

Backlog hits record

There are no signs of orders slowing and the backlog has reached record levels - 5,740 commercial jets on firm order as of mid-May, about 29% of the global fleet, with another 1,900 or so on option.

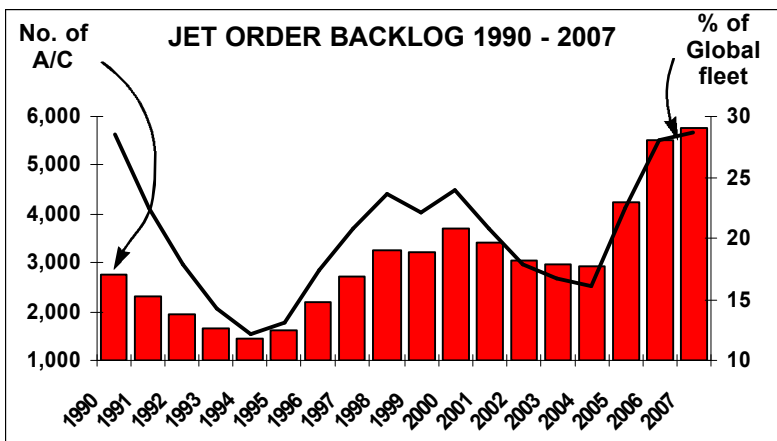
The last time the backlog got close to this level, in proportionate terms, was in 1990 when the lessors, particularly GPA, were attempting to dominate the production schedules. That all ended with a serious airline recession and the collapse of GPA and other lessors.

This time around there are differences. The airline industry no longer seems to be in thrall to the global GDP cycle, partly because in a low-inflation world the cycle seems to have smoothed out, unless we are deluding ourselves. Also, India and China are now major generators of aircraft demand, with 15% of aircraft on order. By contrast, US carriers currently only account for 10% of the backlog.

Narrowbodies account for two thirds of the aircraft on order, which is of course largely a reflection of the LCC phenomenon, and this is the major difference between now and the early 1990s - a structural change in the industry with a more efficient operating model replacing an outmoded version in the short/medium haul markets.

The demand for new narrowbodies is such that at current production rates the backlogs equate to about six and half years of deliveries for A320s and five and half years for 737-800s. There is a major incentive for airlines to maximise order volumes as far as the finance will stretch - in order to achieve the lowest possible unit price and to leverage negotiations on delivery slots. It can all go wrong, however, if the market that these aircraft are delivered into turns out to be too small or too competitive to absorb them.

There would appear to be potential for rationalisation within the backlog, with weaker customers forced to surrender their slots to stronger competitors. Or there is the possibility that some of the airlines with substantial orders might evolve into leasing companies.



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JAL: "Last chance for self-resuscitation"

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Japan Airlines (JAL), Asia's largest carrier, has embarked on a major new cost-cutting and restructuring effort as part of its 2007-2010 "medium-term revival plan", announced in February. The aim is to restore profitability and position the company for post-2009 growth through measures such as staff and wage cuts, fleet downsizing, a shift to high-profit routes and the restructuring of non-core businesses.

When announcing the plan, JAL's president Haruka Nishimatsu called 2007 rather dramatically the carrier's "last chance for self-resuscitation". He was not suggesting that JAL could go bankrupt - or at least that would be an unlikely scenario. Even though JAL was fully privatised in 1987 and is listed on the Tokyo Stock Exchange (TSE), it has continued to have access to government-backed funding.

Although JAL has a weak balance sheet, it is not actually posting heavy losses. Rather, the airline is seeing persistently weak operating results - small losses or marginal profits - and has not paid dividends since 2004. After a promising Y56bn (US\$472m) operating profit in FY2004/05 (2.6% of revenues), there was a marginal Y27bn (US\$227m) operating loss in FY2005/06 (1.2% of revenues). In the latest financial year ended March 31, 2007, JAL earned an operating profit of Y22.9bn (US\$193m), just around 1% of revenues of Y2,302bn. However, JAL disclosed on May 2 that, because of a decision to remove Y44.7bn of deferred tax assets from the FY2006/07 balance sheet and some extraordinary charges, it would report a net loss of around Y16.2bn (US\$136m) for 2006/07, which it did on May 9, rather than a net profit of Y3bn, as had been previously expected. In other words, JAL has now posted net losses for two consecutive years.

JAL's results certainly contrast with the relatively healthy earnings achieved by All Nippon Airways (ANA) and many other large Asian carriers in the past couple of years, as demand in the Asia-Pacific region has strengthened and domestic business travel in Japan has bounced back. ANA is anticipating a Y74bn (US\$623m) operating profit on revenues of Y1,290bn (US\$10.9bn) for

2006/07; the 5.7% operating margin would be similar to the previous year's 5.9%.

It is a point of concern that JAL has been trying hard to cut costs and improve its financial results since early 2005, when fuel prices first surged, but all of those efforts have failed.

Furthermore, in the past couple of years JAL has lost domestic market share, particularly premium passengers, to ANA and other competitors. This was largely blamed on a series of safety lapses in 2005, which did not result in fatal accidents but caused a loss of passenger confidence. There was a sharp traffic decline, which led to the resignation of Isako Kaneko as chairman in May 2005. Although JAL's total traffic had recovered by mid-2006, its premium passenger share has still not returned to the pre-2005 level.

As a result, JAL's share price plummeted in the spring of 2006, from the Y300-325 level it had hovered at for two years to below Y200. The price remained weak for the rest of 2006 but recovered to around Y260 in January/February, when JAL began releasing details of the new restructuring effort. Since then the shares have again fallen steadily - the price was Y228 on May 4.

All of that has made JAL's investors very unhappy. The key shareholders - who play a much more active role in JAL than the typical institutional airline investors do in the US and Europe - demanded the resignation of president/CEO Toshiyuki Shinmachi in the spring of 2006 (the second JAL leader they have forced out - the first was Akira Kondo in 1998). When the current president/CEO Nishimatsu, formerly SVP finance at JAL, took over last year, JAL's largest individual shareholder Eitaro Itoyama (who held a 4% ownership stake at that time) reportedly stated that the new chief executive would also have to go if he does not improve JAL's results and restore dividends.

But there is now more at stake. What Nishimatsu meant with the "last chance" remark was that if the current restructuring does not succeed, shareholders are likely to demand radical changes, such as hiring an outsider - even a non-Japanese - as chief executive and bringing in a

younger and more entrepreneurial board of directors. Such changes would be a major shock for a traditional Japanese company like JAL - though, of course, they might be a good idea anyway in light of future challenges such as increased competition from LCCs.

Not surprisingly, the new plan has had a mixed reception in the financial community. There is consensus that JAL is on the right track in terms of the types of changes it is trying to implement, but many analysts question whether the plan is achievable, given JAL's recalcitrant labour unions and its history of disappointing restructuring efforts. Some analysts also question whether the plan includes deep enough structural changes to enable JAL to survive and prosper in competition with more nimble and aggressive carriers. In the first place, is it already too late to recapture premium traffic lost to ANA, given that many of those passengers have joined ANA's FFP?

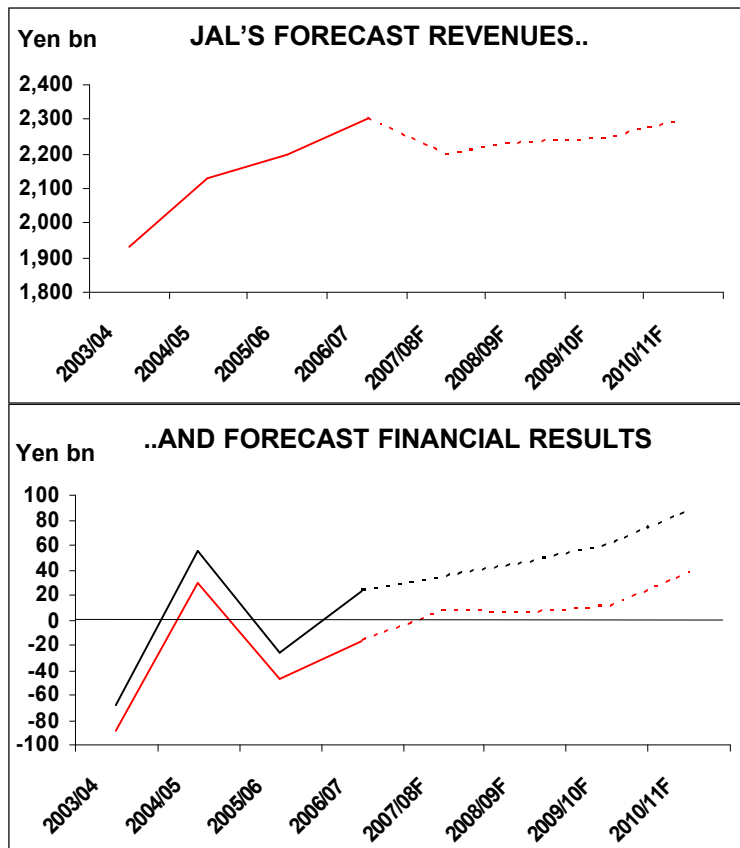
Then again, the greatest concern for many analysts and investors has been JAL's weak cash position and balance sheet. Those fears were at least temporarily soothed by the new ¥60bn (US\$505m) financing obtained in March, which enabled the airline to launch the planned restructuring.

Goldman Sachs summarised its optimistic long term view on JAL as follows in a February research report: "Over the long term, we believe significant restructuring upside remains, and expect the stock price to rise again once asset sales and new borrowings allay concern regarding cash flow and as monthly operating indicators begin to show improvement. We maintain our Buy rating."

The timing of this plan is critical for JAL, because there will be major growth opportunities - as well as increased competition from LCCs - when expansion projects are completed at Tokyo's Haneda and Narita airports in 2009. In particular, the opening of a fourth runway at Haneda in December 2009 will be a watershed event. To capitalise on those opportunities, JAL must restore decent profitability and repair its balance sheet.

The competitive scene

Unlike its counterparts in other regions, JAL cannot blame LCC competition for its ills. Although there are growing numbers of LCCs on intra-Asian routes, Japan's highly restrictive bilateral agreements and severe airport capacity constraints have



ensured that JAL and ANA have minimal exposure to new entrants.

Until the mid-1980s, the Japanese aviation policy was governed by the so-called "45/47 aviation constitution", which made JAL the country's only scheduled international airline but permitted it to operate trunk routes between five domestic points. ANA was the main domestic carrier, though it was also allowed to operate short haul international charters. Toa Domestic Airlines (a predecessor of Japan Air System, which merged with JAL in 2002) was permitted to operate domestic regional and local routes.

The 45/47 system, which had somewhat eroded over the years, was formally abolished in 1985, meaning that JAL lost its scheduled international monopoly and the domestic market was opened up to competition. This paved the way for the complete privatisation of JAL in November 1987, when the government shed its 34% stake in the airline. Both JAL and ANA grew rapidly in the 1986-1992 period, expanding into each other's territories. (JAL was also able to continue adding new long haul international destinations, thanks to the relaxation of ASAs with the US and other countries.)

However, there was no effective fare competition; the government had continued to set the basic domestic fares and airlines were permitted to offer discounts of up to 25%. In 1996 the government put in place a new zone fare system, which gave airlines unprecedented pricing freedom. But the outcome was disappointing: JAL and ANA introduced some discounts but raised off-peak fares in many markets; overall, prices rose. As a result, the government signalled that it would welcome new entrants.

There was a flurry of start-up activity in the late 1990s, giving Japan its first new airline entrants in over 40 years. The newcomers included Skymark Airlines, a Tokyo-based 767-300ER/737-800 operator, and Air Do, a Hokkaido-based 767/737-400 operator (also known as Hokkaido International Airlines), both of which began flying in 1998. Since then at least two other LCCs have taken to the air: Skynet Asia Airways (formerly Pan Asia Airlines), a Fukuoka-based 737-400 operator (2002), and StarFlyer, a Kitakyushu-based A320 operator modelled after JetBlue (March 2006).

