's dominant long-haul international carrier for many years to come.

Successful CCAA exit

Air Canada was able to exit successfully from creditor protection under CCAA ("Companies' Creditors Arrangement Act", the Canadian equivalent of Chapter 11), first, because it secured a comprehensive restructuring agreement with General Electric Capital Corporation (GECC). In addition to restructuring aircraft leases on highly favourable terms, the deal provided for a C\$540m exit-financing facility and a commitment for future RJ financing.

Second, Air Canada raised C\$1.1bn in

new equity capital in the restructuring. Of that, C\$850m came from a rights offering earlier this year, under which creditors swapped debt for equity (receiving about 10 cents of equity for every dollar of claims). Subsequently, in the summer, New York private-equity firm Cerberus Capital Management agreed to purchase C\$250m of convertible preferred shares in the new entity.

The result is a shareholder base dominated by former debt holders. Cerberus has a 9.16% stake. Original shareholders hold less than 0.01% (they received one new share for 11,894 old shares in the rights offering). Because there are relatively few retail or institutional investors, trading is expected to be fairly limited. Non-Canadian holding is expected to remain small - up to 25% would be permitted.

Under the new corporate structure, ACE Aviation Holdings (ACE) is the parent company for Air Canada and other business segments. In addition to Aeroplan (FFP), Jazz (regional division), Destina.ca (travel web site) and Touram (vacations), which were already separate legal entities, the restructuring established three new legal entities under the ACE umbrella: Air Canada Technical Services (ACTS), Air Canada Cargo and Air Canada Groundhandling. The board of ACE is led by Robert Milton as chairman and Michael Green of Cerberus as lead director.

Overall, the restructuring reduced Air Canada's net debt and capitalised leases from C\$12bn to C\$5bn. The airline also exited bankruptcy with a relatively healthy cash position of C\$1.9bn.

Deep enough cost cutting?

Air Canada's cost cutting programme aims to reduce annual operating costs by C\$2bn, representing a 20% reduction from 2002's level of C\$10bn, by the end of 2006. Of the C\$2bn total savings, C\$900m is slated to come from labour, C\$700m from aircraft rents and C\$400m from other sources.

Just over half of the targeted cuts were achieved in 2003, the first full year in bank-

ruptcy. This year's target is C\$1.5bn and next year's is C\$1.9bn. The indications are that the programme is running ahead of the original schedule.

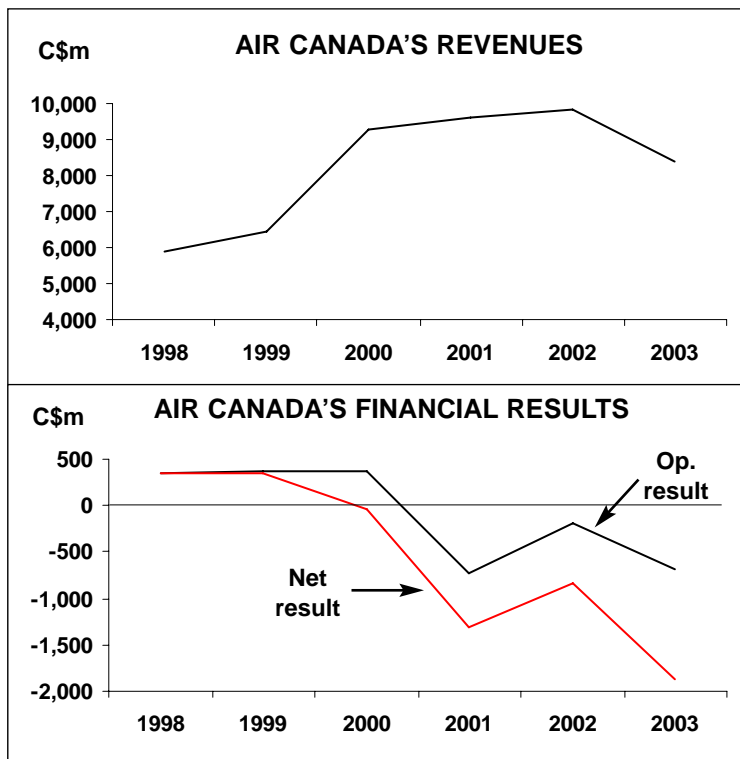
According to Air Canada, measures are now in place that will lead to C\$1bn of annual labour cost savings. C\$800m of those cuts were secured in the first negotiating round in May 2003, followed by C\$200m in May 2004. The unions ratified the new labour agreements in July.

