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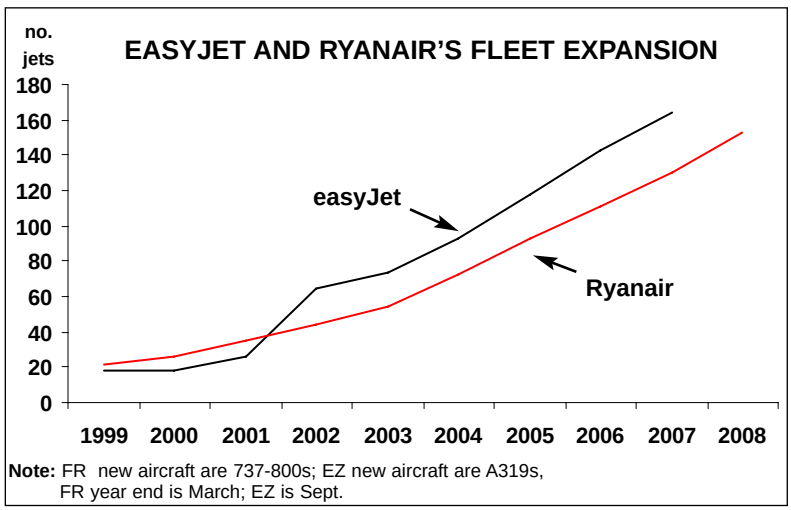
The expansionist dilemma

A second profit warning from easyJet coming too soon after the first one plus comments from Ryanair's CEO Michael O'Leary about an impending competitive bloodbath has understandably upset investors and raised questions about European LCC models.

easyJet and Ryanair are both pointing to overcapacity in the market as the main culprit for their recent problems, the result of too many start-ups trying to imitate them and the stubborn refusal of the flag carriers to accept commercial logic and exit the short-haul market. They are beginning to sound like the AEA carriers whining about there being too many flag-carriers in Europe.

In reality, easyJet and Ryanair are the ultimate expansionists. Their current fleet plans mean that they will both be adding a new aircraft every two weeks or so until the end of 2008 - 104 737-800s for Ryanair and 107 A319s for easyJet. And each new aircraft will have to generate at least 250,000 extra passengers a year (easyJet carried 21.1m passengers in 2003 and Ryanair 23.1m in the year to March 31 2004).

The basic problem does not seem to be Europe-wide LCC overcapacity but rather near-saturation of the London market and an inability to penetrate barriers at continental European bases. Despite the dynamic expansion of recent years, easyJet and Ryanair remain essentially UK (or British/Irish) focused airlines. The graph on page 2 illustrates this. The data comes from OAG (first week of June) and shows intra-European scheduled seats to/from Europe's main cities, with the capacity split out into base flag carriers, other Euro-flag-carriers, other full service airlines (like bmi), easyjet/Ryanair, and other LCCs (including scheduled services



Note: FR new aircraft are 737-800s; EZ new aircraft are A319s, FR year end is March; EZ is Sept.

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offered by charters).

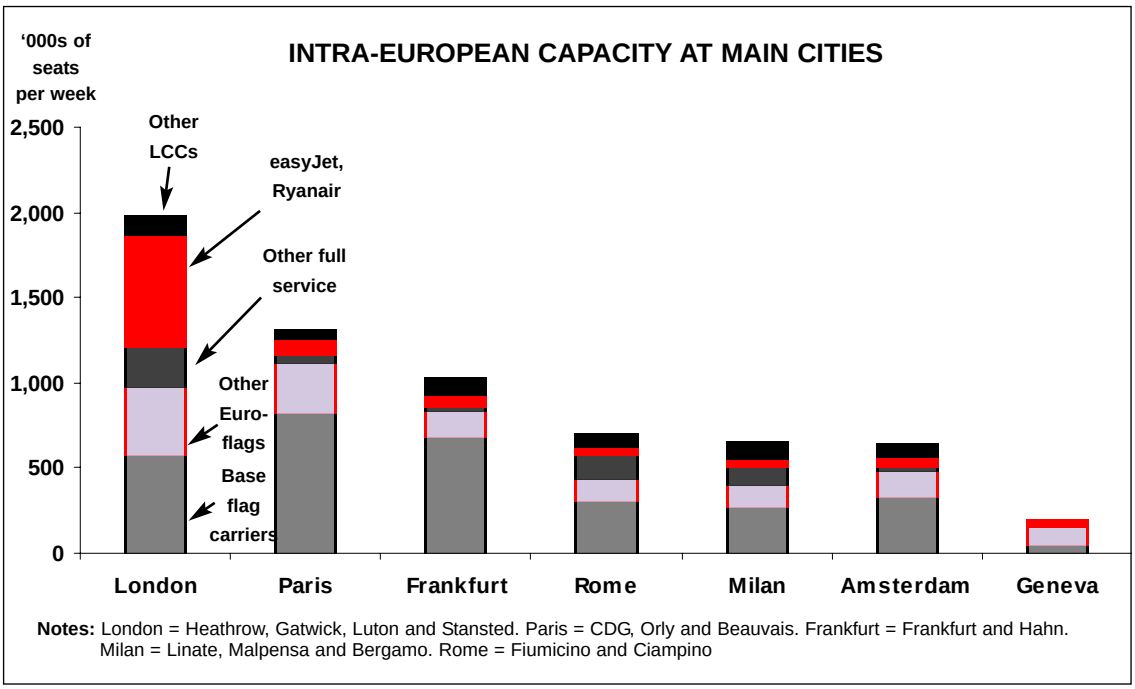
At London (which means Heathrow, Gatwick, Stansted and Luton) easyJet and Ryanair now account for 33% of the total intra-European capacity, more than BA which, having rationalised its short-haul network, has only 29%. Expansion at London is being constrained: BA has come up with an effective defence with ba.com, most of the new continental LCCs have tended to include London on their route networks, and there is a limit to how much existing markets can be stimulated.

Paris is the closest to London in terms of LCC-friendly characteristics: Europe's second largest O&D catchment area, significant second airport, inbound and outbound tourism and VFR traffic, and potentially price-sensitive business markets. easyJet may be France's second biggest carrier, but overall LCC penetration is shallow. EasyJet at Orly and CDG and Ryanair at Beauvais account for just 7% of the Paris total. easyJet remains frustrated by the slot allocation barriers at Orly and has embarked on legal action against COHOR, the slots administrator, as well as challenging the legality of the Air France/KLM merger, through a complaint to the EC. Air France plus KLM control about 62% of intra-European capacity at Paris, and the French flag-carrier isn't going to relinquish any of it without a battle.

easyJet's focus in Germany is now at Berlin, where it is coming up against the most successful of the German LCCs, Air Berlin, and to a lesser extent at Dortmund. It tested out the Munich market for over a year before deciding that it was impossible to convert DBA into a commercial LCC.

Ryanair has grown more rapidly at Frankfurt Hahn than some expected, but its share of Frankfurt (both airports) intra-European capacity is only 7%, less than the 10% controlled by the German charter-derived LCCs like Condor (50% owned by Lufthansa) and Hapag Lloyd Express and, of course, dwarfed by Lufthansa, which has about 66%.

Turning to Italy, prospects should be enhanced by the deteriorating situation at Alitalia whose auditors seem to be suggesting that the airline is facing liquidation. It is, however, immensely difficult to get rid of a southern European flag-carrier no matter how illiquid it is. Alitalia controls about 44% of intra-European capacity at Rome (Fiumicino and Ciampino) and 40% at Milan (Linate, Malpensa and Bergamo). Ryanair has developed its bases at Bergamo and Ciampino but it (plus easyJet which has a much smaller presence) accounts for only 7% of the Rome total and 8% of the Milan total. The competi-



Notes: London = Heathrow, Gatwick, Luton and Stansted. Paris = CDG, Orly and Beauvais. Frankfurt = Frankfurt and Hahn. Milan = Linate, Malpensa and Bergamo. Rome = Fiumicino and Ciampino

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CAPACITY SHARES BY AIRLINE TYPE

	London	Paris	Frankfurt	Rome	Milan	Amsterdam	Geneva
Base flag carrier	29%	62%	66%	44%	40%	50%	22%
Other Euro-flags	20%	23%	15%	18%	20%	23%	55%
Other full service	12%	3%	2%	18%	16%	5%	0%
easyJet and/or Ryanair	33%	7%	7%	7%	8%	9%	22%
Other LCC	6%	5%	10%	12%	16%	14%	1%
Total	100%	100%	100%	100%	100%	100%	100%

Notes: For city/airport definitions see opposite; Air France and KLM have been combined for Paris and Amsterdam

tive picture is complicated by Volare, which has a significant presence at both airports and is trying to convert itself into Europe's third force LCC from a diverse charter/scheduled background. So far it seems to be losing a lot of money.

Amsterdam and Geneva are both bases for easyJet. It has a 9% capacity share of the intra-European market at Amsterdam, and there should be growth opportunities at Schiphol as a result of the KLM/Air France merger. The logical way of extracting value from the merger would be to concentrate global hubbing at CDG and downsize KLM's Schiphol operation; however, the terms of the merger agreement state that the relative importance of the two hubs has to remain unchanged for the foreseeable future. Transavia, 50% owned by KLM, is also an effective LCC-type competitor at Amsterdam.

Geneva too offers growth prospects if the increasingly financially troubled Swiss, which has about 22% of the intra-European capacity there, goes out of business. easyJet actually has just over 22%, and could in theory achieve a dominant position at Geneva. It should be noted, however, that the Geneva market is relatively small - just 10% of the London market, for comparison.

The problem facing both easyJet and Ryanair is that they know that there is a very substantial unsatisfied demand for their products in continental Europe but to grow there they need to establish bases at the main population centres. Up to recently, they have grown successfully by flying from London and other UK/Irish cities to secondary and tertiary points, but to continue to grow, and fill the aircraft they have ordered, they have to expand from bases like Paris or Milan to secondary and tertiary points.

This may imply diversions from the model that has worked so well up to now - full-scale inter-LCC fare battles or accepting higher airport costs, taking over LCC rivals, maybe even experimenting with some from of franchise agreement (as AirAsia has done) in order to develop new markets.

US legacy carriers: shakeout to begin this autumn?

Crude oil prices averaging mid-to-high 30s (dollars per barrel) would mean another heavy $2-4bn aggregate net loss for the US major carriers in 2004 - the year when many of them had expected to return to modest profitability at long last. The industry is now scrambling to find ways to cut non-fuel costs further, but can anything meaningful be achieved outside bankruptcy? And what about the heavy debt burden?

It has to be noted, first of all, that the large US carriers are clearly worse affected by the high fuel prices than their European and Asian counterparts - many of the latter are still likely to turn in profits this year. US airlines are suffering because, unlike carriers like BA and Singapore Airlines, they have not been able to deploy the standard tactic used by most industries to mitigate external cost increases: raising prices. In other words, they have not been able to introduce fuel surcharges in the domestic market.