These LCC entrants have entered many key domestic markets that were previously the exclusive domain of JAL and ANA. About one fifth of the 50 or so domestic routes out of Tokyo Haneda - a vital part of the business for any self-respecting Japanese airline since 62% of all domestic traffic goes via that airport - now have three operators. Another 13 or so routes have two airlines (typically JAL and ANA), so overall, about half of the domestic routes out of Tokyo now have competition. That said the new entrants operate extremely low frequencies out of Haneda and therefore have minimal competitive impact. They have captured only a 6% share of total domestic traffic, with ANA accounting for 48% and JAL 46%.

The main problem has been a chronic shortage of capacity at Haneda, the only domestic airport serving Tokyo. The opening of the second and third runways there in 1997 and 2000 gave the new entrants only a handful of slots. Even though more slots became available when JAL and JAS merged in 2002, the start-ups have not been able to offer sufficient frequencies on trunk routes. They need critical mass to achieve profits. They also face high start-up and fixed costs, which has led to strategies such as hiring foreign pilots and contracting out maintenance and crew training overseas.

Haneda's fourth runway will dramatically increase slot availability, boosting maximum daily

round trips by 43%, from 391 to 557. All airlines will benefit, though it remains to be seen if the new entrants will be able to increase their market share since Haneda also features prominently in JAL's and ANA's post-2009 expansion plans. When the extra slots become available, JAL wants to boost its domestic frequencies and add new short and medium haul international routes using smaller aircraft.

Subsidiary-building and the JAS merger

JAL and ANA have been able to continue to dominate the Japanese aviation scene also because they have set up numerous new airline subsidiaries to cater for different market niches. In the 1990s the government, while trying to liberalise the domestic market, also sought to make Japanese carriers more competitive internationally. JAL's and ANA's unit costs were roughly twice as high as those of their Asian rivals, so the government urged them to set up low-cost "Asia-brand" and charter subsidiaries and forge more cooperative deals with foreign airlines.

Consequently, JAL set up many new airline subsidiaries or re-engineered existing units into viable niche operators that could offer synergies. Internationally, the key ventures have been JALways and Japan Asia Airways (JAA). JALways was originally launched in 1991 as Japan Air Charter to fly IT charters to popular holiday destinations in the Asia-Pacific region. In 1999 the venture was renamed and transformed into an international scheduled airline that now operates throughout the region, serving destinations as far as Australia and Hawaii and utilising a fleet of 747-300s and -200s. JAA, originally formed in 1975 to serve Taiwan, has become JAL's other "Asia-brand" carrier operating 767-300s and 747-300s and -200s.

Domestically, the key new venture has been JAL Express, a low-cost airline-within-an-airline set up in 1998 to operate in secondary markets. The aim was to have unit costs at least 20% below JAL's through the use of offshore crews with lower salaries, though the cost differential is believed to be closer to 10%. The venture utilises 737-400s and serves numerous domestic cities from its Osaka hub.

On the feeder front, JAL established J-AIR in

1996 to take over the Jetstream 31 operations of JAL Flight Academy; the unit now operates CRJ-200ERs throughout Japan. JAL also holds majority stakes in several regional carriers, including Hokkaido Air System (1998) and Japan Air Commuter (1983). There is also a 51%-owned subsidiary called Japan Transocean Air (JTA), which was originally established in 1967 as Southwest Air Lines, was renamed in 1993 and has had its fleet upgraded to 737-400s. The Naha, Okinawa-based niche carrier provides service to smaller airports in the Ryukyu Islands.

But the event that strengthened JAL the most was its 2002 merger with the third-ranked Japan Air System (JAS). It was the first major realignment in Japan's airline industry in 30 years - Japan's version of a post-September 11 industry shakeout. The merger offered only limited cost savings but it made JAL the world's third largest airline by revenue and gave it a more balanced network. The airline's domestic/international revenue ratio improved from 2:5 to 1:1, while its international revenues became better geographically balanced, with transpacific accounting for 35%, Europe 20% and Asia 30% of the total. Significantly, the merger closed the domestic market share gap with ANA, creating a duopoly but also setting the stage for new competitive clashes. The JAL/JAS integration under the JAL Group (officially "Japan Airlines Corporation") and common JAL brand was completed in April 2004.

A cultural struggle

Given its strong market position, both domestically and internationally, and minimal exposure to LCCs, one would think that JAL would be a highly profitable airline. The reason it is not has a lot to do with its old-style corporate culture and state-carrier mentality, meaning that it in the past at least it has lacked incentive to adapt to new market realities.

JAL suffers from a range of legacy ills: high labour costs, a less efficient fleet than rivals, uncompetitive route structure, a bureaucratic corporate structure, militant unions and poor morale. The airline was hit hard by demand decline related to September 11 and SARS, because of its international exposure. JAL has also been disproportionately affected by the high fuel prices because of its relatively old and large aircraft.

Then there were the post-2002 safety lapses (mostly in 2005) that prompted customers to

switch to ANA and other carriers, particularly in the domestic market. The string of mishaps - from engine fires to metal fragments falling off aircraft - may not have seriously compromised safety and may have been due to bad luck, but they were widely interpreted as a warning sign that the company might be cutting corners in safety as it tries to control costs. JAS merger-related integration issues may also have played a part.

Whatever the reason, the mishaps tarnished JAL's image. Analysts have suggested that the negative effects may be long-lasting because many of the premium customers who defected have joined ANA's FFP.

JAL has always suffered from factional rivalry, which has led to frequent management changes and poor employee morale. The airline is heavily unionised and the unions have traditionally wielded much power. In recent years, labour relations have been further strained by the cost cutting and merger-related issues.

JAL's ability to tap funding from government-affiliated development banks has fostered a sense of management complacency, which has made the airline slow to tackle its problems and respond to changed market conditions. There are now signs, for the first time, that the management is feeling a sense of urgency, but it remains to be seen if the unions' attitudes have changed at all.

Although ANA has historically had the advantage of a stronger domestic network, it is outperforming JAL also because it has shown itself to be more entrepreneurial, leading the way in marketing and projecting a trendier image. It has a more modern culture and better employee relations. It has kept its labour costs in check and has a younger, more fuel-efficient fleet.

The revival plan

JAL's 2007-2010 revival plan aims to "rebuild the group's business foundation" and achieve sustained profitability. The airline intends to resume dividend payments "in FY2010 or earlier" (a dividend was last paid in 2004, amounting to Y4 per share). Somewhat surprisingly, the business plan assumes no revenue growth in the four-year period, meaning that the profit increase would come entirely from cost reductions. However, JAL hopes to restart growing from 2010, after it has completed the restructuring and when additional airport capacity will be available.

The business plan projects operating revenues of Y2,298bn (US\$19.4bn) in 2010/11 - virtually the same as the Y2,268bn estimated for 2006/07. However, passenger and cargo revenues will see some growth in the plan period, while "other" revenues will decline. In 2010/11, international passengers are expected to account for 33%, domestic passengers 32%, cargo 9% and other activities 26% of total revenues. JAL's earnings projections are equally modest: a gradual improvement in operating profits over the four-year plan period to Y88bn (US\$741m) in 2010/11 - still only 3.8% of revenues. Net profit in Year 4 is expected to amount to Y37bn (US\$312m) or 1.6% of revenues.

These targets seem modest compared to the 10%-plus operating margins that major European and US carriers strive for. But perhaps a 3.8% operating margin is a reasonable target in a period when revenues stagnate. However, achieving even that margin on a consistent basis may be more challenging.

JAL aims to achieve the business plan goals and financial targets through a range of strategies, including:

- Labour and other cost cuts
- Fleet downsizing and renewal
- Shift to high-profit routes and fleet optimisation
- Expanding low-cost subsidiaries
- Upgrading the premium product
- Focusing on core aviation-related activities
- Reducing debt through the sale of non-core assets.

The airline aims to further improve its safety standards - and it obviously needs to tread carefully with the cost cutting so as not to affect safety. Although this is not part of the business plan (there have been no major safety problems for over a year), it has been reported that JAL will spend US\$516m over the next three or four years on improving safety management systems. This will include the largest Line Operation Safety Audit (LOSA) ever performed for a single airline, under which trained personnel from an outside company will board JAL flights to observe flight crew performance for three months, in an attempt to identify the factors underpinning human errors that can affect flight safety.

One thing that is missing from JAL's revival plan is measures to improve corporate culture and labour relations. Where's the profit sharing? Performance-related bonuses? (Curiously, the

plan mentioned implementing a "large reduction of performance-linked bonus standards".) Where are the improved ways to communicate with employees?

The cost cutting programme

JAL's new cost cutting programme has two key components: reducing labour costs by Y50bn (US\$421m) annually and realising a 14% greater efficiency in fuel usage in the plan period. The airline will also review supplier contracts, sales commission rates and work processes, and it will promote e-business.

The labour cost reductions will involve reducing the workforce by 4,300 or 8% by March 2010 (from 53,100 to 48,800). The job cuts will be across the board (including a 10% reduction in head office jobs) and about 80% of them will be achieved through productivity improvements. JAL aims to improve employee productivity by 10% for flight crews, airport/cargo division workers and reservations/ticketing staff, while sales functions should see a 30% productivity improvement through unified operations within the JAL Group. There will not be any compulsory redundancies; the 4,300 job cuts will be achieved mainly through natural attrition, though a special early retirement programme will play a role initially.

There will be no new wage cuts, but JAL will continue through 2007/08 the 10% across-the-board basic wage reduction introduced in April 2006. An overhaul of the pension system will play a major role in achieving the cost-cutting targets. The airline will also review allowances and bonuses.

Significantly, JAL's top management will share the pain: the new pay cuts for executive directors, effective February 2007, will be around 45% for senior vice presidents and up to 60% for the president/CEO. Nishimatsu has reportedly set his annual salary at just Y9.6m (US\$81,000), which is close to JAL's average salary and obviously much less than what groups such as the pilots earn.

But it remains to be seen if admirable gestures like that will help win union support for the labour cost cuts. In March JAL's four main unions were still demanding a uniform Y15,000 (US\$126) per-person monthly pay rise, though they called off a planned 24-hour strike after talks with the management. JAL has eight labour unions.

The fuel efficiency measures are expected to

lead to operating cost savings of Y18bn and Y8bn (US\$152m and US\$67m) in 2009/10 and 2010/11, respectively. In addition to fleet renewal and downsizing, the savings will result from measures such as reducing the weight of cabin loaded goods and equipment, engine cleaning, more fuel hedging, a long-term procurement agreement with an oil development and refinery company (AOC Holdings) through equity investment and flight operating procedures that reduce fuel consumption.

Fleet downsizing and renewal

JAL's fleet plan calls for the phasing out of larger, older aircraft and bringing in more small and medium-sized aircraft. This means expanding 737 and 777 usage and adding 787s and E170s, while reducing or removing 747s, A300s and MD-80s. The strategy, which is possible thanks to the increase in Haneda slots in late 2009, is intended to cut operating costs by 10% and result in a 1% decline in revenue.

The plan is to bring in 85 new aircraft and retire 64 aircraft in the four-year period. Some of the 747-400s will be converted to freighters. JAL Group's total fleet looks likely to increase from 274 aircraft at the end of March 2007 to 295 in four years' time. However, the growth will be in the last two years of the plan. The passenger fleet (260 in March 2007) is slated to decline by one aircraft to 259 in March 2008, then increasing to 263, 272 and 280 aircraft in the subsequent three years.

According to the plan, JAL's international passenger fleet will grow from 84 to 95 aircraft between 2006/07 and 2010/11. The number of large-size aircraft (747s and 777s) will decline from 49 to 37, or from 58% to 39% of the international passenger fleet total.