The starting point was to benchmark full-service and low-cost carrier productivity. Like the US legacy carriers, Air Canada first focused on productivity improvements, before moving to wage cuts to make up the difference. In the second round, Air Canada introduced a "B" wage scale for new hires and recalls, put in place early retirement incentives, and completed the productivity measures and "A" scale wage cuts.

Among the key mainline employee groups, pilots have had their pay reduced by 15-30%, flight attendants by 13% and mechanics by 3.9% (management and executives took 5-7.5% and 12.5-20% cuts, respectively). The airline eliminated shift premiums, longevity pay premiums, two statutory holidays and one vacation week, reduced overtime rates and lengthened progression through scale. The revised work rules meant longer duty hours, more productive shift schedules and more part-timers. Technology benefits are now permitted. Employment security provisions have been repealed. Proportionally similar labour savings were achieved at regional unit Jazz.

Air Canada was also able to reduce pension expenses and extend the funding schedule. Also, the 24% reduction in staff numbers over the 2002 level has led to a significant labour productivity improvement, because the airline has not contracted much in size.

It has been a point of some concern that the labour contracts have a mid-point wage re-opener in 2006, meaning pay increases are possible from 2007. But Air Canada's management has played down the impact, pointing out that productivity is not a re-opener and that there is an agreement on two important issues: use of binding arbitra-



tion, if necessary, and no industrial action through 2009.

As regards to aircraft ownership costs, Air Canada claims to have secured an average annual cash rent reduction of C\$711m or 49% in 2003-2009, compared to the 2002 level. While in bankruptcy, the airline rejected 48 parked or surplus aircraft, converted owned and debt-financed aircraft to operating leases and obtained significantly lower lease rates. The management believes that Air Canada obtained better lease deals than any of the US carriers (including those currently in Chapter 11) simply because of the timing - the negotiations took place in the depths of the SARS crisis, when aircraft lessors were not able to go to their usual "safety valve", Asia.

Air Canada is also targeting C\$500m-plus annual savings from miscellaneous sources, including restructured supplier contracts, operational changes, elimination of meals in economy class, etc. As of August, the airline had identified C\$420m of such savings.

The airline has claimed that its North American units costs (CASM) have fallen "dramatically" and that the impact of the

restructuring on international CASM should be even greater. However, there are no statistics to support such claims, even when fuel prices are excluded (though it is possible that some of the cost savings have so far only showed up in special items).

Looking at the latest (2Q04) unit cost figures, the progress made seems rather insignificant. Air Canada was able to report an impressive 11% year-over-year decline in CASM, from 16.4 to 14.6 Canadian cents (or a 15% decline excluding fuel), but it also grew mainline ASMs by 11%. In the year-earlier period, from 2Q02 to 2Q03, CASM actually rose by 7%, but mainline capacity fell by 18%. So the two-year CASM decline was only 4.6%, as the airline contracted in size by 9.4%. Total operating costs (excluding restructuring) were reduced by 15.8% in the two-year period.

The problem is that the C\$2bn overall annual cost reduction may not be enough to make Air Canada competitive with LCCs. The current CASM gap with WestJet, its main low-cost competitor, is still around 3.5 Canadian cents (almost 3 US cents).

This is a larger gap than what most of the US legacy carriers now have relative to LCCs. It is probably also larger than US Airways' infamous 4-cent gap when differences in average stage lengths are taken into account - Air Canada's is about 1,300 miles, compared to WestJet's 790 miles.