It has not been for the lack of trying. One US major airline or another (mostly Continental in recent weeks) has tried to raise fares in response to fuel costs nearly every Friday, but the attempts have always collapsed after the weekend when not all carriers participated. The competitive dynamics in the US domestic market are such that no airline with a sizable presence on a route dares charge higher fares than competitors for risk of losing market share. It has been difficult to get fare increases to stick for many years, but the problem has been exacerbated by the increased presence of LCCs and excess capacity (which Continental's CEO estimates at 25%).

To further illustrate how the legacy carriers have effectively lost pricing power in the US domestic market (even though they still account for 70%-plus of the capacity), only LCCs like Southwest and AirTran have been successful in raising fares in response to fuel in recent weeks. However, those increases (such as Southwest's $1-2 per segment) have been too small to have any real beneficial impact.

The start of the summer travel season has brought no improvement to the pricing environment. However, several airlines have indicated that they are reassessing their schedules for the leaner autumn months. This could mean elimination of some of the excess capacity, though nobody is expecting much positive revenue impact.

In his recent testimony to Congress (as part of hearings on aviation taxes and security costs), S&P analyst Philip Baggaley made the point that lower inflation-adjusted fares, rather than higher real fuel prices, are the airlines' main problem. According to Baggaley, current real fuel prices are only modestly higher than the averages of the last 15 years. Real domestic yields and RASM collapsed in 2001-2003 (after declining steadily since deregulation) and have recovered only modestly over the past year.

The big problem regarding fuel, acknowledged by Baggaley and others, is that we are not talking about a temporary spike. Oil prices are expected to remain high for an extended period. Many analysts feel that the prices will settle in the low-to-mid 30s, at best. AirTran's CEO Joe Leonard said recently that he doubted oil would ever fall below $30 again.

This has significant financial implications for an industry used to oil prices in the $24-26 range. According to Merrill Lynch analyst Michael Linenberg, for every $1 change in the price, the US majors' aggregate pretax profit swings by about $450m.

In the longer term, the higher fuel prices are likely to lead to a revision of fleet strategies, namely accelerated disposal of older fleets in favour of more fuel-efficient aircraft. In the short term, with little improvement in sight on the revenue side, cost cutting remains the only option open for the legacy carriers.

Before the May spike in fuel prices, Delta, Northwest and US Airways were the only

major carriers seeking labour cost savings (the first two because their pilot costs were totally out of line with competitors', US Airways to avert another Chapter 11 filing). Now even the strongest legacy carriers may find it necessary to seek labour cost savings later this year. Continental has already warned of potential furloughs, wage concessions and reduced pension funding in the autumn, while many airlines have said that they will consider layoffs.

Although at first glance it is hard to see how Continental and American could extract new concessions from their workers, the more airlines join the process, the easier it is likely to get for everyone. United is widely expected to need another round of labour concessions in Chapter 11; if it succeeds it would make American's wage levels look uncompetitive.

While Delta may now find it easier to get the concessions it needs from its pilots, some analysts are questioning whether that will be enough to avert Chapter 11. JP Morgan analyst Jamie Baker suggests that, in addition to $800m annual pilot concessions, Delta would need aircraft ownership cost savings significantly greater than the $175m achieved by AMR, possibly $300m. The airline is likely to focus on its $2.5bn of non-EETC secured debt, but the problem is that it is extremely difficult to restructure secured debt outside bankruptcy. There is speculation that Delta may need Chapter 11 by the winter to restructure debt.

Of course, after borrowing heavily in recent years to maintain adequate liquidity, all of the legacy carriers have significant debt burdens. According to Baggaley, fixed charges (interest, rentals and scheduled debt maturities) now represent 15-20% of revenues - higher than fuel's 12-14% share.

Baggaley calculated that each of the legacy carriers would take more than 30 years to pay off its debt and leases at the current rate of cash generation. "The debt burden is so heavy for these airlines that they have little prospect of reducing it materially by issuing stock. Even bankruptcy can help only to a degree: US Airways went through bankruptcy but still has a fairly heavy fixed financial burden, and United's proposed reorganisation would reduce their debt and leases by about one quarter."

Baggaley argued that the legacy carriers would not be able to restore their financial strength as they did in the 1990s. "This lack of backup financial resources and the breadth of the financial weakness across the industry mean that a wave of bankruptcies is possible in the next aviation downturn." Because of the threat of terrorism, "the next industry downturn could happen tomorrow", and it could cause some of the weaker carriers to cease operations and liquidate.

Many in the industry doubt that US Airways will succeed in transforming itself into an LCC (see *Aviation Strategy*, May 2004). The airline has an incredibly ambitious schedule of completing all labour concessions talks this month (June).

It is also becoming harder and harder to see how United could possibly emerge from Chapter 11 in this environment. In early June it was still waiting to hear about the $1.6bn loan guarantee application - one possibility is that (given that it is election year) the approval might be conditional.

US LCCs: reaching critical mass?

The US low-cost carrier (LCC) sector has, in many respects, come of age in 2004. Recent months have seen broad recognition that LCCs are no longer just a driving force for change but that the balance of power has shifted from the legacy carriers to LCCs. After growing extremely rapidly since September 11, LCCs have gained critical mass and now control pricing in the domestic market. This has had the consequence - one analyst called it a "cyclical first" - that the legacy carriers are not seeing any revenue recovery despite the resumption of healthy GDP growth.

Yet, LCCs are also reporting lower profit margins or losses in 2004, due to aggressive competitive responses from the legacy carriers, excess industry capacity and high fuel prices. How will they navigate through these challenges?

As another interesting twist, UK entrepreneur Richard Branson is going ahead with plans to launch a "Virgin USA" low-cost unit despite the difficult environment. The venture, formally announced in early June, is expected to begin operations in 2005 initially out of San Francisco, though the headquarters will be in New York City. The key question is: given the tough industry fundamentals and extreme crowding in the East Coast and transcontinental markets, is there still room for a sizable new LCC entrant?

The Virgin-branded carrier would represent an interesting new ownership model (the overseas franchise) in an industry sector that is already diverse. There are currently four or five LCC types in the US:

• Stand-alone entities - LCCs since their inception. The largest are Southwest, JetBlue, AirTran and Frontier, representing three generations of start-ups: pre-deregulation, early 1990s (AirTran and Frontier) and early 2000 (JetBlue).

• "Reformed legacy" carriers - currently only America West. AWA is a rare survivor from the early 1980s crop of entrants. A Chapter 11 visit in the early 1990s gave it low unit costs. Since being rescued by the ATSB in January 2002, it has also transitioned to an LCC-style simple, low fare structure (*Aviation Strategy* briefing, November 2003).

• Regionals that have transformed themselves into LCCs - Independence Air (formerly Atlantic Coast), which begins operations this month, is currently the only example (*Aviation Strategy*, May 2004). However, Mesa has indicated that it will consider following that route and acquiring 737s if its largest partner, US Airways, is liquidated.

• Major carriers' competitive responses - the only examples currently are Song and Ted (by Delta and United, respectively); past examples included Continental Lite, Shuttle (United), MetroJet (US Airways) and Delta Express. While Song is Delta's response to JetBlue, Ted is little more than a new image used to market leisure-oriented flights.

• Charter-into-scheduled leisure carriers - ATA is probably the only example. It is old-established (1973), has extremely low unit costs and focuses heavily on leisure markets.

Most estimates of LCCs' domestic market share include only the stand-alone carriers plus America West. The sector's share of total domestic passengers is currently about 25% and is expected to grow to 40% or more within five years. Currently about 70% of domestic markets have LCC service available.

The sector is dominated by Southwest, which accounts for nearly half of the LCCs' total passengers. Even then, JetBlue has already reached "major carrier" status, with $1bn-plus annual revenues in 2003, and both AirTran and Frontier are approaching that mark.

The shift in market share to LCCs has been a continuous trend since deregulation. The 14-15 years up to the early 1990s saw steady growth by Southwest and numerous start-ups and failures. No fewer than 32 of the 34 carriers that began primarily scheduled passenger service between 1978 and 1992 had disappeared.

In the early 1990s, there was a strong surge in start-up airline activity in the US, thanks to a rare combination of favourable economic, political and industry conditions. There was a good supply

of cheap second-hand aircraft and a large pool of experienced airline workers. Getting up and running was easier as a whole new industry had emerged to provide support services. Technological developments had made it possible to dispense with travel agents and their commissions. Getting federal approval had become easier, thanks to the very pro-competitive stance adopted by the Clinton Administration. The government was dealing decisively with predatory behaviour. Economic circumstances were ideal and finance was readily available.

The numerous new low-cost entrants from the 1993-95 period included AirTran's predecessor ValuJet, whose June 1994 IPO and subsequent spectacular financial success made it a favourite on Wall Street. The airline earned net profit margins as high as 16-18% in the mid-90s (similar to JetBlue's in recent years) in competition with Delta in Atlanta. It set a favourable trend for new entrants generally, paving the way for several successful IPOs and stock and bond offerings. The LCC sector's domestic passenger share surged from just 7% in 1990 to 18% in 1995.

However, the sector's good fortunes were brought to an abrupt end by ValuJet's May 1996 DC-9 crash and subsequent grounding on safety grounds. The airline had evidently overextended itself and some of its profits were earned at the expense of safety. The negative publicity and tightened FAA scrutiny turned the tide against start-ups, and the sector saw no market share growth in the second half of the 90s.

ValuJet itself was able to weather the crisis because of its exceptionally strong cash reserves and because it underwent a thorough transformation over several years. Among other things, changes implemented in maintenance and organisational structure made it a more conventional type of operation, which helped restore public confidence. The name was changed to AirTran and profitability was restored in 1998.

By 2000 it was clear that two LCCs from the early 90s crop of new entrants - the other was Denver-based Frontier, which had also been through tough times - were again doing well and ready to start growing. They had survived when numerous others had failed - Kiwi, WestPac, Air South, Reno and Nations Air, to name just a few. As UBS analyst Sam Buttrick aptly observed: "A large number of inconsequential failures and a small number of highly consequential successes".

US LCCs have used the post-September 11 industry turmoil to sharply accelerate growth and grab market share. Between 2000 and 2003, their capacity surged by 44% and passenger share increased from 20.6% to 25%. The bulk of the growth has come from JetBlue, AirTran and Frontier, because Southwest grew very conservatively in 2001-2003 and is only now returning to its normal 10% annual growth rate.

Why no new US entrants?

The post-September 11 period has seen a strong surge of new-entrant activity in other parts of the world - *Aviation Strategy's* recent survey identified 53 such airlines worldwide (March 2004 issue). Yet there have been no new entrants in the US, other than two or three small niche or charter-type operators (Hoover's Air, for example). There are several reasons.

First of all, the extreme severity of the post-September 11 financial crisis in the US made the environment hostile towards newcomers. It was inconceivable that anyone would have wanted to start (or fund) a new airline when the industry was struggling for survival and seeking government assistance.

Second, while experienced workers and cheap aircraft are certainly available, the barriers to entry in terms of regulatory approval, cost of certification and start-up capital needed are certainly higher now in the US than they were a decade ago (before the ValuJet crash).