In the current financial year, JAL is retiring 10 747 Classics and adding one 777-300ER and three 767-300Fs. The airline has 35 787s on firm order plus 15 options. The original order, for 30 aircraft, was placed in December 2004, and just last month (April) JAL converted five options.

The domestic passenger fleet is expected to grow from 176 to 185 aircraft between 2006/07 and 2010/11. The percentage of medium and small-size aircraft will increase from 90% to 93%. In the current year, JAL is retiring its eight remaining MD-87s and adding more 737-800s, after introducing that type in March. The initial 737-800s

are used on domestic routes out of Haneda, but the type will also be utilised on short and medium-haul international routes, because the fourth runway at Haneda will allow the resumption of scheduled service in such markets. JAL has 30 737NGs on firm order, plus 10 options, for delivery in the next five years.

Haneda's expansion was also a key factor behind JAL's February order for 10 78-seat Embraer 170s, plus five options, for its subsidiary J-AIR. This is a new aircraft type for the JAL Group, whose regional jet operations are currently limited to only nine 50-seat CRJ-200s in J-AIR's fleet.

Network restructuring and product upgrades

Network restructuring includes focusing on high-profit routes, right-sizing aircraft in different markets and expanding the lower-cost subsidiaries. The airline forecasts that these strategies, together with product enhancements, will improve domestic yield by 8% and international yield by 2% between 2006/07 and 2010/11. Load factors are expected to rise by three percentage points to 69% domestically and by four points to 72% internationally in the four-year period.

The current summer season is seeing increased frequencies on the high-yield international Tokyo to New York and Paris routes and in the high-growth markets of China, India, Russia and Vietnam. The Tokyo-New Delhi route will switch to subsidiary JALways. Flights will be reduced in weaker markets such as Tokyo-Hong Kong.

JAL has reaped great benefits from its decision, a year ago, to switch from 747s to 777s on its European routes to London, Amsterdam, Frankfurt, Paris and Milan. This summer, the airline is down-gauging regionally by introducing the 737-800 on five routes from Osaka to China and Vietnam. JAL is also boosting its charter flights by 13%, offering destinations such as Alaska, Australia, the Czech Republic, Hungary, Mongolia, Palau and the Marshall Islands.

Domestically, the airline says it is building a "business structure that generates stable income" in preparation for the increase in Tokyo slots in 2009. JAL is suspending service on 10 domestic routes and reducing flights on five other routes, while adding one new route (Kobe-Ishigaki) and increasing flights on four routes. With the MD-87s

being retired, the domestic market will receive five new 737-800s in 2007/08.

The cargo division is also being prepared for post-2009 growth opportunities. This year JAL is retiring five 747 Classic freighters and introducing three new 767Fs and three newly converted 747-400BFCs. There will be new freighter service to China and Indonesia and a reduction in flights to the US East Coast.

The main product enhancements will be the introduction of first class on key domestic trunk routes and "premium economy" on international routes. JAL is also improving in-flight meal quality and introducing new seats on all classes in international service.

JAL introduced a new domestic business class, "Class J", in June 2004, which is offered for a small supplement and has been highly popular and contributed significantly to profits. It is now adding a 14-seat first class section in 15 777-200s operated on key trunk routes, becoming the first airline in Japan to offer three classes domestically. The new international "JAL Premium Economy" product will include 40 seats on 777s operated mainly on key Japan-Europe and Japan-US routes.

JAL estimates that the four-year route restructuring will result in the lower-cost international subsidiaries, particularly JALways, increasing their share of the group's business from 24% (2006/07) to 37% (2010/11). The two main domestic units, JAL Express and J-AIR, will see their share rise from 15% to 26%.

When growth resumes, the focus will be very much on domestic operations, because JAL wants to tip its international/domestic ratio (currently about 50:50) more in favour of domestic operations. JAL's international operations have suffered much volatility post-September 11, while domestic demand in Japan is very stable. A stronger domestic network will also provide more feed to support international operations.

This contrasts with the current strategies of other global airlines, particularly US carriers, which are focusing on building international services. The starting points are obviously different: most major US and European airlines already have strong domestic/intra-EU operations, whereas JAL has historically been more like Pan Am, Swiss or Sabena, with little domestic feed (all of those airlines failed). And the domestic markets are very different, with the US and (to a lesser extent) intra-EU being highly competitive, while Japan is much less

so.

JAL officially joined the oneworld alliance on April 1 after being the only one among world's top 20 airlines not aligned to a multilateral global alliance. But no-one is expecting much financial impact in the short term - after all, JAL has already cooperated extensively with oneworld members, including American, BA, Cathay Pacific, Iberia, LAN and Qantas. The positive impact is likely to be felt in the long term and will include intangible benefits such as bolstering JAL's image. Another likely benefit is that the joining process forced JAL to bring many of its internal processes and procedures up to scratch - and perhaps enabled it to pick up some good management practices from other world regions - with the help of prestigious "sponsors" like American.

Asset sales are the key

When it was privatised 20 years ago, the JAL Group already had 119 subsidiaries and associated companies. After privatisation there was even more diversification, to the extent that the company admitted in 1991 that the process had gotten slightly out of hand and said that it would consolidate. But habits can be hard to break. The latest annual report (for 2005/06) lists a staggering 275 subsidiaries and 97 affiliates. The subsidiaries include 10 airlines; 105 airline-related businesses (handling, catering, maintenance, etc.); 51 travel services companies; 42 finance, credit card or leasing businesses; 24 hotels/resorts; and 43 other companies (trading, wholesaling, retailing, real estate, printing, construction, temp staffing, information, advertising and cultural events).

Under the medium-term business plan, JAL will concentrate its resources on the core air transport business and will restructure non-core activities, selling some subsidiaries and reducing stakes in others. That process got under way this past winter with the sale of two hotels and a trading company. JAL sold its 49% stake in Hotel Nikko Tokyo to US investment fund Aetos Capital, its 57% stake in a hotel in Hokkaido to Meiji Shipping Co, and more than half of its 51.5% holding in airport retailer Jalux to trading house Sojitz Corp.

The hotel deals were not just cash-raising exercises. Now is apparently an opportune time to sell commercial property in Japan, because land prices there rose in 2006 for the first time in 16 years, and there is considerable investor interest and liquidity,

helped by tourism recovery and low interest rates. ANA and other Japanese companies are also selling hotels, golf courses and other high-value assets bought in the late 1980s.

JAL raised an estimated Y100bn (US\$842m) from asset sales in the fiscal year that ended March 31. The business plan envisages additional hotel and other non-core asset sales bringing in Y51bn (US\$430m) in the current year. There are tentative plans to list shares in JAL Hotels Co. in 2008/09.

JAL is fortunate in having significant assets that can be monetised, because it is not in a position to raise equity until its financial recovery is well established. A global public share offering in July 2006 raised a very useful Y140bn (US\$1.18bn), but that was 30% less than what had been targeted and the offering stirred up much controversy. Shareholders were unhappy about the dilution (share count went up by 38%) and about JAL's failure to mention the offering at its annual shareholder meeting two days before the offering was announced. The timing was wrong as JAL's recovery prospects looked extremely uncertain (it was originally supposed to be a private placement). JAL's share price plummeted in the weeks before the offering and, in a rare move, one of its underwriters withdrew from the syndicate.

The official reason for the July 2006 share offering was to raise funds for fleet renewal, but in reality JAL needed to bolster its extremely weak cash position - just US\$509m, or 3% of annual revenues, in March 2006. The share offering more than tripled the cash reserves to US\$1.6bn, but that still amounted to only 9% of 2005 revenues. The norm - and what is generally considered healthy - for global airlines these days is around 20%.

JAL has also needed funds for convertible bond redemptions. At the end of March investors exercised their right to cash in early Y79.7bn (US\$671m), or about 80%, of convertible bonds issued in April 2004 that were due to mature in 2011. The fact that investors opted to keep holding 20% of the bonds was a promising sign. JAL has potentially another Y50bn of bonds coming up for redemption this month (May) and another Y20bn in February 2008.

JAL's fleet is almost entirely encumbered, but the company continues to have access to the unsecured debt market through the government-affiliated Development Bank of Japan (DBJ),

JAL'S CASH FLOW FORECAST

Yen (bn)	2006/07	2007/08	2008/09	2009/10	2010/11
Sources of cash					
Operating cash flow	94	137	165	187	222
Asset sales	100	51	15	6	4
External financing	61	98	122	128	137
Equity offering	148				
Total cash in-flow	403	286	302	321	363
Planned spending					
Capex	139	108	144	141	146
Debt repayment	245	186	157	189	216
Total cash out-flow	384	294	301	330	362

Source: JAL

whose involvement typically attracts other banks to the syndicate. For the recent bond redemption, JAL obtained loans totalling Y59.5bn (US\$501m) from four banks, including the DBJ and Mizuho Corporate Bank in the lead role. The deal was finalised after the banks had scrutinised JAL's revival plan, and it may be part of a provisionally agreed Y150-200bn (US\$1.3-1.7bn) financing. According to the four-year revival plan, JAL will be looking to raise Y98bn (US\$825m) in debt financing this year, followed by Y122bn, Y128bn and Y137bn in the subsequent three years.

JAL's plan anticipates positive operating cash flow of Y137bn (US\$1.2bn) this year, rising to Y222bn (US\$1.9bn) in 2010/11. The combination of cash generated from operations, new debt financings and this year's asset sales would more or less cover planned capital expenditures (Y108bn this year and some Y140bn annually thereafter) and debt repayments ranging between Y157bn (US\$1.3bn) and Y216bn (US\$1.8bn) annually.

The plan aims to reduce JAL Group's debt and capital lease obligations by 31% in the four-year period, from Y1,455bn (US\$12.3bn) in March 2007 to Y1,008bn (US\$8.5bn) in March 2011. However, operating lease commitments in that period are expected to increase from Y120bn (US\$1bn) to Y275bn (US\$2.3bn), meaning that the reduction in total debt and leases would only be 18.5%.

Reducing debt is a prerequisite for the plans to resume growth post-2009, because JAL is highly leveraged, with a lease-adjusted debt-to-capital ratio of about 91% and net debt/revenue percentage of 90% (as of March 2006) - both much higher than the leverage ratios of other major Asian and European carriers and not far off the US legacy levels.

SAS Group: time for revolution, not evolution

With improving financial results, the SAS Group has - in SAS Group-speak - gone from a "crisis/rescue phase to a conceptually driven restructuring". An imminent new strategic plan will offer "evolution, not revolution", but can the SAS Group survive long-term unless it is much more radical in what it does?

Today the Stockholm-based SAS Group is the fourth largest airline in Europe in terms of passengers carried (behind Air France/KLM, Lufthansa and Ryanair), but although Scandinavian Airlines - the flag carrier of Denmark, Sweden and Norway, (with hubs at Copenhagen, Stockholm and Oslo) - celebrated 60 years of flying in 2006, the airline and the Group have undergone a difficult time in the 2000s.

As the graph (opposite) shows, profitability collapsed at the start of the 2000s, and it has been a long, hard road to recovery ever since, with waves of cost-cutting and restructuring just about the only focus of the Group through the decade. "Turnaround 2005", unveiled in 2002, took an estimated SEK 14bn (€1.5bn) of costs out of the Group in the period to 2005, but it was not enough, and yet another round of cost-cutting launched in 2006 is designed to cut a further SEK 2.5bn (€275m) in 2006 and 2007. Of this latest programme, around 85% of cost-cutting measures have been implemented, according to the Group, and this has translated into SEK 1bn of actual cost savings in 2006, with another SEK 1bn expected in 2007. Of the targeted SEK 2.5bn, SEK 600m is to come from better productivity, SEK 900m from cost savings at SAS Ground Services and Technical Services, and SEK 1bn from admin, sales and other costs.