Air Canada's 14.6-Canadian cent CASM (around 12 US cents) seems very high for a long-haul carrier, even after allowing for higher Canadian cost levels. However, as a dominant airline domestically, with lucrative international routes, it has much more breathing space than US Airways did.

Revenue considerations

The key consideration for Air Canada, like other legacy-type, full service airlines, is whether its unit revenue (RASM) premium over LCCs will be sufficient to offset the remaining CASM disadvantage.

Air Canada's top executives said that the airline has experienced similar RASM premiums over LCCs in its hubs than the US lega-

cy carriers. The difference seems to be that while most US carriers now take the view that those premiums will erode over time, Air Canada is counting on being able to maintain its current RASM premiums. That may not be realistic.

The airline believes that it can maintain the RASM premiums, first, by "maintaining frequency superiority" in domestic markets and, second, by "having happy customers".

Frequency superiority will be maintained by increased use of smaller, 70-90 seat aircraft. The management noted that LCCs would continue using larger than 100-seat aircraft and predicted that Air Canada would achieve higher load factors.

That is an unusual way of looking at things. Usually, smaller aircraft are chosen because they are the right size for thinner routes. An airline may want to expand into smaller markets (JetBlue, for example) or retain a presence in such markets (US Airways). Aircraft in the 70-90 seat category - with the possible exception of the EMB-190 - are not meant for head-to-head competition with 150-seaters. Whatever RASM or load factor benefit there might be would be more than offset by the CASM disadvantage.

Strategies aimed at making customers happy have probably more potential, and Air Canada has accomplished much in that regard. Most significantly, it has introduced a simplified fare structure that "allows for better understanding of value" and makes it easier for customers to choose the fare that best suits their needs.

The pricing strategy was first revised in May 2003 by narrowing 22 or so domestic fare types into just six categories. Last month the airline eliminated one of those categories (Econo), along with minimum stay and round trip requirements for fares on all continental North America flights. It now has five simple fare types - Tango, Fun, Latitude, Freedom and Executive Class. The fare types are priced according to the built-in benefits in terms of flexibility, refundability, level of FFP mileage accumulation, lounge access, etc.

The Tango fares represent an expansion of Air Canada's domestic Tango operation. As the management described it: "We've

basically taken Tango to the world as our low-fare product". The level and structure of those fares have been made the same as WestJet's. Gaining customer trust is considered to be the key challenge with the Tango fares, meaning that customers must know that they will not find a lower fare in the marketplace than the one Air Canada is offering. Air Canada has developed a simple way of showing the five fare types on a single page on its web site.

Air Canada has evidently focused hard on what value propositions could be put into the different fare types, and the management indicated that the process is far from complete. However, US experience has shown that it is extremely difficult for legacy carriers to overhaul their fare structures without an overall negative impact on revenues. Once the key restrictions on the lowest fares have been abolished (to make them competitive with LCC offerings), it is hard to convince customers that there is truly value in paying more for another fare type.

Air Canada says that it is encouraged by the response to the new fares and that "quite a few people" are paying for the extra value. However, it has so far declined to provide any figures or even rough estimates on how many people are flying at the higher fares or which way the business mix is changing. The airline says that customers are still learning about the business model.

The airline unveiled what it described as a "contemporary new look" last month - an updated design and colour scheme for the fleet (to be implemented over the next two years) and new uniforms for front-line staff. It is also adding seat-back entertainment systems for all aircraft except 50-seaters from May 2005 and lie-flat seats for international business class from September 2005.