Third, and most importantly, there just happened to be already well-established LCCs (AirTran and Frontier) and a new entrant of JetBlue's calibre keen and ready to grow as the major carriers began shrinking. Those carriers had already proved themselves to the travelling public, and September 11 gave them their big opportunity. Their presence has effectively prevented new LCCs from starting up.

There is a school of thought that as long as the current LCCs continue to build market share and remain profitable and flexible, new entrants may not get a chance to establish a foothold.

That seems even more likely if other surviving LCCs from the early 90s crop start growing, as now appears to be the case with Spirit Airlines. A

privately owned, hitherto extremely low-profile low-cost operator based in Fort Lauderdale, Spirit recently received a $125m equity investment from Oaktree Capital Management. It had sought additional liquidity since being turned down by the ATSB for a government-guaranteed loan in 2002. The airline subsequently placed a major Airbus order to replace its MD-80s and double the fleet size within five years. Spirit is an obvious future IPO candidate.

Nevertheless, there will undoubtedly be new-entrant hopefuls that have been inspired by the success of the established LCCs. The start-ups will be keen to grab some of the new opportunities that will open when industry restructuring gets under way.

Significant aircraft orders

US LCCs totally dominate order books for new aircraft that will be delivered over the next several years. According to Continental, the US LCC sector has about 400 large jet aircraft (excluding E190s) on order for delivery in the 2004-2007 period, compared to 150 large jets on order by the six legacy carriers.

Recent months have seen several significant new orders from US LCCs. The largest of those was probably Spirit's March order for 35 A319/A321s plus 50 options, with deliveries starting in November. The airline expects to take 15 of the firm aircraft directly from Airbus and the other 20 from ILFC. Also, in early June JetBlue exercised 30 additional A320 options.

There have been no recent Boeing orders from the US LCCs because both Southwest and AirTran already have significant order books sorted out. Southwest is taking 91 737-700s in 2004-2006, including a staggering 46 aircraft this year.

As a result, US LCCs are expected to grow their combined capacity by about 15% annually over the next five years. Individual carriers' growth rates will range from 10% annually for the largest, most mature operators (Southwest and AWA) to perhaps 35% for JetBlue.

US LCC characteristics

Even though European LCCs far outnumber US LCCs, there seems to be more diversity in business models in the US, with many airlines moving further and further away from the traditional Southwest model. It could just be that Europe is a step behind the US.

The US LCCs are characterised by the following:

• **High utilisation, high productivity**
Virtually all LCCs have those characteristics.

• **Low cost structures, but not rigidly so**
Unit costs are typically in the 6s or 7s (cents per ASM). However, Frontier is still classed as an LCC with CASM of 8.3 cents - its costs are higher partly because it is based at one of the country's most expensive airports. The unit cost gap between LCCs and legacy carriers is typically 2-4 cents.

• **Lower labour costs**
LCCs still enjoy a significant labour cost advantage over the legacy carriers, due to less senior work forces, more flexible work rules and substantially lower pension and benefit expenses.

• Lower-cost distribution channels
Critical for US LCCs. However, Internet sales (JetBlue 74%, AirTran 64%, Southwest 55%) are less well developed than at some of the European LCCs. Independence Air aims for 100% selling via its own web site.

• **Both point-to-point and hub models used**
LCCs tend to prefer point-to-point markets, where costs are the lowest. AirTran's and Frontier's business models are based on hub operations, in Atlanta and Denver respectively. Many LCCs operate a mixture of the two, or "focus cities" instead of hubs. Like Southwest, JetBlue is essentially point-to-point though may become more hub-style with the E190s.

• **Both secondary and primary airports**
Anything goes in this respect, the key factor being the desirability of the market. Even Southwest has now departed from its usual strategy of flying to cheaper and less congested secondary airports - Philadelphia was too good an opportunity to miss.

• **Trend away from single fleet type**
Last year JetBlue opted out of the traditional Southwest formula of operating a single aircraft type in the 150-seat category when it ordered 100-seat E190s. This month AirTran is introducing its second new aircraft type, the 737-700, to supplement its 717 fleet. ATA has announced its interest in the 717 or the E190. While Southwest remains dedicated to a single aircraft type, it is

keeping the matter under review. A second aircraft type offers flexibility but will increase unit costs. It really depends on what types of markets an LCC wants to serve.

• Low, simple fare structures

The key characteristic for all LCCs.

• Frequent-flyer programmes

Most sizable US LCCs have them. FFPs are important to the airlines for two reasons: to be accepted by mainstream (including business travellers) and building customer loyalty.

• High-quality product/on-board service

In many cases, US LCCs have succeeded in providing a higher-quality product and better service than the legacy carriers. They have some of the newest fleets, state-of-the-art technology and similar or better amenities than the legacy carriers. Some, such as AirTran and Spirit, have separate business class cabins. The race continues to provide more advanced in-flight entertainment systems - LiveTV, XM Satellite radio, Internet access, etc.

There is evidence that, like Southwest, JetBlue is building a "cult following", which is enabling it to attract price premiums and considerable customer loyalty.

Which markets?

Over the past decade, most of the new-entrant growth opportunities have been on the East Coast - as illustrated by Southwest's heavy focus there and the rise of AirTran and JetBlue.

However, as a post-September 11 trend, there has also been an influx of LCCs to the transcontinental market. It started as just one useful way for a north-south East Coast carrier to boost aircraft utilisation (JetBlue's initial red-eyes); over the past year it has become the nation's hottest bastion of competition. This summer is seeing a 31% year-over-year increase in daily flights, about half of which is coming from LCCs. While all agree that the current level of capacity is not sustainable, no airline is budging because the markets are so important. As the most efficient producers, LCCs have a pretty strong claim to those markets.

Transcontinental services have helped keep LCCs' unit costs low, but unit revenues have fallen by a greater extent. For JetBlue, which has the lowest costs but the highest exposure to the transcontinental market (35% of ASMs), the situation has led to a decline in overall profit margins this year (even before any impact from fuel).

US LCCs do not generally compete with one another. It is a vast country with numerous large markets, so the airlines have been able to stick to the Southwest principle of only going for "underserved, overpriced" markets. In other words, once one LCC is present in a market, that market is no longer overpriced, so other LCCs lose interest in it. That said, as LCCs grow, they will increasingly come in contact with each other.

As regards to future opportunities arising from industry restructuring, all eyes are now on US Airways. If it disappears, the most likely outcome is that its markets are quickly taken over by other legacy carriers and the largest LCCs.

In a recent report on LCCs, Raymond James analyst Jim Parker made the point that, in addition to legacy carriers' hubs, the two remaining areas for LCCs to conquer are medium-to-lower density domestic and long haul international markets. Smaller markets will see low fares, for the first time, with Independence Air's service this month and JetBlue's E190 service from mid-2005. Parker suggested that long-haul flights to Europe, which would logically follow hub development by LCCs and a US-EU open skies treaty, "may be five to seven years out".

Financial outlook

Throughout the post-September 11 crisis, JetBlue and Southwest have consistently posted double-digit operating margins and AirTran has not been too far behind. However, the margins - and in some cases profitability - have come under pressure this year from dismal yields and high fuel prices.

Southwest and JetBlue, which have the industry's best fuel hedges in place, will probably get away with margin declines of a few points. AirTran is still expected to remain profitable in 2004, but the current consensus forecast for Frontier is only breakeven.

To keep things in perspective, a couple of years of reduced profitability would not do much damage, and the LCC model is certainly not being called into question. LCCs are the best-positioned airlines to weather the current challenges also because of their strong cash positions and healthy balance sheets.

By
Heini Nuutinen

Singapore Airlines: ready to face the deluge of Asian LCCs?

Singapore Airlines (SIA) has recovered quickly from the impact of SARS and a few weeks ago reported an operating profit of S$680m (US$400m) for the 2003/04 financial year. Now, however, SIA faces a longer lasting and much more dangerous challenge - the low-cost carriers.

Singapore's flag-carrier, created in 1972 from the former Malaysian-Singapore Airlines, today operates to 60 destinations in Asia and around the world. Historically, SIA has racked up year-after-year of continuous profits, and though September 11 and the Bali bombing of October 2002 hit traffic at the main airline, earnings from elsewhere within the SIA group mitigated the effect on the bottom line. In 2002/03 (SIA's financial year runs to the end of March) operating profit fell 22% to S$717m (US$416m), but net profit increased by 69% to US$626m, partly due to a one-off tax write-back of US$164m after a cut in Singapore's tax rates.

A bigger challenge to SIA came from SARS. The outbreak caused SIA's traffic to collapse in April and May 2003 (see chart, page 14), and in April-June 2003 the SIA Group reported its first-ever quarterly losses. Revenue fell 35% in the quarter and operating losses totalled US$215m, compared with a US$139m profit in the same period in 2002. Net losses totalled US$178m, compared with a US$273m net profit in April-June 2002.

SIA responded to SARS by cutting capacity by more than 30%, reducing management pay by 27%, forcing cabin crew to take unpaid leave and putting a freeze on recruitment. In June 2003, SIA made more than 400 staff redundant, around 1.5% of the 29,000-strong group workforce, and the first time that SIA had laid off staff since the 1980s. But this still wasn't enough, and in July another 180 staff were let go.

Over the same period management persuaded unions to accept substantial wage cuts: pilots agreed to salary reductions of 11%-16.5%, engineers to 7.5% and other staff to between 5%-11%. In return SIA agreed to refund the salary reductions depending on results for 2003/04. The agreed formula was a 25% refund if profits reached S$200m (US$114m), 50% for profits of more than S$300m, 75% for >S$400m, 100% for >S$500m and 115% for >S$600m.

The salary cuts were controversial, with the greatest opposition coming from ALPA-S - the pilots' union. Management had wanted a cut in pilots' pay of up to 22.5%, but after the union resisted the matter was taken to arbitration and the eventual reduction was slightly less.

The deal with the pilots was to remain in force until a new collective agreement was signed in the first quarter of 2004. However, considerable unease about the deal within the pilots union was fuelled by misgivings about management's wish that the new collective agreement should link part of pilots' pay to SIA's financial performance permanently. This resulted in the pilots' union members sacking the entire union leadership at the end of 2003, in favour of representatives that would take a tougher stance with management in the 2004 collective agreement negotiations.

The Singaporean government - renown for its tough line on industrial dissent - stepped in and put pressure on the pilots to come to a quick agreement in 2004 by declaring it would amend the existing Trades Union Act so that leaderships of trades unions would no longer have to get approval from their members for any deals they signed.

Some observers felt the government was bullying the pilots, and with SIA's handling of the redundancies criticised for being heavy-handed, tensions rose between the two sides. However, SIA CEO Chew Choon Seng wrote to all employees in February 2004 to say the airline was on target to report more than S$600m of profit (which it did) - thus triggering a refund of the 2003 wage cuts plus a 15% bonus on top. In a more conciliatory approach, SIA management now promises to share information about SIA's performance with its workforce and develop a better relationship with unions.