At the same time as cost-cutting, the Group has been continuing its sale of non-core assets. Last year SAS Group raised a total of SEK 5.7bn (€626m) from the sale of its remaining 65% stake in its Rezidor Hotel Group, which operates 226 hotels around the globe. SAS sold a 35% share to Carlson Hotels in 2005, and the remaining stake was floated on the Stockholm exchange in November, with the IPO being nine times oversubscribed. It is also completing the sale of its stake in SAS Flight Academy - its pilot training arm - to

investment fund STAR Capital Partners, which is merging the company with another investment it is making, a majority stake in General Electric Commercial Aviation Training. The disposal will benefit SAS Group by around SEK 750m, and SAS will obtain its future pilot trainings needs through an ongoing contract with Flight Academy.

On the back of cost-cutting and asset sales, in full 2006 (which for the first time did not include Rezidor, which - as one analyst puts it - means that the 2006 numbers are "extremely confusing") the Group's financial results improved. SAS Group revenue increased 9.5% to SEK 60.8bn (€6.7bn) in 2006, and operating profit rose 88% to SEK 1,273m (€140m). Pre-tax profit rose from a SEK 246m loss in 2005 to a SEK 292m profit in 2006, and at the net level profit rose from SEK 255m in 2005 to an apparently healthy SEK 4.7bn in 2006, which came after deducting SEK 337m for restructuring costs (SEK 413m in 2005) and SEK 146m for impairment losses. But excluding discontinued operations, the net profit in 2006 was just SEK 164m (€18m) - though considerably better than the SEK 322m net loss (excluding discontinued operations) in 2005.

As SAS admits, the Group is benefiting from being at the top of the business cycle at the moment, with strong GDP growth in most markets it operates in (and particularly strong traffic growth in Norway, Spain and the Baltic region). Yet SAS says it needs to improve its earnings by at least another SEK 3bn (€330m) a year. Put another way, a key Group target is a Cash Flow ROI of at least 20%-25% per year, but although this has risen from a low of just above 5% in early 2002, CFROI was just 15% in 2006 (13% in 2005), and there is a long way to go in hitting this objective.

Inconsistent performances

The Group's constituent parts are still producing a wide range of financial performances, ranging from the impressive to the abysmal. As can be seen in the table, (see page 12), the worst performing part of the Group is SAS Aviation Services.

SAS Cargo is based at Kastrup in Denmark, and is one of the cargo airlines being investigated

Aviation Strategy

Briefing

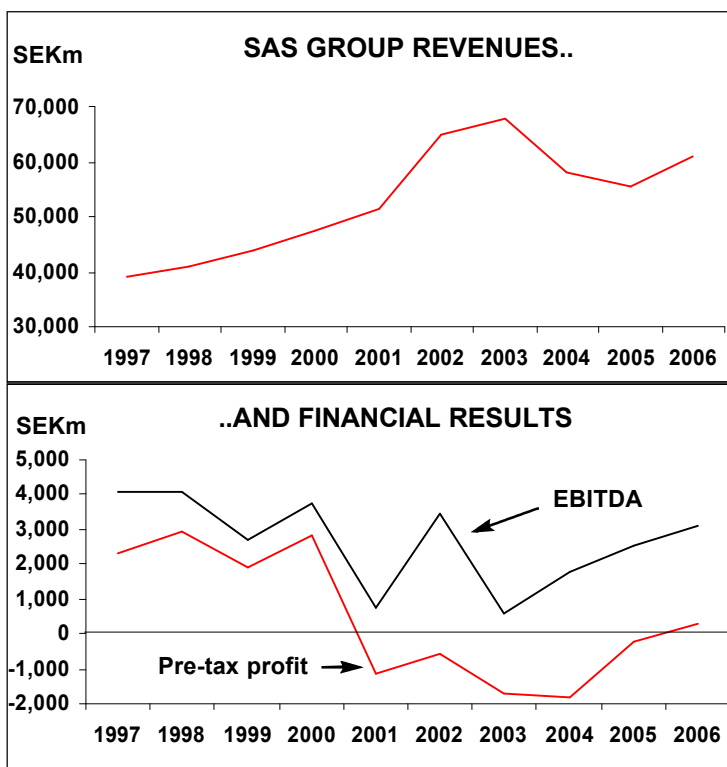
by the European Commission's cartel probe (and for which the Group has made a SEK 50m provision for expected legal costs). But while Cargo made a SEK 99m EBT (€10.9m) before non-recurring items in 2006, and Ground Services chipped in a SEK 43m EBT (€4.7m), SAS Technical Services made a SEK 249m (€27.4m) loss in 2006 - which although better than the SEK 523m loss of 2005, is still dragging down the results of the entire Aviation Services division. Last year Technical Services closed a maintenance base at Stavanger, which will save an estimated SEK 200m a year, but this alone will not be enough to deliver a profit to the business unit.

Much more worrying for the Group is the inconsistency in the core of what SAS does - its airlines. In 2004 the Group split its mainline into four parts - SAS Braathens (which operates all Norwegian services, and which is to be renamed as Scandinavian Airlines Norway in June), Scandinavian Airlines Sweden, Scandinavian Airlines Denmark, and Scandinavian Airlines International - and again, the table, (page 12), shows large differences in performance.

The powerhouse of the entire Group is SAS Sweden, which delivered an operating margin of 6.3% and SEK 525m (€57.7m) of EBIT in 2006, representing 41.9% of the Group's entire EBIT in the year. The other Scandinavian operations, however, are less successful.

SAS Braathens has been going through troubled times recently, with the integration of Braathens, bought in 2002, into the SAS Group being more complicated than anticipated. Last year pilots and flight attendants carried out industrial action in pursuit of pay claims - with pilots carrying out so-called sick-outs (where an unusually high number of staff calls in sick) - and the unit has faced a number of legal challenges. Last year SAS Braathens was fined NKR 20m by the Norwegian competition authority after "abusing" its dominant position in the Norwegian market and forcing a local competitor off a route - although Braathens managed to overturn that decision in the local courts. More seriously, last year Norwegian "economic crime" investigators filed charges against SAS Braathens, alleging that it stole information from the computers of LCC rival Norwegian after the expiry of an earlier co-operation deal between the two airlines on the Stavanger-Newcastle route.

In 2006 Petter Jansen, the chief executive of SAS Braathens, resigned due to an apparent dis-



agreement with SAS Group on the strategy for Braathens, and was replaced by Ola Strand, an SAS Group "loyalist", with 10 year's experience there. What Strand will do with SAS Braathens (or will be allowed to do by the Group) is open to debate. SAS Braathens is called a "low-cost" operation, but it's not in the same league as its fierce competitor, Norwegian, and indeed speculation persists that SAS Braathens will be turned into a fully-fledged LCC. But this ignores the reality that Braathens - as well as the other national SAS operations - can never truly become a low cost carrier due to legacy and structural costs.

Fundamentally, that means the unwillingness of the local workforce to allow erosion of what they see as "hard-won" pay and conditions. Already unions have posted effective warning shots to management over attempts put them onto national contracts (rather than pan-Group contracts) as part of the overall SAS strategy to "localise" its structure.

While Norwegian pilots went onto national contracts in 2004 as part of the Braathens/local SAS unit merger, Danish and Norwegian pilots staged a three-day wildcat strike in January 2006 at the prospect of national contracts, before a one-year pay deal (with a 2.4% pay rise) was agreed with all

SAS GROUP RESULTS 2006

	Share of revenue*	Share of operating profit**	Operating margin**
Scandinavian Airlines			
<i>SAS Braathens</i>	17.5%	26.3%	2.6%
<i>SAS Denmark</i>	15.2%	14.8%	1.7%
<i>SAS Sweden</i>	11.5%	41.9%	6.3%
<i>SAS International</i>	10.8%	13.5%	2.2%
Total Scandinavian Airlines	55.0%	96.6%	3.1%
Other Airlines			
<i>Spanair</i>	15.3%	16.8%	1.9%
<i>wideroe</i>	4.1%	2.8%	1.2%
<i>Blue1</i>	2.8%	-1.3%	-0.8%
<i>airBaltic</i>	2.2%	4.4%	3.5%
Total Other Airlines	24.4%	22.7%	1.6%
SAS Aviation Services			
<i>Ground Services</i>	8.2%	0.5%	0.1%
<i>Technical Services</i>	6.8%	-29.0%	-7.4%
<i>Cargo</i>	5.1%	5.3%	1.8%
<i>Flight Academy</i>	0.6%	3.9%	11.1%
Total SAS Aviation Services	20.6%	-19.3%	-1.6%

Note: *Prior to group eliminations. **Excluding Others & Adjustments.

pilots in Sweden, Denmark and Norway in May last year - but only after a compromise of formal employment of Danish and Swedish pilots remaining in the SAS Group, even though pilots are supposedly part of the national SAS companies.

Industrial unrest is also breaking out among other sections of the workforce. In April 2007 the Group was hit by a three day wildcat strike by 1,600 members of the Danish Cabin Attendants Union (CAU) based in Copenhagen, who were protesting at the perceived lack of progress in new negotiations on pay and conditions for the 2006/07 labour contract. SAS only reached an agreement with CAU back in October 2006 on a one-year pay deal (back-dated to March that year, and expiring at the end of February 2007) after prolonged negotiations between the two sides that lasted 14 months. It was only after the union set a date for strike action in late 2006 that a deal was agreed, including a 3.5% pay rise. Meanwhile in Sweden 1,000 flight attendants represented by the HTF union also threatened industrial action in October last year, after talks on working conditions stalled (although management again headed off action with a new one-year deal), while Norwegian flight attendants also staged industrial action last year.

The reluctance of unions to accept erosion of their terms and conditions is a fundamental challenge to Mats Jansson, who became SAS president and CEO in January this year, taking over from Jorgen Lindegaard, who resigned in August

2006 after five years in the position. Lindegaard spent his time trying to restructure the group in the face of tough market conditions and resistance from unions, but a harder stance may be needed by Jansson, who previously headed up a Scandinavian consumer goods distributor. In early 2006 SAS Group said that it wanted to cut back its 2,000-strong pilot workforce as its operations were now "more efficient", but the issue has not been pushed by management - so far.

The size of the workforce is naturally dependent on the strategy of the mainline airlines, and at last there appears to be some consistency in what those core airlines are doing. From start of 2006 the new mainline strategy has been based on a reduction of the dependency on a hub network, with a greater emphasis being given on building up profitable direct routes between Scandinavia and the rest of Europe.

Long-haul woes

For the first time since 1995, long-haul routes reported a profit in 2006, but SAS only serves seven long-haul destinations (with a fleet of four A330s and seven A340s), and without scale the long-haul operation has been struggling. Though SAS plays an important part in the Star alliance - securing northern European feed and regional routes for the alliance - in terms of incoming feed into SAS's long-haul routes, SAS doesn't really benefit to any great extent from Star, as its geographical closeness to Lufthansa means that most Star business traffic to the south of Scandinavia tends to gravitate to long-haul routes out of Frankfurt.

Although capacity is slowly increasing out of Stockholm, Copenhagen remains the key long-haul hub for SAS, but the long-haul operation has been hampered by a lack of focus, as it has constantly been axing and launching services as it tries to find sustainable, profitable routes. According to Jansson, the idea on long-haul is to be "more demand-driven than ever before" through flexible capacity, for example by switching marginal capacity to North America in the summer and to Asia and the Middle East in the winter. The latest addition to the network is a four-times-a-week service from Stockholm to Beijing, launched in March this year, on which SAS is codesharing with Air China. SAS also serves Beijing from Copenhagen, but shut down a route to Shanghai

from Copenhagen this April, in favour of making Beijing its preferred hub in China.

SAS's only other Asia destinations are Bangkok and Tokyo. Although SAS already serves Bangkok from Copenhagen, a service from Stockholm is being relaunched this October after being dropped in 2003. This time around SAS says the route will be successful due to the growing importance of Bangkok (home of Thai Airways) as a Star alliance hub.