Air Canada describes its new business model as being based on "simplicity, flexibility and efficiency in all areas of our operations". The newly redesigned web site is a "focal point for a number of strategies", facilitating both cost savings and product change. Online sales as percentage of revenues are currently in the high 20s, up from just 2% in 2000, though over 60% domestically. The target by 2006 for Canada is 92%,

AIR CANADA'S FLEET AND FLEET PLANS					
Mainline					
Year-End Fleet	2003	2004	2005	2006	2007
A319	48	48	47	46	46
A320	52	50	47	45	40
A321	10	13	13	13	13
A333	8	8	8	8	8
A343	9	11	11	11	11
B737	10	-	-	0	0
B747-CMBI	3	-	-	0	0
B767	6	12	10	9	7
B767-300	26	30	30	29	29
CRJ 200	25	25	22	0	0
EMB 190	-	-	3	20	44
70-100 seats	-	-	-	15	15
Total Mainline	197	197	191	196	213
jazz system					
CRJ 200	10	22	28	50	50
DH1	36	45	42	40	34
DH3	26	26	26	26	26
B142	10	3	0	0	0
CRJ 705	0	0	15	15	15
Total jazz	82	96	111	131	125
Total ACE	279	293	302	327	338
Total RJs	35	47	68	100	124

Canada-US 65% and other international 40%.

Route network strategy

Air Canada has a global network, with Canada accounting for 43%, Canada-US 23%, transatlantic 21% and other international 13% of total revenues in 2003. North America's share has declined by almost five percentage points in the past two years, as revenues in that region plummeted by 21% between 2001 and 2003. European routes have seen a corresponding increase, with revenues rising by 5.2%.

The vision for the restructured Air Canada is "to be the customer's clear choice in domestic and transborder markets by offering mass transit/self-service product and to leverage its global network as their preferred carrier for travel".

For the North American markets, that means high-frequency service between all major cities and maximum connectivity with smaller aircraft. In settling on that strategy, Air Canada was motivated by the benefit of

being a dominant carrier in a hub, particularly in respect of RASM premiums. An analysis of selected US markets by Seabury Group, using DoT statistics, found that the number one carrier in terms of market share also got more than its "fair share" of revenues. The second and third largest carriers underperformed in terms of revenues. In other words, the study suggested that rank in a city is a primary determinant of expected RASM premium.

In respect of future growth, however, the focus of Air Canada's post-bankruptcy strategy is on international markets outside North America. The airline ranks as the 13th largest international carrier in the world, serving 19 countries in the Americas, seven in Europe and six in Asia. In addition to benefiting from Star alliance membership, it enjoys unfettered access to parts of the world that US carriers cannot serve. After being sidetracked by the 1999 acquisition of Canadian and delayed by the post-September 11 crisis and its own bankruptcy, the airline is now ready to start adding new international destinations from various Canadian gateways. Its top executives predict that Air Canada's international operations could eventually far outweigh its domestic service.

The executives said that Air Canada would probably begin looking for niche markets not served by other international carriers, such as the recently introduced nonstop Toronto-Delhi route. There is obviously good potential to draw traffic from the US market for such services.

Subsequently, late last month Air Canada announced plans to launch the first-ever nonstop flights between Vancouver and Sydney in mid-December, operating two daily flights with 282-seat A340-300s. The airline sees further opportunities from Vancouver to markets across the Pacific, as well as over the pole to destinations such as Delhi.

The airline also recently introduced non-stop Toronto-Hong Kong A340 service, which has been successful. It sees further opportunities from Toronto particularly to China and Korea.

Air Canada also sees some growth

opportunities to secondary markets in Europe - in the first place, it will reintroduce service that was terminated in the wake of the SARS crisis. There are also further opportunities in Latin America, into which Air Canada has been pushing successfully since the US government's introduction of a "transit without visa" programme.

Air Canada welcomed transport minister Jean Lapierre's late-October announcement that the government would consider liberalising Canada's air policies, including lifting foreign ownership restrictions on airlines.

Fleet plans

Air Canada has reduced its fleet by 13% in the past two years, from 336 aircraft in early 2003 to 293 aircraft at the end of this year, including 197 at mainline and 96 at Jazz. The plan is to continue phasing out older widebody aircraft and to introduce up to 180 new 70-100 seaters. There will be a need to add long-haul aircraft at some point - the current thinking is that it will be possible to find used 767-300s, A330s and A340s.