Altogether, the wage reductions cut costs by just over US$100m a year, and with traffic recovering in June and July 2003, SIA has now reversed its capacity cuts. In November 2003 SIA

started recruiting again, rehiring some of the staff it made redundant earlier in the year.

Although revenue fell 6.4% in July-September 2003, SIA posted an 18% increase in operating profit to US$180m in the period. Recovery continued into the third quarter of SIA's financial year, with operating profits for October-December up 174% to US$279m. For the full 2003/04 financial year, although SIA Group revenue fell 7.2% to US$5.7bn compared with the previous year, operating profit decreased by just 5.1%, to US$401m. In fact operating profit would have been US$95m higher but for an unexpected extra bonus of two months' salary to staff, on top of the 15% bonus they earned under the schedule agreed with unions. Without the extra two months' salary, operating profits would have increased year-on-year by an impressive 17.4%. Net profit was 20.2% down at US$501m. In the 2003/04 period, SIA Group passengers carried fell by 13.4% to 13.3m. RPKs were down by 12.8% and ASKs fell by 11.4% over the financial year, with load factor dropping 1.2 points to 73.3%.

The SARS crisis and the uproar over redundancies were an unpleasant welcoming present for Chew Choon Seng, who became SIA CEO in June and replaced Cheong Choong Kong, who had been in charge for 20 years. Following its first ever loss, Seng wasted little by appointing LEK Consulting in August to help him with a wide-ranging review of the company and to "re-examine what we do" - though SIA insisted that the review was planned before the outbreak of SARS.

Although the outcome of the review has not been revealed publicly, cost cutting appears to be close to the top of the agenda for SIA in 2004. This year the airline is looking to save up to another S$1.6bn (US$950m) a year from further cost cutting initiatives, part of which will come from newer, more efficient aircraft.

Fleet changes

SIA currently operates a fleet of 87 aircraft, the bulk of which are 747-400s and 777-200ERs. The 747 fleet has an average age of more than eight years, and many of them will be disposed of over the next couple of years. Requests for proposals (RFPs) had been issued in early 2003, but these were withdrawn after the SARS crisis. In September 2003, SIA considered re-issuing them, but again they were postponed. Finally, in February 2004, SIA issued RFPs to Boeing and Airbus for aircraft to replace not only the older 747s but also its retired A310s. SIA may not only order up to 10 new long-haul aircraft, but also medium/short-haul aircraft as well, which traditionally it has not operated following the launch of SilkAir (see below). The choice would be between the A321, the 737-900 or even the 7E7. Boeing hopes an SIA order would give the new aircraft the same type of boost as SIA gave to the A380 project. However the earliest the 7E7 would be in service is 2008, a timescale that doesn't address SIA's medium-term aircraft needs.

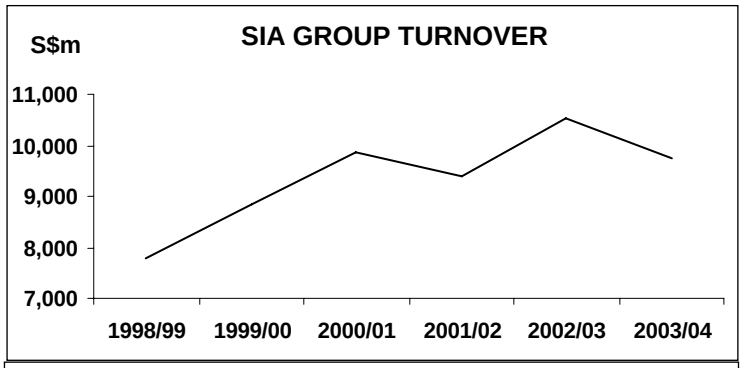
Boeing is likely to be competitive on the 7E7 price, though it is unlikely to repeat the type of deal it agreed back in 1999 when it acquired 17 A340-300s from SIA in order to secure an order for 10 777-200ERS - it was only in September 2003 that Boeing finally sold the last of these aircraft.

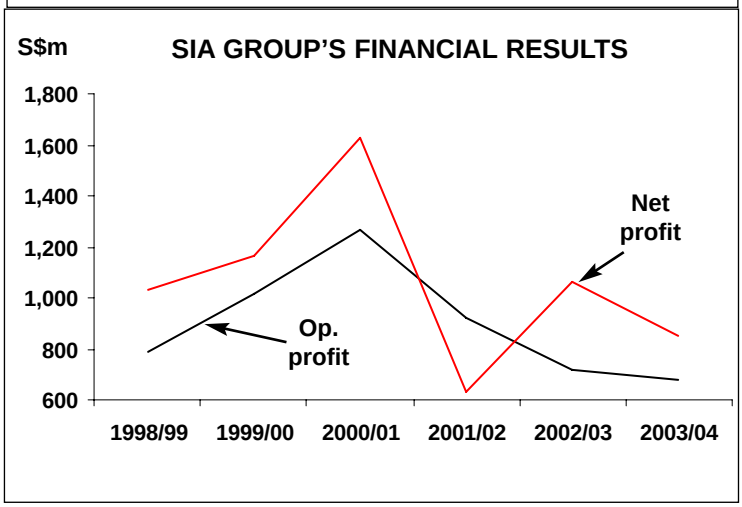
The need for new aircraft is becoming acute, as SIA's disposal of its 747s is gathering pace. In April SIA announced that two unidentified airlines had signed LoIs to buy eight 747-400s over the period 2006-2008, which will be converted into cargo aircraft using Boeing's "Special Freighter" conversion programme. One of these is believed to be Dragonair, which will buy five aircraft.

SIA is also disposing of A310s and the remaining A340-300s that were taken out of service after the SARS outbreak. These have partially been replaced by the arrival of five A340-500s in 2004 (although they were originally going to be delivered a year earlier), which have been put onto non-stop routes to the US. In February 2004 SIA launched a non-stop service to Los

SIA GROUP FLEETS

	SIA		SIA Cargo		SilkAir	
	Fleet	On order (options)	Fleet	On order (options)	Fleet	On order (options)
A319					4	2(1)
A320					7	3(1)
A340-500s	5	(5)				
A380		10 (15)				
747-400	30	(6)				
747-400F			**13**	**3**		
777-200ER	44	3 (6)				
777-300	8	4				
Total	**87**	**17 (32)**	**13**	**3**	**11**	**5 (2)**





Angeles, and in June 2004 it will launch a non-stop route to Newark with the A340-500s, replacing existing services via Amsterdam. The 18-hour Newark flights will take over from SIA's LA flights as the longest commercially operated non-stop route in the world.

As for the A380s, they are on target for delivery in 2006. Meanwhile, SIA Cargo - which was spun out as a separate company in October 2000 - operates 13 747-400Fs and has three more on order, for delivery in 2004 and 2005. In April 2004 SIA Cargo sold and leased back for 10 years a 747-400F to Aviation Financial Services. The main SIA airline also uses sales and leaseback, and has arranged deals for almost 20 of its 747-400s since the late 1990s.

SIA Cargo is also looking to add capacity, most probably via converting 747-400s to freighters, or via an order of A380-800s. Though the A380s could only be used on a handful of routes, they are attractive thanks to unit operating cost advantages over the 747-400F. SIA has an option to convert its A380 order into freighters, but the earliest a cargo version could be delivered in 2008 or 2009, which indicates a stop-gap order of up to six converted 747-400Fs for delivery in 2006-2007, probably from SIA's own 747s-400s.

Cost cutting at the SIA Group is likely to be accompanied by disposal of assets and outsourcing, a policy that the Singaporean government (which still owns 53% of SIA) is "encouraging". Lee Kuan Yew, a Singapore minister, said that: "SIA will have to transform its business plan. This is already taking place elsewhere ... airlines are beginning to disaggregate their various components." Sales could include Singapore Airport Terminal Services, which SIA owns 87% of, and SIA Engineering, which SIA also owns 87% of. In the last few weeks SIA has insisted it wants to keep hold of both these subsidiaries, though continuing government pressure to offload them will be hard to resist. And if the baggage-handling subsidiary is sold, it would raise between US$0.6bn-US$1.2bn, as it has a 75% market share in Singapore.

Whether the money raised from disposals will be used for investment elsewhere remains to be seen. SIA already has a substantial war chest - in 2001 it raised US$515m through a bond issue, and in 2003 authorised (but has not yet carried out) another US$570m worth of bonds, which will be used for future growth. This could include acquisitions, a strategy that has been core to SIA over recent years - though there have been more failures than success. SIA has aborted efforts to buy or buy into Ansett Australia, South African Airways and Air India, and its 25% stake in Air New Zealand has now been diluted down to 4.5%. Its only investment success has been Virgin Atlantic Airways, in which it bought a 49% stake in for US$975m in March 2000.

If there are new acquisitions, they are likely to be strategic and located in growth markets such as India and China. SIA has previously considered a joint venture with the Indian group Tata, but nothing materialised. Until the aviation regime further liberalises, SIA may content itself with adding more services. It has increased frequencies to Mumbai and is adding a new route to Ahmedabad in July, bringing total Indian cities served to six.

Following an updated air services agreement between the respective governments, SIA is also launching new services to China. Alongside existing services to Beijing, Guangzhou and Shanghai, in January 2004 SIA launched the first international route into Shenzhen in southern

China, while services to Nanjing were launched in March.

Australia is another market that interests SIA. At one point SIA considered launching an airline in Australia, but again this came to nothing and instead SIA is now concentrating on obtaining rights to operate beyond services from Australia to the US. The Singaporean government has been pressing Australia to sign an "Open Skies" agreement ever since 2000 - though some analysts believe the Australian government is trying to protect Qantas for as long as possible. In September 2003 the two countries agreed to allow unrestricted frequencies between Singapore and Australia, but SIA is urging the government to go further.

But though SIA has considered launching airlines in many different, large markets, it is a missed investment opportunity in a smaller country - Thailand - that SIA may rue most of all.

The LCC challenge

In 2003, SIA declined an invitation from the Thai government to set up an LCC in Thailand, to be based at Chiang Ma in the north of the country. At the time, SIA's management was sceptical whether LCCs could establish themselves in Asia, given restrictive air service agreements and the absence of suitable secondary airports. SIA also stated that: "The project will demand considerable resources which SIA is not able to commit at the present time because of SIA's other needs".

SIA's hesitation allowed Malaysia's AirAsia to step in and fill SIA's position in the proposed carrier. Thai AirAsia launched in February 2004 and operates domestically and on Bangkok-Changi, using aircraft leased from its parent, AirAsia, which was launched in 1996 and operates 17 737-300s domestically and to Thailand. In October 2003 AirAsia launched a mini-hub at Johor Bahru's Senai airport, which is just a bridge away from Singapore. The airline plans to raise US$200m by selling a 25% stake in an IPO in 3Q or 4Q 2004, which will fund a doubling of the fleet. There is also speculation that Virgin Blue is interested in taking a stake in AirAsia.