The other long-haul routes are to the US (Chicago, New York, Seattle and Washington), although SAS Group says that these routes have come under "severe competition" from US carriers, with Continental, Delta and US Airways all building up capacity into Scandinavia that had been cut following September 11. Nevertheless, SAS's services to New York are being nudged up slowly, with a fourth weekly flight between Copenhagen-New York starting this May. Elsewhere, a three-times-a-week Copenhagen to Dubai route using A340s will start in October, becoming the first direct link between Scandinavia and Dubai.

European adjustments

On short- and medium-haul, in 2006 Scandinavian Airlines had a 33% share of the Nordic market (as measured by ASKs), rising to 45% if all SAS Group airlines are included. As SAS puts it, the network is being adjusted "to local traffic flows and profitable feeder traffic". And "dynamic traffic management was increasingly implemented in 2006, allowing Group units to adapt capacity to demand". Practically, for example, this means that the Denmark unit reduced its capacity substantially over the Christmas and New Year period (compared with previous years), as there is much lower demand then. As mentioned earlier, Scandinavian Airlines is also increasing non-stop routes out of Scandinavia, and five routes were launched out of Stockholm this spring (to Glasgow, Malaga, Munich, Palma de Mallorca and Reykjavik).

In terms of the product, it wasn't until the results of a study at Star airlines were completed in 2004 that SAS made the discovery that up to 50% of its market was "price-driven", and that they didn't value frills. A three-class service was therefore introduced on European services in 2004, including a premium-economy service with free meals, fast-track check-in and security clearance, and

free rebooking and refunds. At the same time the business class product was overhauled to include no centre-seat occupancy in three seat rows, while the economy product was stripped back, with charges introduced for frills such as meals.

But while there is now a distinct no-frills economy product, it's clear that SAS is focussing more of its mainline operation on business travellers. 60-70% of SAS's passengers are business travellers (whether they fly business or economy), which SAS Group says are "our main customers". In February this year Scandinavian Airlines began to make its offer to business travellers more "distinct", with the premium economy product promoted as saving time and money for business travellers.

In 2005 (and later than at virtually all its competitors) Scandinavian Airlines introduced flexible booking, enabling - for example - passengers to mix outbound business class with an inbound economy fare. The premium economy product has been renamed from Economy Flex to Economy Extra and is now available at lower fares, with extra frills such as internet check-in and as fast-track security at more airports. And in Economy, free meals are now given to Gold members of SAS's FFP, whom are being given a better range of FFP benefits. The business push is also extending into long-haul, and this April Scandinavian Airlines completed the installation of new business-class sleeper seats on its long-haul fleet, alongside an improved in-flight entertainment system.

SAS Group says that its business travel is picking up, but pressure on both European business and leisure traffic is increasing from the LCCs. easyJet only operates a couple of routes to Scandinavia (to Copenhagen), but Ryanair operates 13 routes out of Stockholm Skavsta, although it too has been shifting capacity, and in May opens three new routes out of Stockholm - to Alghero, Marseille and Venice - that will replace three routes to Brussels, Kaunas and Gdansk. A bigger challenge to SAS comes from Air Berlin, which operates 12 routes from Stockholm, 13 from Gothenburg and 26 out of Copenhagen.

And then there is the growing threat from Scandinavian LCCs. Although Swedish LCC FlyMe filed for bankruptcy in March, FlyNordic (whose owner, Finnair, is selling the airline to Norwegian) operates 10 aircraft out of Stockholm Arlanda; Danish LCC Sterling operates a fleet of 24 737s to 35 destinations in Scandinavia and

SAS GROUP FLEETS		
	Fleet	Orders
Scandinavian Airlines		
A319	2	2
A321	8	
A330	4	
A340	7	
737-400	4	
737-500	13	
737-600	26	
737-700	15	2
737-800	13	
MD-81	4	
MD-82	31	
MD-87	9	
F50	6	
RJ-70ER	1	
Q400	23	
Total	166	4
Spanair		
A320	16	
A321	5	
MD-81	1	
MD-82	10	
MD-83	17	
MD-87	11	
F100	2	
Total	62	
Wideroe		
Q100	17	
Q300	8	
Q400	3	
Total	28	0
Blue1		
MD-90	3	
RJ-85ER	7	
RJ-100ER	2	
Total	12	0
airBaltic		
737-300	2	
737-500	8	
F50	9	
Total	19	0
SAS Total	287	4

Europe (with a major presence at Copenhagen, Oslo, Stockholm and Gothenburg); while Oslo-based Norwegian has a fleet of 22 aircraft, carried 5.1m passengers in 2006 and has just announced that it is to acquire 11 737-800s as it looks to expand its operations and replace older 737-300s.

Collectively, these LCCs are putting tremendous pressure on Scandinavian Airlines. Back in 2004 SAS said its strategy going forward would be based on a "network carrier at a low cost" concept, but although mainline airline unit costs have been cut by more than a third over the last five years, "there continues to be a cost gap between SAS and rival airlines servicing the Scandinavian region" according to ABN Amro, and this is something that the new CEO must address as a matter of urgency.

Indeed on a Group basis, airline unit costs have remained pretty constant over the last couple of years despite the continuing efforts of SAS to cut costs. Snowflake - SAS's LCC concept - was short-lived. After launching with four aircraft in 2003 it evolved into what was confusingly called a "fares brand", before being reabsorbed into the mainline carrier in 2005, with the rationale being that the lessons of Snowflake had been learnt and that the mainline unit costs had come down anyway thanks to ongoing cost-cutting.

However, the latest SEK 2.5bn cost-saving programme reveals that costs still need to come down. But even reducing the cost gap with other network carriers is simply just not good enough for the SAS Group, as it is now primarily competing with LCCs. Worryingly, the Group appears to be increasingly relying on its "other" airlines to carry the fight to the LCCs, while the mainline operations refocus on the business market.

A mixed bag of "others"

While the mainline operations have a collective operating margin of 3.1% in 2006, the "other" airlines (the groups calls them "individually branded airlines") posted a measly 1.6% margin.

The poorest performer was Blue1. The Vantaa-based airline was launched as Air Botnia back in 1988, but was bought by SAS in 1998 and rebranded as Blue1 in 2004.

It operates 12 aircraft on feeder routes from Finland to Copenhagen and Stockholm, but last year - in order to reduce its dependence on the stagnant Finnish domestic market - underwent a

huge expansion on non-stop routes between Finland and continental European destinations. Eleven routes were launched in 2006, including to London Stansted, Paris, Rome and Zurich, and six new European routes are being added through 2007 (a Helsinki-Milan route began in April, for example), but further expansion on direct routes will be limited after this, due to a lack of aircraft. For the longer routes into Europe the airline added three MD-90s (leased from Scandinavian Airlines) to its fleet, which also includes nine RJs, with the last of its Saab 2000s having been phased out in 2006.

It's not clear yet whether this is a sensible strategy and whether enough demand exists for lots of direct routes into continental Europe. Even if it is, in the short-term that expansion is very costly for Blue1, which reported an operating loss of SEK 16m in 2006.

The SAS Group also owns regional Norwegian airline Wideroe, but its profits fell in 2006 due to increasing competition, and in response the airline is midway through a programme to cut SEK 200m in costs. It is Spanair (of which SAS Group owns 94.9%) - the largest of the "other" Group airlines - that makes the least strategic sense for SAS. Justification for it comes from the view that it is the "Star alliance's main point of access to North Africa," according to Gonzalo Pascual Arias, president of Spanair, but the airline is coming under fierce pressure from LCCs, not only from Ryanair, easyJet and Air Berlin, but also from Vueling and Clickair - Iberia's new LCC (see *Aviation Strategy*, December 2006). Spanair too is implementing a cost reduction programme designed to save SEK 200m, but the airline's routes look detached when compared with the other parts of the SAS network.

Completing the rag-bag of "other" airlines is Riga-based airBaltic (47.2% owned by SAS Group), which was the best performing non-mainline carrier in 2006 in terms of margin, but whose revenue base is small (SEK 1.5bn, or €170m). SAS Group also owns 49% of Estonian Air (acquired from Maersk Air in 2003), 25% of Swedish regional carrier Skyways, 37.5% of Air Greenland and 49% of Aerolineas de Baleares.

It's not a convincing airline portfolio, and collectively they add little strategic strength to SAS Group. As ABN Amro puts it, "we see Spanair facing major challenges this year, with the growth of Vueling, Clickair, easyJet and Ryanair in the Spanish market, while airBaltic would be threat-

ened significantly were Ryanair to open a new base in Riga".

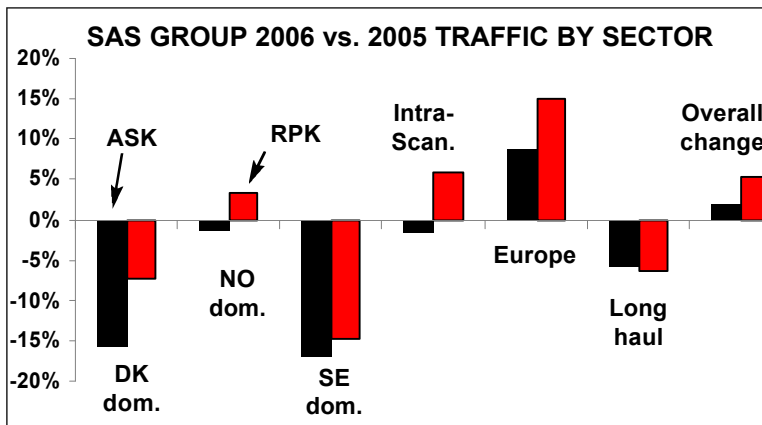
A frozen fleet

Adding to the problems that the mainline and the "other" carriers face is the Group's financial position. It is getting better: long-term debt totalled SEK 17bn (€1.9bn) at the end of March 2007 (SEK 5.9bn down on a year earlier), although cash and short-term investments at the end of Q1 2007 were SEK 8.8bn, almost identical on a year earlier. The debt improvement came from the hotel transaction and other sales (+SEK 3.8bn in 2006), stronger cash flow (+SEK 3bn), and the sale of aircraft and other property (+SEK 4bn). But Jansson says that although the 2006 result is encouraging, group revenue is "too low to meet shareholders' return requirements and future investment needs".

This is directly affecting the fleet plan. The Group fleet consists of 287 aircraft, (see table, left) but the average age is approaching 11 years, with wide variation among the Group's airlines. airBaltic's fleet is 15 years' old, while Scandinavian Airlines' average age is just under 11, with Blue1 having the youngest age, at less than seven years.

Yet the Group has just four aircraft on firm order, all for delivery in 2007, and costing the Group just \$109m in capex commitments. What the Group calls a "capex holiday" will continue through to the end of the decade, i.e. there will be no major investment in aircraft in this period. On short- and medium-haul, this has forced the Group to keep its fleet of 83 MD-80s (44 of which are with Scandinavian Airlines, with 39 at Spanair) - and which have an average age of almost 18 years - for at least another five and possibly up to eight years, until they are replaced by a new generation of aircraft.

SAS Group had been expected to replace these aircraft in 2008 or 2009, but the Group spin on this about-turn is that although the MD-80 fleet has high fuel burn compared with modern aircraft, in other areas they are relatively cheap to run (e.g. in maintenance). The decision to postpone will have a particularly negative effect on Spanair, which had wanted to phase out all its MD-80s by 2010 at the latest, and which had already announced plans to start replacing the model via the lease of 717s and A320s this year. Instead, Spanair now has to follow the fleet restrictions imposed by its parent.