The airline took the 70-100 seat decision after realising that its narrowbody fleet was significantly over-gauged - 63% of total block hours flown carried fewer than 100 passengers per flight, while only 29% of block hours were operated by aircraft with less than 120 seats. Another factor was the availability of new-generation small jets that have attractive economics and high customer appeal, such as the EMB-190, which JetBlue will introduce from mid-2005.

Immediately after emerging from bankruptcy, Air Canada placed orders for up to 180 new 70-90 seat aircraft, dividing the commitment equally between Bombardier

and Embraer. First, there was a firm order for 15 CRJ200s and 15 CRJ700s, plus 15 conditional orders and 45 options, with the 50-seat deliveries beginning immediately (last month) and the 70-seat deliveries in May 2005. Next, Air Canada ordered 45 EMB-190s plus 45 options, for delivery from November 2005.

As a result, Air Canada's RJ fleet will rise from just 35 aircraft at the end of 2003 to 68 by year-end 2005 and 124 by year-end 2007. The CRJs will be split equally between mainline and Jazz, to comply with the pilot scope clause, while the EMB-190s will be flown by mainline pilots. The management said that all of the aircraft would be introduced at totally competitive pay rates, with pilot costs on the EMB-190 being "within striking distance of JetBlue's"

Outlook

Air Canada believes that it is now well positioned to generate operating profits, and analysts generally agree with that, at least for the near term. A profit in the third quarter (October-December) will be in sharp contrast with the worsening losses reported by most US airlines.

While yields remain weak in Canada and the US routes, they are improving in many other international markets. Thanks to higher overall system traffic and yield, Air Canada expects to report 12% revenue growth and 6% higher RASM in the third quarter. Even though fuel prices remain a concern, fuel surcharges in effect for Canada-US and all international travel and a stronger Canadian dollar have helped mitigate the impact.

By
Heini Nuutinen

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Jet values and lease rates

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

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

These values are different from and

NARROWBODY VALUES (US\$m)									
	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A318	28.7				717-200	22.7	15.2		
A319 (IGW)	36.1	27.9			727-200Adv				0.9
A320-200 (IGW)	42.8	33.7	24.7		737-200Adv				2.2
A321-200 (LGW)	46.5	37.0			737-300 (LGW)		15.0	11.9	5.9
					737-400 (LGW)		16.4	12.8	
					737-500		14.1	10.4	
					737-600	30.6	21.3		
					737-700	36.4	28.7		
					737-800	45.9	35.8		
					737-900	44.2			
					757-200		29.3	22.5	8.7
					757-200ER		32.7	24.8	
					757-300		36.8		
					MD-82			9.3	5.6
					MD-83		12.7	10.5	6.6
					MD-88			10.8	
					MD-90		16.3	12.9	
WIDEBODY VALUES (US\$m)									
	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A300B4-200				4.2	747-200B				6.7
A300B4-600			7.3		747-400		91.3	62.3	
A300B4-600R (HGW)		35.7	27.9		767-200				7.6
A310-300 (IGW)			22	7.3	767-300		40.8	29.6	
A330-200		78.7			767-300ER (LGW)		50.7	37.2	
A330-300 (IGW)	92.2	71.1	49.9		767-400		60.5		
A340-200			42.5		777-200		72.0		
A340-300 (LGW)		76.3	55.8		777-200ER	123.5	99.1		
A340-300ER	107.9	84.7			777-300	125.6	93.3		
A340-500	123.5								
A340-600	129.8								
					DC-10-30				6
					DC-10-40				1.6
					MD-11P		46.8	35.3	

Note: As assessed at end October 2004
Source: AVAC

Aviation Strategy

Lease trends

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

	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A318	230				717-200	205	149		
A319 (IGW)	302	254			727-200Adv				41
A320-200 (IGW)	315	281	236		737-200Adv				50
A321-200 (LGW)	346	291			737-300 (LGW)		148	129	88
					737-400 (LGW)		162	139	
					737-500		148	126	
					737-600	201	169		
					737-700	295	246		
					737-800	334	289		
					737-900	326			
					757-200		217	201	120
					757-200ER		225	201	
					757-300		269		
					MD-82			121	88
					MD-83		141	124	98
					MD-88			123	
					MD-90		144	135	