But AirAsia is not the only LCC competition SIA is facing. Singapore-based ValuAir was launched by ex-SIA managing director and deputy chairman Lim Chin Beng in May 2004. It operates to Jakarta, Hong Kong and Bangkok with two A320s leased from Singapore Aircraft Leasing Enterprise, and has expansion plans elsewhere in the region, including China and India. However, it does offer some frills, such as in-flight catering. ValuAir sold a 10.8% stake to Asiatravel.com, an internet hotel reservations company, for $4m, and is raising further money at present. Elsewhere, Sky Asia - Thai Airways International's new LCC - has plans for regional routes, while in November 2003 Indonesia's Lion Air launched a Jakarta-Singapore route.

Perhaps most worryingly of all, in April Qantas announced it was investing US$30m in setting up a LCC in Singapore by the end of 2004, to be called JetStar Asia. It will initially have a fleet of four A320s or 737-800s - growing to 20 aircraft - and serve a range of destinations across Asia, possibly to include China and Vietnam. Qantas will own 49.9% of JetStar Asia, with Temasek Holdings, the Singaporean government's investment vehicle (which controls SIA), having 19%.

Even to SIA's conservative management, the trend is obvious. The new wave of LCCs are taking advantage of creeping liberalisation in Asia and are likely to put pressure on SIA's yields - for example, AirAsia's Bangkok-Singapore route undercuts SIA fares by a third.

At some point in late 2003, the challenge of the LCCs forced SIA to do a strategic U-turn, and management started to analyse the LCC business model. The most obvious route was to convert SilkAir, the SIA Group's regional subsidiary that operates to more than 20 destinations across Asia with a fleet of four A319s and seven A320s (with five A320-family aircraft on order).

In 2002/03 the airline recorded an operating profit of US$16m, and it is expected to post a profit for 2003/04 despite the effect of SARS - in the nine months to December 2003, SilkAir posted an operating profit of US$6.6m and a net profit of US$5.4m. Capacity grew by 20% in 2003, and the airline is looking for even bigger growth in 2003, including new routes to China, despite the new competition from LCCs.

After analysis of SilkAir and the LCC business model, SIA decided against turning it into a low-cost carrier on the grounds that conversion from a conventional airline would be too problematical. Instead, in December 2003 SIA decided to launch a new Singapore-based LCC called Tiger Airways.

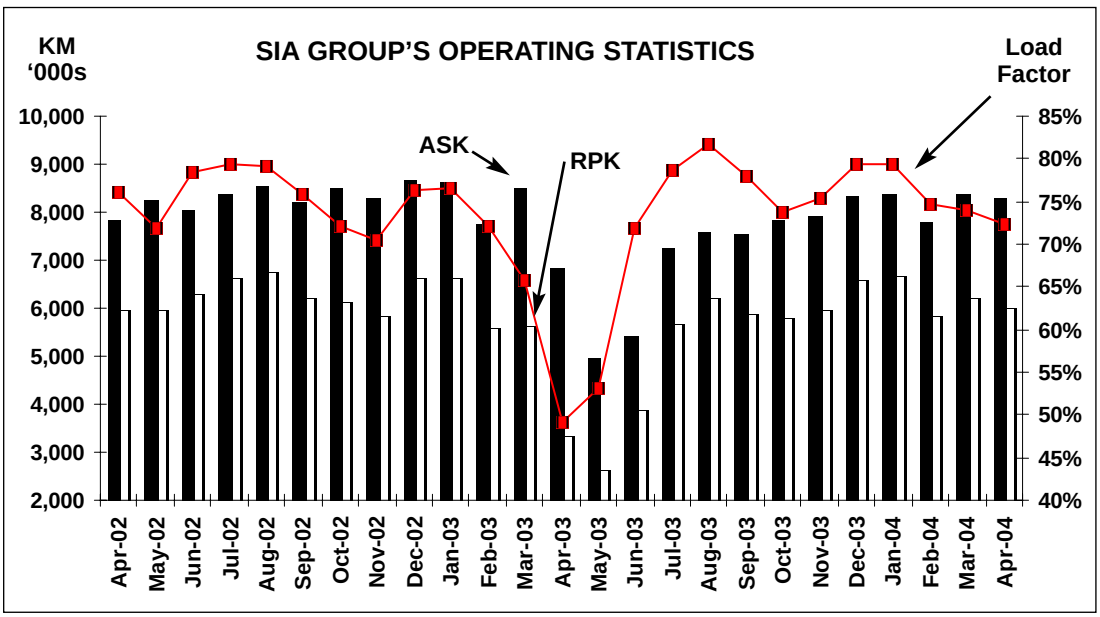
Tiger will start operations in August 2004 out of Changi airport and operate to destinations within a four-hour range of Singapore with an initial fleet of four leased A320s - two to arrive in July and two in December - that could rise to 25 aircraft within three years. The A320 was chosen after an apparent lack of 737-700s and -800s available for lease in the summer.

SIA holds a 49% stake in Tiger, with 24% held by US company Indigo Partners (co-founded by US investor David Bonderman), 16% by Irelandia Investments (controlled by the family of Tony Ryan, the founder of Ryanair, and the man who appointed Michael O'Leary as CEO) and 11% by Temasek Holdings, the Singaporean government's investment vehicle. Indigo managing partner and ex-America West CEO William Franke is the chairman of Tiger, and Patrick Gan - a pharmaceutical executive with no airline industry experience - has been appointed CEO. The management team insists Tiger will operate completely independently of SIA, and the airline's plans were given a boost in March when the government confirmed it would build a dedicated terminal for LCCs at Changi (the fourth largest airport in Asia in terms of passengers carried). The terminal will be completed by 2005 and will have lower charges than the existing Changi terminals. However the move will also encourage other LCCs, particularly AirAsia, which is reluctant to launch more routes into Changi because of its high charges.

But will Tiger Airways be successful? Costs in Singapore are higher than in Malaysia and Thailand, home of the challenger LCCs, and whether Tiger can get its costs down to the 2.3 cents per ASK that AirAsia is achieving remains to be seen. And will restrictive bilaterals hamper the development of LCC routes out of Singapore?

On the other hand, if Tiger is a success it may cannibalise revenue elsewhere in the SIA Group. At the main SIA airline, less than 10% of revenue comes from short-haul or leisure travellers, and Tiger may help to stem the leakage of that traffic to rival LCCs. But the biggest impact of a successful Tiger is likely to be on SilkAir. In January 2004 SIA appointed Mike Barclay, SIA's general manager in Germany, as the CEO of SilkAir, with a mandate to meet the challenge of the LCCs by refreshing the airline and keeping costs under control. SilkAir insists it will continue to serve what it calls the "middle-market" segment - essentially secondary destinations that have low or medium traffic flows - and that half its traffic comes from interline passengers, who will not transfer over to LCCs. But this still leaves 50% non-interline traffic, and if a LCC segment does exist to/from Singapore, then SilkAir is likely to be squeezed between SIA and Tiger/ValuAir.

But with other LCCs launching regardless of SIA's plans, the SIA Group may feel it has no alternative but to launch an LCC of its own, even if it does contribute to the downfall of SilkAir. In his letter to employees in February, SIA CEO Seng said that SIA had to face increasing competition from LCCs, and "unless SIA's costs are well managed, profits will come under pressure and SIA's continued growth and survival will be at risk" In April 2004, Merrill Lynch downgraded SIA from buy to neutral on the back of worries over the impact of the new LCCs - though in May, Deutsche Bank recommended buying SIA shares as its "valuation [is] near crisis levels". SIA's management know they are in a real battle with the LCCs to preserve the historically high profits levels at the airline.



Malaysia Airlines: virtual rationalisation

At the end of May, Malaysia Airlines posted its best ever results since its stock market listing in 1985. For the financial year ending March 31, 2004 Malaysia Airlines recorded a net profit of RM 336.5m (US$88.6m), 37% higher than for the previous financial year.

This result was achieved despite a drop in revenues from RM8.67bn to RM8.6bn (US$2.3bn). Operating profits improved 39% to RM195.6m. Pre-tax profits rose to RM345.2m versus RM333.9m in the previous financial year. At the pre-tax level, airline operations contributed RM273.2m, cargo services RM96.5m, but the airline catering division recorded a loss of RM24.4m.

International traffic showed a small increase, rising by 0.3% to 33.1bn RPKs while domestic traffic registered a 2.1% decrease with RPKs falling to 4.6bn. Cargo traffic increased by 5.5% to 2.18bn RTKs.

September 11 and the SARS epidemic forced Malaysia Airlines to embark on rationalisation and cost cutting measures. The airline has centralised its reservation call centres in Malaysia/Singapore and Australia/New Zealand to Kuala Lumpur and Adelaide respectively. It has also undertaken several IT initiatives - it has adopted a new Revenue Management System (RMS) to enhance the management of passenger seats inventory system-wide and optimise yields. This initiative, coupled with a Route Marketing Plan (RMP) is expected to produce a 5% yield improvement.

This target may prove a tall order given the significant pricing pressure in the Asian regional market. AirAsia is the most immediate LCC threat to Malaysia, and the continent now boasts 20 other LCCs. In addition, Malaysia Airlines faces a threat to its profitable cargo operations from five new 747F orders in the region this year and plans from other Asian carriers to convert passenger aircraft into freighters.

The airline has also introduced an Integrated Crew Management System (iCMS) for effective in-flight crew planning, rostering and tracking, to optimise crew productivity. A taskforce has been established to identify further cost savings, but only if they do not impact service quality.

The Maintenance Engineering System (MES) has improved the reliability of aircraft turnaround times and resource optimisation. The MES package has reduced aircraft maintenance downtime days, improved hangar slot management, produced direct labour savings and improved the tracking of engines and other next higher assemblies (NHA).

Additionally the airline has upgraded its existing MASGO system to support the current and future business and operational needs of Malaysia Airlines wholly owned subsidiary, MASKargo.

Malaysia Airlines has also collaborated with nine other Asian carriers to set up Travel Exchange Asia (TEA), a virtual travel agent that offers e-distribution services. TEA enables customers to book and purchase airline tickets, hotel, rooms, make reservations for car rentals and holiday packages via the internet.

Restructuring of the airline has left Malaysia Airlines as a near virtual airline. The asset-unbundling means that Malaysia Airlines is in effect a franchise operator.

Network issues

Domestic routes, a mixture of thick and thin, are operated with fare levels set by the government. Whilst some of the thicker routes, despite competition from Air Asia, still produce profits for Malaysia Airlines, the airline is also required to operate a number of thinner routes (e.g. Sabah), which produce losses. With no PSO-style mechanism in place, under the restructuring, Malaysia Airlines continues to operate domestic services but has virtually no financial exposure.

MALAYSIA AIRLINES' FLEET

Type	Number in fleet
747-400	17
747-200F	2
777-200	15
A330-300	10
A330-200	5
737-400	19
Fokker 50	10
Total	**78**

A number of key performance indicators are in place for the operation of domestic services between Malaysia Airlines and the Government, which can provide Malaysia Airlines with either financial benefits or penalties. Therefore, Malaysia Airlines' financial performance largely depends on the operation of its international route network.