Elsewhere in the Group fleet, the MD-90s have been phased out of the Scandinavian Airlines fleet and reassigned to the other Group airlines. The SAS Group estimates it needs up to 50 new regional aircraft across its airlines. Yet again - as with the medium-haul aircraft - financial constraints have overridden operational requirements. Around 25 regional aircraft are needed for Spanair, and other aircraft are needed for Blue1, airBaltic and Estonian Air. Although an order is not imminent in the short- or medium-term, SAS Group says that the Sukhoi Russian Regional Jet is "very interesting".

In 2006 the Group sold and leased back 19 aircraft, but the scope to save more money from this is reducing fast, as just 20% of the total Group fleet remains owned, with the rest all now leased.

Time to be radical

The Group's overall airline strategy can be seen in the traffic chart, (see above). In 2006 SAS Group passengers carried rose 6.3%, to 38.6m (of which 25.1m were carried by Scandinavian Airlines), and a Group RPK rise of 5.4% was higher than a 1.9% increase in ASKs, resulting in a 2.4% rise in Group passenger load factor, to 71.5%. However, there was wide variation in ASK adjustments among different geographical areas, with capacity increases in Scandinavian-Europe and intra Scandinavian routes coming at the expense of long-haul and Swedish domestic capacity.

In 2007 the overall capacity increase will rise to 5%-7%, but most of that growth will come from subsidiaries, with 15% expected at Spanair, 20% at Blue1 and 30% at airBaltic. After two years of contraction (see chart, right) Scandinavian Airlines'

overall capacity will remain flat in 2007, with the Danish operation level, Braathens up 2% and Sweden up 6%. Long-haul capacity, however, will fall by an anticipated 4% in 2007.

Based on this capacity rise, combined with falling costs, a continuing recovery in traffic and a reduction in the price of fuel, many analysts are upbeat about the Group's prospects. Group results for the first quarter of 2007 revealed a 6.7% rise in revenue, with a reduced operating loss of SEK 327m, equivalent to €36m (SEK 1.1bn in Q1 2006) and the net loss falling from SEK 1.1bn in January-March 2006 to a loss of SEK 47m (€5.2m) in Q1 2007.

Yet the Group is still weak strategically. The 2006 results prompted SAS Group to launch a strategic review aimed at identifying further cost-cutting and opportunities to increase revenues, and the so-called "Strategy 2011" - which is being unveiled this June (having been delayed from May) - will aim for "conceptually driven restructuring" according to Jansson.

Undoubtedly this will include yet another raft of cost cutting (and unions appear to sense what is coming), although this will be wrapped around a justification of strategic readjustment. "Strategy 2011" will define some big questions, says Jansson, but no radical departure from the current geographical and customer focus is expected, nor necessary.

Where Jansson may be more radical is in defining the scope of the SAS Group. As far back at the 1990s it was clear that the SAS Group's attempts to diversify into a full travel company (the so-called Total Travel Concept) was a failure, yet the Group still held on to many non-aviation assets for far too long, for example only disposing of its major hotel chain last November.

SAS Group says it has completed its disposal programme and, according to Jansson, is now "a company of core operations", but surely this depends on what you consider is core. If this is defined as aviation assets, then certainly SAS has (at long last!) a core of aviation concerns only - but Jansson has to go further than that, and ask questions as to whether it has the right aviation assets.

Most obviously, SAS's remaining 20% stake in bmi (it sold another 20% stake in 1999 to Lufthansa) - which the Group maintains has always been a financial investment and not held for strategic reasons - will probably go at the end of 2007, once the SAS Group finally escapes from

its disastrous joint venture agreement with bmi and Lufthansa. The European Co-operation Agreement (ECA) was signed in 2000 and shares revenues and costs on routes between the UK, Scandinavia and Germany, but all ECA does is rack up losses for SAS and Lufthansa. ECA has been described by SAS as "a stupid contract", and the Group's share in ECA cost it SEK 415m in 2006, with the accumulated figure since ECA started rising to SEK 2bn (€220m) as at the end of 2006 (and with another year of losses to add in 2007, the ECA's last year of operation).

UK sources say that SAS Group is already touting its bmi stake around airlines and private equity groups (including Iceland's FL Group, according to one UK newspaper), for a price in the range of £100m. But while Virgin Atlantic and British Airways may well be interested in buying Sir Michael Bishop's 50% plus one share stake when he retires, the attractiveness of a minority stake in bmi must be far less, even if bmi's 13% share of Heathrow slots is a prime asset given the recent Open Skies deal. Lufthansa, with a 30% stake in BMI, is the most obvious acquirer of SAS's stake, but the German flag carrier appears more interested in buying airlines in southern Europe.

Intriguingly, in his conversation with analysts after the 2006 results were presented in February this year, Jansson stated that what SAS does is still "a little bit complicated. I am used to working in one or two parts of the value chain, but SAS works in three different parts of the value chain - the pure airline operation in nine different subsidiaries, ground handling in another subsidiary, and then technical services". "We now have a core operation in the Group, but we also have to look into it more in detail, and define what the core, core operation is, and what consequences it could have for the Group for the future."

While Jansson may well have been cautious in what he was saying prior to the unveiling of the formal strategy review, "Strategy 2011" may be his ideal - and only - opportunity to be truly radical. And that should mean SAS Group being brave enough to dispose of more parts of the SAS empire.

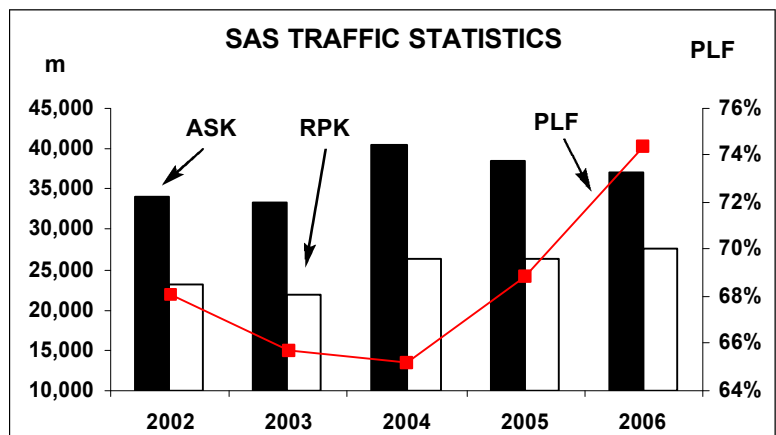
ABN Amro says that it "has doubts about the sense of running a relatively small-scale heavy maintenance business in the high-cost Nordic area, which cannot compete with the business scale of companies such as Lufthansa Technics or the labour costs of Iberia." Indeed the futures of both Ground and Technical Services must be in

great doubt - they contribute little or nothing to financial results, employ a vast amount of capital, and could easily be replaced by a series of out-sourced contracts.

But Jansson must be even more radical than that. The Group's "other" airline operations are spread around Europe, with moderate or little synergies between them. ABN Amro sees "no sense in SAS owning Spanair, and we are pretty sceptical about Blue 1". What real feed these airlines provide into SAS's routes out of its hubs is open to question, particularly as SAS wants to de-emphasise its hubs and build up more direct routes. The sale of Spanair (and speculation is mounting that Lufthansa may make an offer), Blue1 and - potentially - all its other non-mainline carriers would be a strategic and financial blessing to SAS, freeing up much needed resources to bolster its core mainline operations that are facing ever-increasing competition from the LCCs. And an argument can even be made for SAS to ditch its entire long-haul operation, which is tiny compared with that of any of the other European majors.

Following a restructuring of ownership in 2001, 50% of the Group is held by the Scandinavian governments - the Danish and Norwegian states each own 14.3%, and Sweden owns 21.4% - with the other 50% listed on the Nordic Exchange in Stockholm. In the past, Scandinavian government ownership has tended to moderate any managerial desires to be truly radical, but substantial cracks are now appearing in that unified Scandinavian viewpoint.

In particular, Sweden's new right-wing government says that it wants to sell off its stake in SAS at some point in the future, as part of a huge multi-billion Euro sell-off of state assets, when restructuring has been completed. In March the Danish government insisted it would not sell its stake in SAS - for the moment at least - as it wanted to give time to the new CEO to turn the group around. However, some elements in the Danish government - and in particular within the Finance ministry



- are believed to have different views on this. The only unwavering commitment to retain its SAS stake comes from the Norwegian government, which (off-the-record) is critical of the Swedish government's position on SAS, which it believes is motivated purely by ideology.

There's little doubt that SAS Group benefits from its ownership by the Scandinavian governments. Last year - after a formal tender process - Scandinavian Airlines won the vast majority of lucrative contracts on offer to carry Danish government officials for the next two years (and worth an estimated €25m), and also tied up a similar deal with the Swedish government. But loyalty from state owners will dissolve at some point, and when it does the SAS Group will be in danger of being disassembled by new owners. For the last six months speculation has been growing about a potential Lufthansa bid for SAS Group - which has encouraged an upwards drift in the SAS share price - although Lufthansa says these rumours are "speculation".

But much more ruthless predators (for example, private equity groups) are likely to be looking at the SAS Group, and if they acquire the company they will not hesitate to carve it up. The question is, will SAS Group's current management be brave enough to be that ruthless now?

AVIATION STRATEGY ONLINE

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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 provided by the The Aircraft Value Analysis Company (contact details opposite) and are not based exclusively on recent market transactions but more reflect AVAC's opinion of the worth of the aircraft. These fig-

ures are not solely based on market averages. In assessing current values AVAC bases its calculations on many factors such as number of type in service, number on order and backlog, projected life span, build standard, specification etc. The lease rental rates are calculated independently of values and are all market based.

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	29.2				717-200	13.1			
A319 (IGW)	40.6	33.3	25.9		737-300 (LGW)			10.9	6.1
A320-200 (IGW)	48.2	38.8	29.3		737-400 (LGW)			11.7	
A321-200 (LGW)	53.0	42.3	31.7		737-500 (LGW)			9.7	
					737-600	29.5	22.8		
					737-700 (LGW)	40.7	26.5		
					737-800 (LGW)	50.8	41.4		
					737-900ER	54.6			
					757-200		28.1	22.8	12.1
					757-200ER		30.5	24.4	12.2
					757-300		36.4		
					MD-82			5.7	3.7
					MD-83			6.7	4.4
					MD-88			6.8	4.0
					MD-90			8.2	

WIDEBODY VALUES (US\$m)

	NEW	5 years old	10 years old	20 years old		NEW	5 years old	10 years old	20 years old
					747-200B				3.2
A300B4-600				6.2	747-400		98.7	75.6	
A300B4-600R (HGW)			25.3		767-200				6.5
A310-300 (IGW)			18.1	6.7	767-300			29.6	11.7
A330-200		78.2			767-300ER (LGW)		54.2	42.2	20.5
A330-300 (IGW)		73.6	54.0		767-400		57.0		
A340-200			42.6		777-200		69.9	51.8	
A340-300 (LGW)		74.8	56.1		777-200ER	131.8	107.6	83.3	
A340-300ER	111.3	89.0	63.1		777-300		99.4		
A340-500 (IGW)		89.6			787-800	99.9			
A340-600 IGW)		95.9							
A380-800	183.3				MD-11P			39.8	

Note: As assessed at end April 2007
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	252				717-200	168			
A319 (IGW)	376	322	280		737-300 (LGW)			157	112
A320-200 (IGW)	384	354	302		737-400 (LGW)			152	
A321-200 (LGW)	455	389	338		737-500 (LGW)			136	
					737-600	225	192		
					737-700	369	271		
					737-800	410	356		
					737-900ER	455			
					757-200		296	225	180
					757-200ER		278	255	176
					757-300		296		
					MD-82			107	81
					MD-83			108	83
					MD-88			78	111
					MD-90			115	