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

	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
A300B4-200				88	747-200B				142
A300B4-600			145		747-400		771	593	
A300B4-600R (HGW)		270	245		767-200				113
A310-300 (IGW)			210	112	767-300		311	269	
A330-200		612			767-300ER (LGW)		399	340	
A330-300 (IGW)	687	580	464		767-400		553		
A340-200			427		777-200		563		
A340-300 (LGW)		624	485		777-200ER	871	756		
A340-300ER	822	671			777-300	903	745		
A340-500	878								
A340-600	945								
					DC-10-30				122
					DC-10-40				82
					MD-11P		479	401	

Note: As assessed at end
October 2004
Source: AVAC

AIRCRAFT AND ASSET VALUATIONS

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Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France												
YE 31/03	Year 2002/03	13,702	13,495	207	130	1.5%	0.9%	131,247	99,960	76.2%		71,525
	Apr-Jun 03	3,442	3,453	-10	5	-0.3%	0.1%	31,888	23,736	74.4%		71,936
	Jul-Sep 03	3,715	3,598	117	56	3.1%	1.5%	35,255	27,544	78.1%		
	Oct-Dec 03	3,933	3,855	78	35	2.0%	0.9%	33,380	25,329	75.9%		71,900
	Jan-Mar 04	3,668	3,680	-12	16	-0.3%	0.4%	33,917	25,026	73.8%		
	Year 2003/04	15,024	14,855	169	113	1.1%	0.8%	134,444	101,644	75.6%		
KLM												
YE 31/03	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%		32,853
	Oct-Dec 03	1,838	1,801	36	10	2.0%	0.5%	17,969	14,378	80.0%		31,804
	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
Air France/ KLM Group*	Apr-Jun 04	5,394	5,205	189	115	3.5%	2.1%	48,944	38,025	77.7%		
Alitalia												
YE 31/12	Year 2001	4,745	5,007	-262	-818	-5.5%	-17.2%	51,392	36,391	70.8%	24,737	23,667
	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 2002/03	12,490	12,011	543	117	4.3%	0.9%	139,172	100,112	71.9%	38,019	51,630
	Apr-Jun 03	3,023	2,957	59	-104	2.0%	-3.4%	34,962	25,102	71.8%	9,769	49,215
	Jul-Sep 03	3,306	2,980	333	163	10.1%	4.9%	35,981	27,540	76.5%	9,739	47,702
	Oct-Dec 03	3,363	3,118	244	148	7.3%	4.4%	35,098	25,518	72.7%	8,453	46,952
	Jan-Mar 04	3,386	3,327	164	22	4.8%	0.6%	35,232	24,932	70.8%	8,142	46,551
	Year 2003/04	13,806	13,067	739	237	5.4%	1.7%	141,273	103,092	73.0%	36,103	49,072
	Apr-Jun 04	3,479	3,208	271	127	7.8%	3.7%	36,150	27,083	74.9%	9,288	46,280
	Jul-Sep 04	3,645	3,213	432	221	11.9%	6.1%	36,639	28,749	78.5%	9,822	46,179
Iberia												
YE 31/12	Year 2002	5,123	4,852	272	174	5.3%	3.4%	55,633	40,647	73.0%	24,956	25,963