The Government of Malaysia is formulating a new National Aviation Policy this year and it is likely that it will continue to favour a liberalised approach to air transport operations. A possible policy will be to encourage a more liberal or even open skies regime with important neighbouring countries such as Vietnam, Thailand, and the Philippines.

The profit recovery has encouraged Malaysia Airlines to continue its network expansion. Three new destinations in China (Chengdu, Kunming and Wuhan) and three new destinations in India (Kolkata, Cochin and Ahmedabad) have been announced, bringing the total of destinations served to 105. Later this year, Malaysia Airlines' services to New York, currently flown over Dubai, will be flown over Stockholm. Additional frequencies are planned for Beijing, Xiamen, Hong Kong, Osaka, Dhaka, Hyderabad, Bangalore, Bombay, Saigon, Phnom Penh, Vienna and Paris.

LCCs again

Managing Director, Datuk Ahmad Fuaad Dahlan said that the airline had no current plans to set up a low cost airline subsidiary though it was reviewing the concept given the proliferation of such airlines in the region. Air Asia is looking to carry 50% more passengers in 2004 than in the previous year, with numbers increasing to 3 million.

Malaysia Airports Holdings Bhd (MAHB), owner and operator of Kuala Lumpur International Airport, has said that it has no immediate plans to build a terminal dedicated to LCC operations, a development that had been mooted. The airport, which opened in 1998, was designed to handle 25m passengers per year. In 2003, it handled 17.5m passengers and expects to handle over 18.5m passengers in 2004. Work has begun on a second satellite at KLIA, which when completed in 2008 will take capacity up to 40m passengers.

The strength of the Malaysian economy should provide a strong engine for traffic growth for the airline. In the first quarter of 2004, Malaysian GDP growth was 7.6%, the highest recorded quarterly growth rate for three-and-a-half years. JP Morgan forecast that the economy would remain strong throughout 2004, forecasting an annual GDP growth rate of 7.0%. Malaysia, as a net exporter of oil, also benefits from its current high prices.

Like many other carriers, Malaysia Airlines has announced that it will be introducing a fuel surcharge. From the beginning of June, round trip fares on long-haul flights will be raised by RM100, and on regional round trip fares by RM30.

The airline has a small cost advantage compared with some of its larger local competitors, such as Cathay Pacific and Singapore Airlines. One area in which the airline will be looking to reduce costs is in distribution. At the start of 2004 Malaysia Airlines offered the possibility of making domestic flight bookings on its own website, and levels of internet bookings stand at 5%. In August this year, when international bookings will be also be made though the website, the airline will launch a major marketing campaign. By 2009, Malaysia Airlines has targeted internet bookings of 20%.

Malaysia Airlines has to balance its strategy to meet both the financial expectations of its shareholders and its obligations as national flag carrier in a country highly dependent on tourism, and competing with Singapore and Dubai. The airline is seen as playing a traditional role in assisting economic development, charactised by the confirmed order for six A380s, for 2007/08 delivery.

British Airways' CeBA vision

British Airways, as part of its strategic priorities (on which we reported in the April issue of *Aviation Strategy*) has incorporated a vision of a "Customer-enabled BA" or CeBA for short, as part of its strategy. The company's vision statement is "Dealing with BA will be so easy that our customers can choose to serve themselves".

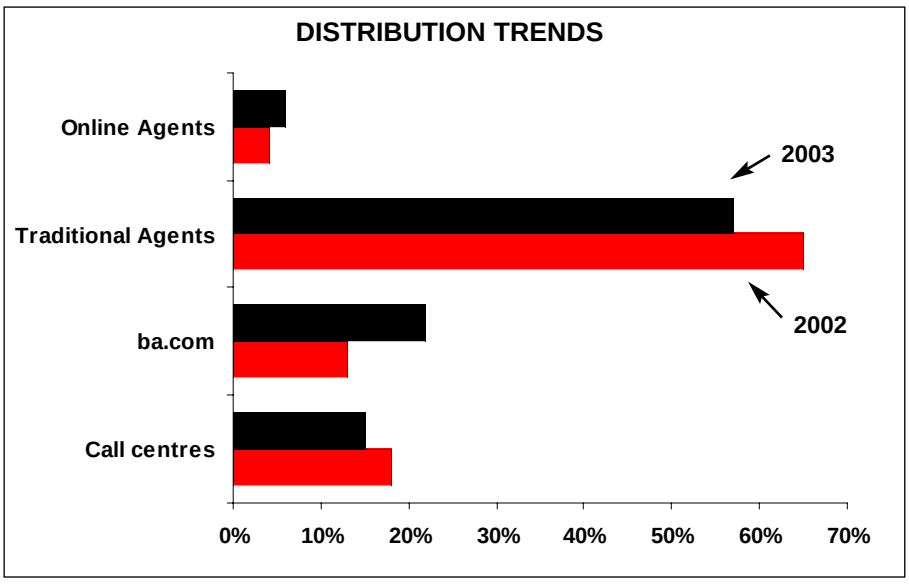
The prime motivation behind this must be to remove human interaction as much as possible in anything but face-to-face front end operations. This is a trend that we as consumers see in all aspects of dealing with large companies. The best example may be in the proliferation of voice and tone activated automated call services where the customer increasingly pays for the inefficiencies or limitations of operations.

BA sees CeBA as a bit more than this cynical view. It is a fundamental part of simplifying the business processes that is the core of its strategic aspirations. It describes it as a multi-functional programme that aims to cover the full process of the customer's experience from booking to returning home. As an essential element it tries to streamline the product offering in order to ensure consistency of delivery and elimination of duplication. In addition it helps that the internet is proving a viable way for the consumer to interact with internal systems without the intervention of any human agent. The company estimates that the implementation is worth some £100m in annualised benefits.

While reducing costs and cutting personal service, BA wanted to make sure that the customer remains "happy" - in its management-speak, "making the interaction with BA an easier and richer experience". To that end it wanted to make sure that after implementation the customer would be comfortable in agreeing that: its products and services are simple to understand; there is an assurance that transactions are successful; the product offering is crystal-clear; in case of service disruption there is adequate communication and assistance for rearrangement of travel plans; there is consistency in communication ("I get the same answer whomever I ask"). Above all, the customer has to do it all himself on ba.com and increasingly he or she will get charged for talking to a human.

For any of the legacy carriers from the restrictive IATA period this would be an uphill struggle. As a result of the way the industry developed, BA itself had millions of fare-types, 72 selling classes, 7 different cabins, classified 15 different types of customer, 10 different ways to pay, 9 kinds of check-in ... and the rest. It estimated that it employed some 12,000 people merely to translate its internal systems to allow the execution of everyday transactions for customers. Because of the number of information systems the customer rarely got the same answer to the same question. The complexity and number of systems and processes made change and improvement incredibly slow.

In the first year of implementation however, the company has achieved some major



improvements.

Half of all UK short-haul leisure fares are now booked online at ba.com. All of the frequent flier transactions are available online. The company has halved the number of fares (alright there are still more than a million of them!). It has simplified and unified all the fare rules and conditions from some 3000 to 3 basic types. Selling classes now have tightly defined yield bands and common conditions. The use of eTicketing has doubled to 50% of all bookings. Furthermore, over 50% of its low fare offerings - the most expensive to administer - are booked online.

As part of the selling message the customer is forcefully told that to get a paper ticket or to talk to an agent will cost more than just doing it all online. The followers of Diogenes may rightly say that you may well still get different answers to the same question - but now you have to pay for them.

The ba.com site meanwhile has been further enhanced. It can now handle large groups, take payment by debit card (which is a major saving), allows booking of tickets for other people, and the paying for tickets from other countries. It dynamically provides for upgrading and advanced product selling. For the customer it provides full management of the travel process apart from the flight itself: change and update bookings, allocate seats, choose meals and check-in. Also the company is starting to roll out the ability for home-printed boarding passes.

BA is seeing a structural shift in distribution patterns. In the UK still by far the majority of bookings go through travel agencies. However this is falling - last year by around 8 percentage points to below 60% of total bookings and call centre bookings have fallen by 3 percentage points to around 15%. Web bookings have taken up the slack with a nine point jump on ba.com to around 21% of total bookings with the rest provided by other online engines.

In designing its web offering BA has taken leaves out of many books - not least its LCC competitors - but more importantly has not just transferred its internal booking engine to hook on to the back of some ill-designed web pages. It has gone back to basics: how on earth do we get someone to book with us? In today's world the answer may well be to make it cheap and easy and then tell them they want it and that it is good for them.

Freighter values and lease rates

FREIGHTER VALUE RATES ($m)

	New	5 years old	10 years old	20 years old
A300F4-200				10.79
A300-600RF	70.28	54.22	38.17	
727-200F Adv				1.84
737-300QC		19.10	15.40	
747-200M				9.46
747-400M		96.78	68.47	
747-400F	144.77	114.75	84.73	
747-400ERF	153.67			
757-200PF		39.31	30.41	
767-300F		55.91		
MD-11C		52.72	42.11	
MD-11F		58.69	47.46	

FREIGHTER LEASE RATES ($'000s per month)

	New	5 years old	10 years old	20 years old
A300F4-200				140
A300-600RF	451	383	332	
727-200F Adv				57
737-300QC		181	160	
747-200M				164
747-400M		767	607	
747-400F	1,270	1,031	808	
747-400ERF	1,335			
757-200PF		274	246	
767-300F		420		
MD-11C		505	430	
MD-11F		570	486	