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
					747-200B				133
A300B4-600				140	747-400	822	706		
A300B4-600R (HGW)			234		767-200				126
A310-300 (IGW)			237	144	767-300			296	204
A330-200		710			767-300ER (LGW)	492	448		369
A330-300 (IGW)		706	574		767-400	532			
A340-200			552		777-200	600	518		
A340-300 (LGW)		785	636		777-200ER	1,089	942	822	
A340-300ER	988	857	660		777-300		914		
A340-500 (IGW)		881			787-800	787			
A340-600 (IGW)		899							
A380-800	1,226				MD-11P			404	

Note: As assessed at end April 2007
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 emp.
Alaska	Jan-Mar 06	735	861	126	-80	17.1%	-10.9%	8,914	6,566	73.7%	3,905	8,988
	Apr-Jun 06	710	639	71	49	10.0%	6.9%	9,389	7,440	79.2%	4,443	9,347
	Jul-Sep 06	760	789	-29	-20	-3.8%	-2.6%	9,895	7,842	79.3%	4,710	9,467
	Oct-Dec 06	790	808	-18	-12	-2.3%	-1.5%	9,261	6,828	73.7%	4,107	9,485
	Year 2006	3,334	3,422	-87	-53	-2.6%	-1.6%	43,306	33,012	76.2%	24,025	12,933
	Jan-Mar 07	759	778	-18	-10	-2.4%	-1.3%	10,652	7,552	71.0%	5,471	13,236
American	Year 2005	20,657	21,008	-351	-892	-1.7%	-4.3%	283,417	222,685	78.6%	98,040	87,200
	Jan-Mar 06	5,344	5,229	115	-92	2.2%	-1.7%	68,801	53,131	77.2%	23,642	86,600
	Apr-Jun 06	5,975	5,499	476	291	8.0%	4.9%	71,774	59,314	82.6%	25,879	86,500
	Jul-Sep 06	5,830	5,610	220	1	3.8%	0.0%	71,641	58,526	81.7%	24,977	86,400
	Oct-Dec 06	5,397	5,212	185	17	3.4%	0.3%	67,813	53,430	78.8%	23,606	85,200
	Year 2006	22,563	21,503	1,060	231	4.7%	1.0%	280,052	224,423	80.1%	98,139	86,600
Jan-Mar 07	5,427	5,179	248	81	4.6%	1.5%	72,362	56,063	77.5%	23,299	85,100	
Continental	Jan-Mar 06	2,947	2,936	11	-66	0.4%	-2.2%	37,070	28,996	78.2%	11,486	42,600
	Apr-Jun 06	3,507	3,263	244	198	7.0%	5.6%	45,477	37,605	82.7%	17,596	43,450
	Jul-Sep 06	3,518	3,326	192	237	5.5%	6.7%	47,091	38,691	82.2%	17,328	41,500
	Oct-Dec 06	3,157	3,137	20	-26	0.6%	-0.8%	43,903	35,036	79.8%	16,603	
	Year 2006	13,128	12,660	468	343	3.6%	2.6%	178,500	144,060	80.7%	67,119	44,000
	Jan-Mar 07	3,179	3,115	64	22	2.0%	0.7%	43,853	34,519	78.7%	16,176	
Delta	Year 2005	16,191	18,192	-2,001	-3,818	-12.4%	-23.6%	252,327	193,042	76.5%	118,853	55,600
	Jan-Mar 06	3,719	4,204	-485	-2,069	-13.0%	-55.6%	55,685	42,460	76.3%	25,531	53,735
	Apr-Jun 06	4,655	4,286	369	-2,205	7.9%	-47.4%	60,699	48,364	79.7%	27,221	51,700
	Jul-Sep 06	4,659	4,491	168	52	3.6%	1.1%	63,797	51,150	80.2%	27,556	51,000
	Year 2006	17,171	17,113	58	-6,203	0.3%	-36.1%	238,168	186,892	78.5%	106,649	51,300
	Jan-Mar 07	4,144	3,989	155	-130	3.7%	-3.1%	56,774	43,794	77.1%	25,325	52,260
Northwest	Year 2005	12,286	13,205	-919	-2,533	-7.5%	-20.6%	147,694	122,017	82.6%	70,300	32,460
	Jan-Mar 06	2,890	2,905	-15	-1,104	-0.5%	-38.2%	35,757	29,432	82.3%	15,700	31,318
	Apr-Jun 06	3,291	2,996	295	-285	9.0%	-8.7%	37,743	32,593	86.4%	14,300	31,267
	Jul-Sep 06	3,407	3,041	366	-1,179	10.7%	-34.6%	38,741	33,024	85.2%	17,600	32,760
	Oct-Dec 06	2,980	2,886	94	-267	3.2%	-9.0%	37,386	30,564	81.8%	16,600	30,484
	Year 2006	12,568	11,828	740	-2,835	5.9%	-22.6%	149,575	125,596	84.0%	67,600	30,484
Jan-Mar 07	2,873	2,672	201	-292	7.0%	-10.2%	36,845	29,964	81.3%	15,600	30,008	
Southwest	Year 2005	7,584	6,764	820	548	10.8%	7.2%	137,069	96,917	70.7%	77,693	31,729
	Jan-Mar 06	2,019	1,921	98	61	4.9%	3.0%	35,532	24,591	69.2%	19,199	31,396
	Apr-Jun 06	2,449	2,047	402	333	16.4%	13.6%	36,827	28,716	78.0%	21,999	31,734
	Jul-Sep 06	2,342	2,081	261	48	11.1%	2.0%	38,276	28,592	74.7%	21,559	32,144
	Oct-Dec 06	2,276	2,102	174	57	7.6%	2.5%	38,486	27,036	70.2%	21,057	32,664
	Year 2006	9,086	8,152	934	499	10.3%	5.5%	149,123	108,936	73.1%	96,277	32,664
Jan-Mar 07	2,198	2,114	84	93	3.8%	4.2%	38,105	25,924	68.0%	19,960	33,195	
United	Year 2005	17,379	17,598	-219	-21,176	-1.3%	-121.8%	225,785	183,898	81.4%	67,000	55,000
	Jan-Mar 06*	4,465	4,636	-171	22,628	-3.8%	506.8%	61,511	48,739	79.2%	16,267	53,600
	Apr-Jun 06	5,113	4,853	260	119	5.1%	2.3%	64,499	54,541	84.6%	18,228	53,500
	Jul-Sep 06	5,176	4,841	335	190	6.5%	3.7%	66,377	55,165	83.1%	18,099	
	Oct-Dec 06	4,586	4,563	23	-61	0.5%	-1.3%	63,226	50,324	79.6%	16,704	51,700
	Year 2006	19,340	18,893	447	22,876	2.3%	118.3%	255,613	208,769	81.7%	69,325	53,000
Jan-Mar 07	4,373	4,465	-92	-152	-2.1%	-3.5%	61,900	49,415	79.8%	16,350	51,500	
US Airways Group	Year 2006	11,557	10,999	558	304	4.8%	2.6%	123,889	97,667	78.8%	57,345	32,459
	Jan-Mar 07	2,732	2,616	116	66	4.2%	2.4%	35,411	27,039	76.4%	19,935	36,000
	Year 2005	1,701	1,653	48	-20	2.8%	-1.2%	38,145	32,508	85.2%	14,729	8,326
JetBlue	Jan-Mar 06	490	515	-25	-32	-5.1%	-6.5%	10,584	8,909	84.2%	4,335	9,039
	Apr-Jun 06	612	565	47	14	7.7%	2.3%	11,590	9,533	82.2%	4,525	9,377
	Jul-Sep 06	628	587	41	-0.5	6.5%	-0.1%	12,129	9,756	80.4%	4,773	9,223
	Oct-Dec 06	633	569	64	17	10.1%	2.7%	11,712	9,331	79.7%	4,932	9,265
	Year 2006	2,363	2,236	127	-1	5.4%		46,016	37,522	81.6%	18,565	9,265

* = Including reorganisation items - net loss of \$311m without

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

Aviation Strategy

Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France/ KLM Group YE 31/03	Year 2004/05	24,641	21,744	641	453	2.6%	1.8%	214,606	168,998	78.7%	64,075	102,077
	Apr-Jun 05	6,257	5,982	275	135	4.4%	2.2%	57,936	46,041	79.5%	17,948	101,886
	Jul-Sep 05	6,790	6,154	636	864	9.4%	12.7%	60,472	50,961	84.2%	18,705	
	Oct-Dec 05	6,430	6,205	225	91	3.5%	1.4%	58,266	46,644	80.0%	17,120	102,291
	Year 2005/06	25,901	24,771	1,136	1108	4.4%	4.3%	234,669	189,253	80.6%	70,020	102,422
	Apr-Jun 06	7,282	6,766	516	306	7.1%	4.2%	60,839	49,596	81.5%	19,049	
	Jul-Sep 06	7,779	7,058	721	475	9.3%	6.1%	63,616	53,611	84.2%	19,600	
	Oct-Dec 06	7,593	7,260	333	302	4.4%	4.0%	60,999	48,663	79.8%	17,829	
BA YE 31/03	Year 2004/05	14,681	13,666	1,015	472	6.9%	3.2%	144,189	107,892	74.8%	35,717	46,065
	Apr-Jun 05	3,716	3,398	318	162	8.6%	4.4%	36,706	27,768	75.6%	9,177	46,079
	Jul-Sep 05	3,887	3,427	460	301	11.8%	7.7%	37,452	29,812	79.6%	9,767	46,144
	Oct-Dec 05	3,664	3,362	301	212	8.2%	5.8%	37,119	27,499	74.1%	8,530	45,624
	Jan-Mar 06	3,692	3,530	162	144	4.4%	3.9%	36,657	26,780	73.1%	8,160	45,171
	Year 2005/06	14,813	13,588	1,227	812	8.3%	5.5%	147,934	111,859	75.6%	35,634	47,012
	Apr-Jun 06	4,208	3,825	383	280	9.1%	6.7%	38,222	29,909	78.3%	9,569	45,100
	Jul-Sep 06	4,331	4,080	251	315	5.8%	7.3%	38,727	30,872	79.7%	9,935	45,058
Oct-Dec 06	4,051	3,798	253	210	6.2%	5.2%	36,563	27,073	74.0%	7,878	42,197	
Iberia YE 31/12	Jan-Mar 05	1,531	1,571	-40	-21	-2.6%	-1.4%	15,261	11,421	74.8%	6,181	24,044
	Apr-Jun 05	1,466	1,392	74	54	5.0%	3.7%	15,843	11,939	75.4%	7,242	24,435
	Jul-Sep 05	1,439	1,368	71	53	4.9%	3.7%	16,659	13,619	81.8%	7,656	25,069
	Oct-Dec 05	1,451	1,504	-53	-7	-3.7%	-0.5%	15,864	12,082	76.2%	6,596	23,845
	Year 2005	5,808	5,712	96	608	1.7%	10.5%	63,628	49,060	77.1%	27,675	24,160
	Jan-Mar 06	1,457	1,536	-79	-54	-5.4%	-3.7%	15,689	11,876	75.7%	6,300	23,772
	Apr-Jun 06	1,816	1,753	63	44	3.5%	2.4%	16,809	13,420	79.8%	7,461	24,109
	Jul-Sep 06	1,825	1,700	125	96	6.8%	5.3%	16,846	14,065	83.5%	7,354	22,721
	Oct-Dec 06	1,811	1,750	61	-12	3.4%	-0.7%	16,458	13,132	79.8%	6,682	
	Year 2006	5,388	5,266	122	57	2.3%	1.1%	65,802	52,493	79.8%	27,799	23,901
Lufthansa YE 31/12	Jan-Mar 05	5,041	5,079	-38	-150	-0.8%	-3.0%	32,477	23,793	73.3%	11,190	
	Apr-Jun 05	5,487	5,138	349	140	6.4%	2.6%	37,700	28,178	74.7%	13,583	
	Jul-Sep 05	5,798	5,411	387	501	6.7%	8.6%	38,967	30,466	78.2%	14,203	
	Year 2005	21,397	20,545	852	725	4.0%	3.4%	144,182	108,185	75.0%	51,260	90,811
	Jan-Mar 06	5,369	5,460	-91	-118	-1.7%	-2.2%	33,494	24,044	71.8%	11,442	
	Apr-Jun 06	6,529	6,203	326	142	5.0%	2.2%	37,797	28,603	75.7%	14,106	
	Jul-Sep 06	6,765	6,188	577	461	8.5%	6.8%	39,225	30,627	78.1%	14,781	
	Year 2006	26,206	25,090	1,116	1,060	4.3%	4.0%	146,720	110,330	75.2%	53,432	93,541
SAS YE 31/12	Apr-Jun 05	2,046	1,925	121	64	5.9%	3.1%	13,810	9,259	67.0%	9,357	32,285
	Jul-Sep 05	2,140	2,036	104	68	4.9%	3.2%	13,599	9,838	72.3%	9,325	
	Oct-Dec 05	2,050	1,966	84	25	4.1%	1.2%	12,880	8,646	67.1%	8,945	
	Year 2005	7,789	7,717	173	32	2.2%	0.4%	38,454	26,487	68.9%	23,799	32,363
	Jan-Mar 06	1,078	1,064	-150	-137	-13.9%	-12.7%	12,275	8,179	66.6%	8,532	31,528
	Apr-Jun 06	2,439	2,319	120	75	4.9%	3.1%	14,005	10,325	74.0%	10,325	32,622
	Jul-Sep 06	2,476	2,318	158	83	6.4%	3.4%	14,086	10,745	76.3%	10,141	32,772
	Oct-Dec 06	2,215	2,121	94	679	4.2%	30.7%	13,405	9,162	68.4%	9,611	25,534
Year 2006	5,270	5,010	260	169	4.9%	3.2%	36,971	27,506	74.4%	25,100	31,965	
Ryanair YE 31/03	Year 2004/05	1,727	1,301	426	345	24.7%	20.0%	36,611	31,205	84.0%	27,593	
	Apr-Jun 05	488	392	96	84	19.7%	17.2%			83.4%	8,500	2,764
	Jul-Sep 05	652	409	244	208	37.4%	31.9%				9,500	2,987
	Oct-Dec 05	439	381	58	44	13.2%	10.0%			83.0%	8,600	2,963
	Year 2005/06	2,045	1,598	447	371	21.9%	18.1%			83.0%	34,768	3,063
	Apr-Jun 06	711	539	172	146	24.2%	20.5%				10,700	
	Jul-Sep 06	864	553	313	268	36.2%	31.0%				11,481	3,881
Oct-Dec 06	651	575	76	63	11.7%	9.7%			82.0%	10,300	4,209	
easyJet YE 31/03	Year 2003/04	1,963	1,871	92	74	4.7%	3.8%	25,448	21,566	84.5%	24,300	3,727
	Oct-Mar 05	1,039	1,116	-77	-41	-7.4%	-3.9%	14,526	12,150	83.8%	13,500	
	Year 2004/05	2,364	2,278	86	76	3.6%	3.2%	32,141	27,448	85.2%	29,600	4,152
	Oct-Mar 06	1,095	1,177	-82	-50	-7.5%	-4.6%	16,672	13,642	81.8%	14,900	
	Year 2005/06	3,034	2,813	221	176	7.3%	5.8%	37,088	31,621	84.8%	33,000	4,859