	Jan-Mar 03	1,128	1,183	-55	-24	-4.9%	-2.1%	13,200	9,458	71.6%	5,717	
	Apr-Jun 03	1,348	1,265	83	60	6.2%	4.5%	13,516	9,982	73.8%	6,472	
	Jul-Sep 03	1,434	1,301	133	93	9.3%	6.5%	14,819	11,846	79.9%	7,073	
	Year 2003	5,800	4,459	202	180	3.5%	3.1%	56,145	42,100	75.0%	25,613	
	Jan-Mar 04	1,325	1,356	-32	-1	-2.4%	-0.1%	14,563	10,721	73.6%	6,136	
	Apr-Jun 04	1,461	1,371	90	95	6.2%	6.5%	14,743	11,106	75.3%	6,913	
Lufthansa												
YE 31/12	Year 2002	17,791	16,122	1,669	751	9.4%	4.2%	119,877	88,570	73.9%	43,900	94,135
	Jan-Mar 03	4,242	4,588	-346	-411	-8.2%	-9.7%	29,251	20,618	70.5%	10,391	
	Apr-Jun 03	4,423	4,214	209	-39	4.7%	-0.9%	30,597	22,315	71.7%	10,758	
	Jul-Sep 03	4,923	4,783	140	-20	2.8%	-0.4%	32,895	24,882		12,020	
	Year 2003	20,037	20,222	-185	-1,236	-0.9%	-6.2%	124,000	90,700	73.1%	45,440	94,798
	Jan-Mar 04	4,742	4,883	-141	76	-3.0%	1.6%	31,787	23,030	72.5%	11,414	93,479
	Apr-Jun 04	5,269	5,045	224	-28	4.3%	-0.5%	36,440	26,959	74.0%	13,336	
SAS												
YE 31/12	Year 2002	7,430	7,024	78	-15	1.0%	-0.2%	47,168	30,882	68.2%	21,866	
	Jan-Mar 03	1,608	1,654	-224	-188	-13.9%	-11.7%	11,169	6,551	60.9%	4,477	30,373
	Apr-Jun 03	1,906	1,705	201	8	10.5%	0.4%	12,278	7,855	64.0%	5,128	
	Jul-Sep 03	1,941	1,715	131	91	6.7%	4.7%	12,543	8,681	69.2%	8,301	34,856
	Year 2003	7,978	8,100	-122	-195	-1.5%	-2.4%	47,881	30,402	63.5%	31,320	34,544
	Jan-Mar 04	1,652	1,823	-171	-184	-10.4%	-11.1%	11,852	7,031	59.3%	7,238	
	Apr-Jun 04	2,007	1,979	27	13	1.3%	0.6%	13,456	8,960	66.6%	8,879	
Ryanair												
YE 31/03	Year 2002/03	910	625	285	259	31.3%	28.5%			84.0%	15,740	1,900
	Apr-Jun 03	280	220	57	46	20.4%	16.4%			78.0%	5,100	2,135
	Jul-Sep 03	407	237	170	148	41.8%	36.4%				5,571	2,200
	Oct-Dec 03	320	253	67	51	20.9%	15.9%				6,100	2,356
	Year 2003/04	1,308	978	330	252	25.2%	19.3%			81.0%	23,133	2,300
	Apr-Jun 04	366	288	78	64	21.3%	17.5%			83.0%	6,600	2,444
	Jul-Sep 04	516	305	211	181	40.9%	35.1%			90.0%	7,400	2,531
easyJet												
YE 30/09	Year 2001/02	864	656	111	77	12.8%	8.9%	10,769	9,218	84.8%	11,350	3,100
	Oct-Mar 03	602	676	-74	-76	-12.3%	-12.6%	9,594	7,938	82.2%	9,347	
	Year 2002/03	1,553	1,472	81	54	5.2%	3.5%	21,024	17,735	84.1%	20,300	3,372
	Oct-Mar 04	803	861	-58	-36	-7.2%	-4.5%	10,991	9,175	83.3%	10,800	

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. * = Preliminary consolidated figures for Air France Group from April-June, KLM Group from May-June