Note: As assessed at end April 2004, mid-range values for all types
Source: AVAC

		Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Alaska	**Year 2002**	**2,224**	**2,313**	**-89**	**-119**	**-4.0%**	**-5.4%**	**31,156**	**21,220**	**68.1%**	**14,154**	**10,142**
	Jan-Mar 03	519	597	-79	-56	-15.2%	-10.8%	7,577	5,058	66.7%	3,258	9,988
	Apr-Jun 03	576	581	-5	-3	-0.9%	-0.5%	7,932	5,427	68.4%	3,616	10,222
	Jul-Sep 03	702	623	79	41	11.3%	5.8%	8,380	5,911	72.5%	4,280	10,114
	Year 2003	**2,445**	**2,456**	**-11**	**13**	**-0.4%**	**0.5%**	**37,614**	**26,061**	**69.3%**	**19,981**	**13,401**
	Jan-Mar 04	598	657	-59	-43	-9.9%	-7.2%	8,333	5,761	69.1%	3,592	9,984
American	**Year 2002**	**17,299**	**20,629**	**-3,330**	**-3,511**	**-19.2%**	**-20.3%**	**277,121**	**195,927**	**70.7%**	**94,143**	**93,500**
	Apr-Jun 03	4,324	4,237	87	-75	2.0%	-1.7%	68,678	51,095	74.4%		
	Jul-Sep 03	4,605	4,440	165	1	3.6%	0.0%	69,234	52,653	76.0%		
	Oct-Dec 03	4,391	4,618	-227	-111	-5.2%	-2.5%	66,541	47,622	71.6%		90,600
	Year 2003	**17,440**	**18,284**	**-844**	**-1,128**	**-4.8%**	**-6.5%**	**279,706**	**202,521**	**72.4%**		**96,400**
	Jan-Mar 04	4,512	4,470	42	-166	0.9%	-3.7%	68,551	48,746	71.1%		
America West	**Year 2002**	**2,047**	**2,246**	**-199**	**-430**	**-9.7%**	**-21.0%**	**43,464**	**33,653**	**73.6%**	**19,454**	**13,000**
	Apr-Jun 03	576	559	17	80	3.0%	13.9%	11,223	8,854	78.9%	5,185	11,309
	Jul-Sep 03	592	542	50	33	8.4%	5.6%	11,365	9,068	79.8%	5,322	11,175
	Oct-Dec 03	563	551	13	7	2.3%	1.2%	11,265	8,508	75.5%	4,888	
	Year 2003	**2,255**	**2,222**	**33**	**57**	**1.5%**	**2.5%**	**44,880**	**34,270**	**76.4%**	**20,050**	**11,326**
	Jan-Mar 04	577	559	18	1	3.1%	0.2%	11,832	8,539	72.2%	4,897	11,827
Continental	**Year 2002**	**8,402**	**8,714**	**-312**	**-451**	**-3.7%**	**-5.4%**	**128,940**	**95,510**	**73.3%**	**41,014**	**40,713**
	Apr-Jun 03	2,216	1,978	238	79	10.7%	3.6%	30,847	24,841	75.9%	10,120	
	Jul-Sep 03	2,365	2,191	174	133	7.4%	5.6%	33,071	26,450	79.1%	10,613	
	Oct-Dec 03	2,248	2,232	16	47	0.7%	2.1%	31,528	23,789	74.9%	9,884	
	Year 2003	**8,870**	**8,667**	**203**	**38**	**2.3%**	**0.4%**	**139,703**	**104,498**	**74.8%**	**39,861**	**37,680**
	Jan-Mar 04	2,269	2,404	-135	-124	-5.9%	-5.5%	32,621	23,678	71.7%	9,735	
Delta	**Year 2002**	**13,305**	**14,614**	**-1,309**	**-1,272**	**-9.8%**	**-9.6%**	**228,068**	**172,735**	**71.9%**	**107,048**	**75,100**
	Apr-Jun 03	3,307	3,111	196	184	5.9%	5.6%	51,552	38,742	75.2%	25,969	69,800
	Jul-Sep 03	3,443	3,524	-81	-164	-2.4%	-4.8%	55,535	42,704	76.9%	27,059	70,100
	Oct-Dec 03	3,398	3,764	-366	-327	-10.8%	-9.6%	55,740	40,522	72.7%	26,514	70,600
	Year 2003	**13,303**	**14,089**	**-786**	**-773**	**-5.9%**	**-5.8%**	**216,263**	**158,796**	**73.4%**	**104,452**	**70,600**
	Jan-Mar 04	3,292	3,680	-388	-383	-11.8%	-11.6%	55,300	39,027	70.6%	25,343	69,900
Northwest	**Year 2002**	**9,489**	**10,335**	**-846**	**-798**	**-8.9%**	**-8.4%**	**150,355**	**115,913**	**77.1%**	**52,669**	**44,323**
	Apr-Jun 03	2,297	2,370	-73	227	-3.2%	9.9%	34,434	26,322	76.4%	12,800	39,442
	Jul-Sep 03	2,556	2,410	146	47	5.7%	1.8%	37,476	30,491	81.4%	13,971	38,722
	Oct-Dec 03	2,407	2,419	-12	370	-0.5%	15.4%	34,413	26,732	77.7%	12,821	
	Year 2003	**9,510**	**9,775**	**-265**	**248**	**-2.8%**	**2.6%**	**142,573**	**110,198**	**77.3%**	**51,900**	**39,100**
	Jan-Mar 04	2,603	2,711	-108	-223	-4.1%	-8.6%	35,133	26,883	76.5%	12,500	39,230
Southwest	**Year 2002**	**5,522**	**5,104**	**417**	**241**	**7.6%**	**4.4%**	**110,859**	**73,049**	**65.9%**	**63,046**	**33,705**
	Apr-Jun 03	1,515	1,375	140	246	9.2%	16.2%	28,796	20,198	70.1%	17,063	32,902
	Jul-Sep 03	1,553	1,368	185	106	11.9%	6.8%	29,296	20,651	70.5%	17,243	32,563
	Oct-Dec 03	1,517	1,406	111	66	7.3%	4.4%	29,439	18,771	63.8%	16,290	32,847
	Year 2003	**5,937**	**5,454**	**483**	**442**	**8.1%**	**7.4%**	**115,532**	**77,155**	**66.8%**	**65,674**	**32,847**
	Jan-Mar 04	1,484	1,438	46	26	3.1%	1.8%	29,582	18,977	64.2%	15,995	31,522
United	**Year 2002**	**14,286**	**17,123**	**-2,837**	**-3,212**	**-19.9%**	**-22.5%**	**238,569**	**176,152**	**73.5%**	**68,585**	**78,700**
	Apr-Jun 03	3,109	3,540	-431	-623	-13.9%	-20.0%	51,692	39,809	77.0%	16,381	60,000
	Jul-Sep 03	3,817	3,798	19	-367	0.5%	-9.6%	56,726	45,500	80.2%	17,635	59,700
	Oct-Dec 03	3,615	3,750	-135	-476	-3.7%	-13.2%	55,709	42,823	76.9%	16,448	58,900
	Year 2003	**13,274**	**15,084**	**-1,360**	**-2,808**	**-10.2%**	**-21.2%**	**219,878**	**168,114**	**76.5%**	**66,000**	**58,900**
	Jan-Mar 04	3,732	3,943	-211	-459	-5.7%	-12.3%	56,181	42,287	75.3%	15,923	
US Airways	**Year 2002**	**6,977**	**8,294**	**-1,317**	**-1,646**	**-18.9%**	**-23.6%**	**90,700**	**64,433**	**71.0%**	**47,155**	**30,585**
	Apr-Jun 03	1,777	1,710	67	13	3.8%	0.7%	20,929	15,789	75.4%	10,855	26,587
	Jul-Sep 03	1,771	1,808	-37	-90	-2.1%	-5.1%	21,615	16,611	76.9%	10,584	26,300
	Oct-Dec 03	1,764	1,838	-74	-98	-4.2%	-5.6%	23,550	16,759	71.2%	13,507	26,797
	Year 2003*	**5,312**	**5,356**	**-44**	**-174**	**-0.8%**	**-3.3%**	**85,673**	**62,408**	**72.8%**	**44,373**	**26,797**
	Jan-Mar 04	1,701	1,844	-143	-177	-8.4%	-10.4%	23,771	16,220	68.2%	12,700	26,854
JetBlue	**Year 2002**	**635**	**530**	**105**	**55**	**16.5%**	**8.7%**	**13,261**	**11,000**	**83.0%**	**5,752**	**3,823**
	Apr-Jun 03	245	199	46	38	18.8%	15.5%	5,271	4,498	85.3%	2,210	4,475
	Jul-Sep 03	274	220	54	29	19.7%	10.6%	5,962	5,229	87.7%	2,414	4,650
	Oct-Dec 03	263	228	35	20	13.3%	7.6%	6,021	5,002	83.1%	2,378	4,892
	Year 2003	**998**	**830**	**168**	**104**	**16.8%**	**10.4%**	**21,950**	**18,550**	**84.5%**	**9,012**	**4,892**
	Jan-Mar 04	289	256	33	15	11.4%	5.2%	6,790	5,427	79.9%	2,650	5,292

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

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

		Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France												
YE 31/03	**Year 2001/02**	**11,234**	**11,017**	**217**	**141**	**1.9%**	**1.3%**	**123,777**	**94,828**	**76.6%**		**70,156**
	Oct-Dec 02	3,396	3,392	4	2	0.1%	0.1%	32,581	24,558	75.4%		
	Jan-Mar 03	3,240	3,373	-133	-106	-4.1%	-3.3%	32,070	23,906	74.5%		
	Year 2002/03	**13,702**	**13,495**	**207**	**130**	**1.5%**	**0.9%**	**131,247**	**99,960**	**76.2%**		**71,525**
	Apr-Jun 03	3,442	3,453	-10	5	-0.3%	0.1%	31,888	23,736	74.4%		71,936
	Jul-Sep 03	3,715	3,598	117	56	3.1%	1.5%	35,255	27,544	78.1%		
	Oct-Dec 03	3,933	3,855	78	35	2.0%	0.9%	33,380	25,329	75.9%		71,900
Alitalia												
YE 31/12	**Year 2001**	**4,745**	**5,007**	**-262**	**-818**	-5.5%	-17.2%	**51,392**	**36,391**	**70.8%**	**24,737**	**23,667**
	Jan-Jun 02	2,462	2,574	-63	-49	-2.6%	-2.0%			69.7%		21,366
	Year 2002	**5,279**	**4,934**	**-89**	**101**	**-1.7%**	**1.9%**	**42,224**	**29,917**	**70.8%**	**22,041**	**22,536**
	Jan-Mar 03	1,097	1,226	-187		-17.0%		10,503	6,959	66.3	4,993	21,984
BA												
YE 31/03	**Year 2001/02**	**12,138**	**12,298**	**-160**	**-207**	**-1.3%**	**-1.7%**	**151,046**	**106,270**	**70.4%**	**40,004**	**57,227**
	Oct-Dec 02	3,025	2,939	86	21	2.8%	0.7%	34,815	24,693	70.9%	9,200	51,171
	Jan-Mar 03	2,721	2,988	-213	-216	-7.8%	-7.9%	33,729	23,439	69.5%	8,547	50,309
	Year 2002/03	**12,490**	**12,011**	**543**	**117**	**4.3%**	**0.9%**	**139,172**	**100,112**	**71.9%**	**38,019**	**51,630**
	Apr-Jun 03	3,023	2,957	59	-104	2.0%	-3.4%	34,962	25,102	71.8%	9,769	49,215
	Jul-Sep 03	3,306	2,980	333	163	10.1%	4.9%	35,981	27,540	76.5%	9,739	47,702
	Oct-Dec 03	3,363	3,118	244	148	7.3%	4.4%	35,098	25,518	72.7%	8,453	46,952
Iberia												
YE 31/12	Jul-Sep 02	1,229	1,103	132	104	10.7%	8.5%	14,535	11,419	78.6%	6,624	
	Oct-Dec 02	1,236	1,219	18	-17	1.5%	-1.4%	13,593	9,695	71.3%	5,689	25,544
	Year 2002	**5,123**	**4,852**	**272**	**174**	**5.3%**	**3.4%**	**55,633**	**40,647**	**73.0%**	**24,956**	**25,963**
	Jan-Mar 03	1,128	1,183	-55	-24	-4.9%	-2.1%	13,200	9,458	71.6%	5,717	
	Apr-Jun 03	1,348	1,265	83	60	6.2%	4.5%	13,516	9,982	73.8%	6,472	
	Jul-Sep 03	1,434	1,301	133	93	9.3%	6.5%	14,819	11,846	79.9%	7,073	
	Oct-Dec 03	1,475	1,443	32	44	2.2%	3.0%	14,621	10,815	74.0%	6,350	
KLM												
YE 31/03	**Year 2001/02**	**5,933**	**6,018**	**-85**	**-141**	**-1.4%**	**-2.4%**	**72,228**	**56,947**	**78.7%**	**15,949**	**33,265**
	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**
Lufthansa												
YE 31/12	**Year 2001**	**14,966**	**14,948**	**18**	**-530**	**0.1%**	**-3.5%**	**126,400**	**90,389**	**71.5%**	**45,710**	**87,975**
	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
SAS												
YE 31/12	**Year 2001**	**4,984**	**5,093**	**-109**	**-103**	-2.2%	-2.1%	**51,578**	**31,948**	**64.6%**	**23,060**	**22,656**
	Oct-Dec 02	1,984	1,826	158	-34	8.0%	-1.7%	11,689	7,308	65.6%	5,155	
	Year 2002	**7,430**	**7,024**	**78**	**-15**	**1.0%**	**-0.2%**	**47,168**	**30,882**	**68.2%**	**21,866**	
	Jan-Mar 03	1,608	1,654	-224	-188	-13.9%	-11.7%	11,169	6,551	60.9%	4,477	30,373
	Apr-Jun 03	1,906	1,705	201	8	10.5%	0.4%	12,278	7,855	64.0%	5,128	
	Jul-Sep 03	1,941	1,715	131	91	6.7%	4.7%	12,543	8,681	69.2%	8,301	34,856
	Oct-Dec 03	1,910	1,797	113	-80	5.9%	-4.2%	11,931	7,344	61.6%	7,512	34,544
	Year 2003	**7,978**	**8,100**	**-122**	**-195**	**-1.5%**	**-2.4%**	**47,881**	**30,402**	**63.5%**	**31,320**	**34,544**
Ryanair												
YE 31/03	**Year 2001/02**	**642**	**474**	**168**	**155**	**26.2%**	**24.1%**	**10,295**	**7,251**	**81.0%**	**11,900**	**1,547**
	Jul-Sep 02	272	149	123	113	45.2%	41.5%	3,138			4,300	1,676
	Oct-Dec 02	201	149	53	47	26.4%	23.4%			86.0%	3,930	1,761
	Year 2002/03	**910**	**625**	**285**	**259**	**31.3%**	**28.5%**			**84.0%**	**15,740**	**1,900**
	Apr-Jun 03	280	220	57	46	20.4%	16.4%			78.0%	5,100	2,135
	Jul-Sep 03	407	237	170	148	41.8%	36.4%				5,571	2,200
	Oct-Dec 03	320	253	67	51	20.9%	15.9%				6,100	2,356
easyJet												
YE 30/09	**Year 2000/01**	**513**	**455**	**58**	**54**	**11.3%**	**10.5%**	**7,003**	**5,903**	**83.0%**	**7,115**	**1,632**
	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 june not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK

		Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
ANA												
YE 31/03	**Year 2000/01**	**10,914**	**10,629**	**285**	**-137**	**2.6%**	**-1.3%**	**85,994**	**58,710**	**68.3%**	**43,700**	**14,303**
	Apr-Sep 01	5,168	4,811	357	136	6.9%	2.6%	45,756	30,790	67.3%	25,876	
	Year 2001/02	**9,714**	**9,529**	**185**	**-76**	**1.9%**	**-0.8%**	**87,908**	**57,904**	**64.7%**	**49,306**	
	Apr-Sep 02	5,322	5,194	127	-69	**2.4%**	**-1.3%**	44,429	29,627	66.7%	25,341	
	Year 2002/03	**10,116**	**10,137**	**-22**	**-235**	**-0.2%**	**-2.3%**	**88,539**	**59,107**	**66.7%**	**50,916**	**14,506**
	Apr-Sep 03	5,493	5,362	131	186	2.4%	3.4%	32,494	19,838	61.1%	22,866	
Cathay Pacific												
YE 31/12	**Year 2001**	**3,902**	**3,795**	**107**	**84**	**2.7%**	**2.2%**	**62,790**	**44,792**	**71.3%**	**11,270**	**15,391**
	Jan-Jun 02	1,989	1,753	235	181	11.8%	9.1%	29,537		78.1%		14,300
	Year 2002	**4,243**	**3,634**	**609**	**513**	**14.4%**	**12.1%**	**63,050**		**77.8%**		**14,600**
	Jan-Jun 03	1,575	1,672	-97	-159	-6.2%	-10.1%	26,831		64.4%	4,019	14,800
	Year 2003	**3,810**	**3,523**	**287**	**168**	**7.5%**	**4.4%**	**59,280**	**42,774**	**72.2%**	**12,322**	**14,673**
JAL												
YE 31/03	**Year 2000/01**	**13,740**	**13,106**	**634**	**331**	**4.6%**	**2.4%**	**129,435**	**95,264**	**73.6%**	**38,700**	**17,514**
	Year 2001/02	**9,607**	**9,741**	**-135**	**-286**	**-1.4%**	**-3.0%**				**37,183**	
	Year 2002/03	**17,387**	**17,298**	**88**	**97**	**0.5%**	**0.6%**	**145,944**	**99,190**	**68.0%**	**56,022**	
Korean Air												
YE 31/12	**Year 2000**	**4,916**	**4,896**	**20**	**-409**	**0.4%**	**-8.3%**	**55,824**	**40,606**	**72.7%**	**22,070**	**16,000**
	Year 2001	**4,309**	**4,468**	**-159**	**-448**	**-3.7%**	**-10.4%**	**55,802**	**38,452**		**21638**	
	Year 2002	**5,206**	**4,960**	**246**	**93**	**4.7%**	**1.8%**	**58,310**	**41,818**	**71.7%**		
Malaysian												
YE 31/03	**Year 1999/00**	**2,148**	**2,120**	**28**	**-68**	**1.3%**	**-3.2%**	**48,158**	**34,930**	**71.3%**	**15,370**	**21,687**
	Year 2000/01	**2,357**	**2,178**	**179**	**-351**	**7.6%**	**-14.9%**	**52,329**	**39,142**	**74.8%**	**16,590**	**21,518**
	Year 2001/02	**2,228**	**2,518**	**-204**	**-220**	**-9.2%**	**-9.9%**	**52,595**	**34,709**	**66.0%**	**15,734**	**21,438**
	Year 2002/03	**2,350**	**2,343**	**7**	**89**	**0.3%**	**3.8%**	**54,266**	**37,653**	**69.4%**		**21,916**
Qantas												
YE 30/06	**Year 2001/02**	**6,133**	**5,785**	**348**	**232**	**5.7%**	**3.8%**	**95,944**	**75,134**	**78.3%**	**27,128**	**33,044**
	Jul-Dec 02	3,429	3,126	303	200	8.8%	5.8%	50,948	40,743	80.0%	15,161	34,770
	Year 2002/03	**7,588**	**7,217**	**335**	**231**	**4.4%**	**3.0%**	**99,509**	**77,225**	**77.6%**	**28,884**	**34,872**
	Jul-Dec 03	4,348	3,898	450	269	10.3%	6.2%	50,685	40,419	79.7%	15,107	33,552
Singapore												
YE 31/03	**Year 2001/02**	**5,399**	**4,837**	**562**	**395**	**10.4%**	**7.3%**	**94,559**	**69,995**	**74.0%**	**14,765**	**29,422**
	Apr 02-Sep 02	2,278	2,134	144	289	6.3%	12.7%	25,091	19,600	78.1%	3,972	
	Year 2002/03	**5,936**	**5,531**	**405**	**601**	**6.8%**	**10.1%**	**99,566**	**74,183**	**74.5%**	**15,326**	**30,243**
	Apr 03-Sep 03	2,411	2,447	-36	7	**-1.5%**	**0.3%**	22,380	17,773	79.4%	3,644	
	Oct-Dec 03	1,623	1,345	278	222	17.1%	13.7%	24,088	18,349	76.2%	3,875	

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

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1999	243	134	377	101	53	154	531
2000	302	172	474	160	42	202	676
2001	368	188	556	291	101	392	948
2002	366	144	510	273	102	375	885
2003	275	117	392	274	131	405	797
2004-Jan	257	98	355	264	133	397	752

AIRCRAFT SOLD OR LEASED

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1999	582	230	812	989	170	1,159	1,971
2000	475	205	680	895	223	1,118	1,798
2001	286	142	428	1,055	198	1,253	1,681
2002	439	213	652	1,205	246	1,451	2,103
2003	408	94	502	1,119	212	1,331	1,833
2004-Jan	14	22	36	99	23	122	158

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

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
Mar 04	17.2	10.8	62.6	17.1	14.4	84.0	12.3	9.7	78.6	42.9	34.8	81.1	63.2	47.8	75.5
Ann. chng	3.5%	7.3%	2.2	2.6%	13.5%	8.1	5.5%	9.9%	3.2	3.8%	10.1%	4.6	4.8%	11.1%	4.3
Jan-Mar 04	48.7	28.6	58.8	49.3	38.0	77.0	35.6	28.0	78.7	124.9	98.1	78.6	182.7	133.1	72.8
Ann. chng	2.7%	5.9%	1.8	3.7%	8.7%	3.6	5.8%	7.0%	0.9	5.1%	7.8%	1.9	4.9%	8.2%	2.2

Source: AEA

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
2002	990.0	701.6	70.9	159.0	125.7	67.2	103.0	83.0	80.5	84.1	56.8	67.5	346.1	265.5	76.7
2003	963.1	706.6	73.4	148.3	117.6	79.3	94.8	74.0	80.5	84.2	59.3	70.5	327.2	251.0	76.7
Apr - 04	83.9	64.7	77.1	12.9	10.7	82.9	8.1	6.5	79.9	8.1	5.6	69.5	29.1	22.8	78.3
Ann. chng	7.8%	14.0%	4.2	24.3%	34.6%	6.4	12.6%	60.6%	23.9	15.8%	23.2%	4.2	18.5%	37.8%	11.0
Jan-Apr 04	331.0	238.9	72.2	48.0	37.1	77.3	32.5	27.1	83.2	32.5	23	70.9	113.1	87.2	77.1
Ann. chng	5.6%	8.8%	2.1	7.4%	16.7%	6.1	-0.7%	16.2%	12.1	14.6%	17.7%	1.8	6.8%	16.8%	6.6

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	17 May	GOL	15x 737-800s	2007/09	plus 28 options
	18 May	AirTran	2x 717-200s		plus 4 converted options
	10 June	Korean Air	2x 747-400Fs	2H 05	
Airbus	11 May	Spirit Airlines	11x A319s 4x A320s		plus up to 50 options
	11 June	CASGC	20x A330-300s	1Q 06 -	

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,June 2003*

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