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation.

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 2003/04	11,529	11,204	325	234	2.8%	2.0%	87,772	55,807	63.6%	44,800	28,870
	Year 2004/05	12,024	11,301	723	251	6.0%	2.1%	85,838	55,807	65.0%	48,860	29,098
	Year 2005/06	12,040	11,259	781	235	6.5%	2.0%	86,933	58,949	67.8%	49,920	22,170
Cathay Pacific												
YE 31/12	Year 2004	5,024	4,350	674	581	13.4%	11.6%	74,062	57,283	77.3%	13,664	15,054
	Jan-Jun 05	3,074	2,799	275	225	8.9%	7.3%	39,535	30,877	78.1%	7,333	15,400
	Year 2005	6,548	6,015	533	424	8.1%	6.5%	82,766	65,110	78.7%	15,440	15,447
	Jan-Jun 06	3,473	3,201	272	225	7.8%	6.5%	43,814	34,657	79.1%	8,144	
	Year 2006	7,824	7,274	550	526	7.0%	6.7%	89,117	71,171	79.9%	16,730	
JAL												
YE 31/03	Year 2003/04	18,398	19,042	-644	-844	-3.5%	-4.6%	145,900	93,847	64.3%	58,241	21,197
	Year 2004/05	19,905	19,381	524	281	2.6%	1.4%	151,902	102,354	67.4%	59,448	53,962
	Year 2005/06	19,346	19,582	-236	-416	-1.2%	-2.2%	148,591	100,345	67.5%	58,040	53,010
Korean Air												
YE 31/12	Year 2003	5,172	4,911	261	-202	5.0%	-3.9%	59,074	40,507	68.6%	21,811	15,352
	Year 2004	6,332	5,994	338	414	5.3%	6.5%	64,533	45,879	71.1%	21,280	14,994
	Year 2005	7,439	7,016	423	198	5.7%	2.7%	66,658	49,046	71.4%	21,710	17,573
	Year 2006	8,498	7,975	523	363	6.2%	4.3%	71,895	52,178	72.6%	22,140	16,623
Malaysian												
YE 31/03	Year 2003/04	2,308	2,258	50	121	2.2%	5.2%	55,692	37,659	67.6%	15,375	20,789
	Year 2004/05	2,882	2,798	84	86	2.9%	3.0%	64,115	44,226	69.0%	17,536	22,513
	Year 2005/06	3,141	3,555	-414	-421	-13.2%	-13.4%	65,099	46,122	70.8%	17,910	20,324
Qantas												
YE 30/06	Year 2003/04	7,838	7,079	759	448	9.7%	5.7%	104,200	81,276	78.0%	30,076	33,862
	Jul-Dec 04	5,017	4,493	524	358	10.4%	7.1%	57,402	43,907	76.5%	16,548	35,310
	Year 2004/05	9,524	8,679	845	575	8.9%	6.0%	114,003	86,986	76.3%	32,660	35,520
	Jul-Dec 05	4,999	4,626	373	258	7.5%	5.2%	59,074	45,794	77.5%	17,260	35,158
	Year 2005/06	10,186	8,711	1,475	542	14.5%	5.3%	118,070	90,899	77.0%	34,080	34,832
	Jul-Dec 06	6,099	5,588	511	283	8.4%	4.6%	61,272	49,160	80.2%	18,538	
Singapore												
YE 31/03	Year 2003/04	5,732	5,332	400	525	7.0%	9.2%	88,253	64,685	73.3%	13,278	14,010
	Year 2004/05	7,276	6,455	821	841	11.3%	11.6%	104,662	77,594	74.1%	15,944	13,572
	Year 2005/06	6,201	5,809	392	449	6.3%	7.2%	109,484	82,742	75.6%	17,000	13,729
Air China												
YE 31/03	Year 2004	4,050	3,508	542	288	13.4%	7.1%	64,894	46,644	71.9%	24,500	29,133
	Year 2005	4,681	4,232	449	294	9.6%	6.3%	70,670	52,453	74.2%	27,690	18,447
	Year 2006	5,647	5,331	316	338	5.6%	6.0%	79,383	60,276	75.9%	31,490	18,872
China Southern												
YE 31/03	Year 2004	2,897	2,787	110	19	3.8%	0.7%	53,769	37,196	69.2%	28,210	18,221
	Year 2005	4,682	4,842	-160	-226	-3.4%	-4.8%	88,361	61,923	70.1%	44,120	34,417
	Year 2006	5,808	5,769	39	26	0.7%	0.4%	97,044	69,575	71.7%	49,200	45,000
China Eastern												
YE 31/03	Year 2004	2,584	2,524	60	39	2.3%	1.5%	41,599	27,581	66.3%	17,710	20,817
	Year 2005	3,356	3,372	-16	-57	-0.5%	-1.7%	52,428	36,381	69.4%	24,290	29,746
	Year 2006	3,825	4,201	-376	-416	-9.8%	-10.9%	70,428	50,243	71.3%	35,020	35,000

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

Aviation Strategy

Databases

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 %
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
2004	220.6	144.2	65.4	224.0	182.9	81.6	153.6	119.9	78.0	535.2	428.7	80.1	795.7	600.7	75.5
2005	309.3	207.7	67.2	225.9	186.6	82.6	168.6	134.4	79.7	562.6	456.4	81.1	830.8	639.3	76.9
2006	329.9	226.6	68.7	230.5	188.0	81.5	182.7	147.5	80.7	588.2	478.4	81.3	874.6	677.3	77.4
Mar-07	28.1	18.8	66.9	18.3	15.0	81.9	15.8	13.3	83.9	50.1	41.4	82.8	74.4	58.1	78.1
Ann. change	4.5%	8.3%	2.4	4.2%	4.9%	0.6	2.7%	9.3%	5.0	4.1%	7.6%	2.7	4.8%	8.5%	2.7
Jan-Mar 07	79.1	49.6	62.7	51.4	39.2	76.3	45.5	37.9	82.1	143.5	115.6	80.5	212.3	159.6	75.2
Ann. change	4.8%	7.0%	1.3	3.4%	3.1%	-0.2	2.7%	6.1%	2.6	4.0%	5.7%	1.3	4.9%	6.6%	1.2

Source: AEA

NINE LARGEST US PASSENGER AIRLINES 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 %
2005 Q1	227.9	170.0	74.6	38.2	29.4	77.0	26.5	21.6	81.5	26.9	19.9	73.9	91.6	70.9	77.4
Q2	237.5	188.8	79.5	45.6	39.1	85.6	27.6	23.2	84.1	25.4	17.9	70.6	98.6	80.2	81.3
Q3	239.1	192.4	80.4	49.5	42.2	85.3	28.9	24.2	83.7	25.0	18.8	75.2	103.4	85.2	82.4
Q4	225.1	172.2	76.4	41.9	33.2	79.2	27.4	22.3	81.4	24.2	17.2	71.1	93.5	72.7	77.8
2005	929.6	723.4	77.8	175.2	143.9	82.1	110.4	91.3	82.7	101.5	73.8	72.7	387.1	309.0	79.8
2006 Q1	219.2	169.3	77.2	39.6	29.7	75.0	26.1	21.7	83.2	28.2	21.1	74.8	93.9	72.5	77.2
Q2	228.1	188.3	82.6	49.7	42.1	84.7	28.2	23.9	84.7	26.3	20.4	77.6	104.2	86.4	82.9
Q3	232.2	187.9	80.9	54.0	45.3	83.9	28.7	24.4	85.0	26.3	20.4	77.6	109.0	90.1	82.7

Note: Legacy airlines are American, Continental, Delta, Northwest, United and USAirways. Statistics also include Alaska, America West and Southwest.

JET ORDERS

	Date	Buyer	Order	Delivery	Other information/engines
Boeing	02 May	Copa	4 x 737-800		
	26 Apr	S7 Group	10 x 737-800		
	26 Apr	SpiceJet	10 x 737-800		
	24 Apr	Virgin Atlantic	15 x 787-900		plus 8 options and 20 purchase rights
	23 Apr	Av. Cap. Group	15 x 737, 5 x 787		
	19 Apr	CIT Group	5 x 737-700		
Airbus	09 May	Flyington Freight.	6 x A330-200F	2H 2009	
	07 May	Emirates	4 x A380		
	23 Apr	Av. Cap. Group	20 x A320 family		
	17 Apr	Israir	3 x A320		
Embraer					
Bombardier	11 May	Tatarstan A/L	6 x CRJ900		

Note: Only firm orders from identifiable airlines/lessors are included.

Source: Manufacturers

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