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
ANA												
YE 31/03	Year 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 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
	Jan-Jun 04	2,331	2,046	285	233	12.2%	10.0%	35,250		76.1%	6,404	
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 2001	4,309	4,468	-159	-448	-3.7%	-10.4%	55,802	38,452		21,638	
	Year 2002	5,206	4,960	246	93	4.7%	1.8%	58,310	41,818	71.7%		
	Year 2003	5,172	4,911	261	-202	5.0%	-3.9%	59,074	40,507	68.6%	21,811	
Malaysian												
YE 31/03	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
	Year 2002/03	5,936	5,531	405	601	6.8%	10.1%	99,566	74,183	74.5%	15,326	30,243
	Year 2003/04	5,732	5,332	400	525	7.0%	9.2%	88,253	64,685	73.3%	13,278	29,734
	Apr-Jun 04	1,588	1,409	179	159	11.3%	10.0%	25,249	18,167	71.9%	3,800	

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-March	227	94	321	249	110	359	680

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-March	32	13	45	215	32	247	292

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

Aviation Strategy

Databases

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72
1999	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
2000	208.2	132.8	63.8	229.9	179.4	78.1	137.8	108.0	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2001	212.9	133.4	62.7	217.6	161.3	74.1	131.7	100.9	76.6	492.2	372.6	75.7	743.3	530.5	71.4
2002	197.2	129.3	65.6	181.0	144.4	79.8	129.1	104.4	80.9	447.8	355.1	79.3	679.2	507.7	74.7
2003	210.7	136.7	64.9	215.0	171.3	79.7	131.7	101.2	76.8	497.2	390.8	78.6	742.6	551.3	74.2
Aug 04	20.3	14.5	71.6	21.3	18.1	85.3	13.6	10.8	79.8	48.2	40.3	83.5	72.1	57.6	79.9
Ann. chng	7.3%	5.1%	-1.5	3.6%	4.6%	0.8	20.8%	16.8%	-2.7	7.5%	7.4%	0.0	7.6%	6.8%	-0.5
Jan-Aug 04	146.9	96.7	65.9	151.2	124.5	82.3	101.0	78.3	77.6	356.5	286.0	80.2	529.9	401.3	75.7
Ann. chng	6.1%	8.2%	1.2	6.0%	9.7%	2.8	18.5%	23.7%	3.3	8.8%	12.1%	2.4	8.5%	11.6%	2.1

Source: AEA

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
2002	990.0	701.6	70.9	159.0	125.7	67.2	103.0	83.0	80.5	84.1	56.8	67.5	346.1	265.5	76.7
2003	963.1	706.6	73.4	148.3	117.6	79.3	94.8	74.0	80.5	84.2	59.3	70.5	327.2	251.0	76.7
Sept - 04	80.0	57.1	71.3	14.8	12.4	83.9	8.9	7.3	82.0	6.6	4.3	64.7	30.3	24.0	79.2
Ann. chng	2.9%	9.0%	4.0	8.3%	12.0%	2.8	7.9%	7.5%	-0.3	7.4%	13.0%	3.2	8.0%	10.8%	2.0
Jan-Sept 04	762.0	576.4	75.6	123.6	101.6	82.2	77.5	65.6	84.6	72.2	51.3	71.1	273.2	218.5	80
Ann. chng	5.7%	8.3%	1.8	11.1%	15.6%	3.2	10.1%	22.0%	8.3	15.1%	15.1%	0.0	11.8%	17.3%	3.7

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	Delivery	Other information/engines
Boeing	21 Oct	Primaris	20 x 737-800 20 x 7E7-8	2007 onwards 2010 onwards	plus 25 options plus 15 options
Airbus	26 Oct	Turkish Airlines	19 x A320 12 x A321 5 x A330-200	10/05 - 2008 " "	IAE V2527AS " CF6-80EI A3
	2 Nov	Hainan Airlines	8 x A319	2005 - 2007	
	4 Nov	Niki Luftfahrt	10 x A320	09/05 onwards	plus 40 options combined
	4 Nov	Air Berlin	60 x A320	"	with Air Berlin
Embraer	19 Oct	Copa Airlines	10 x Emb 190	11/05 onwards	plus 20 options
Bombardier					

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

Source: Manufacturers

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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