Issue No: 114

Aviation Strategy

April 2007

Ryanair on the Atlantic

Transatlantic open skies appears to have acted as a catalyst for startling change in the long haul sector. Ryanair's announcement that it will enter the long haul business, in approximately four years time, with an upcoming order for 50 787s or maybe A350s, represents potentially a big shake-up in the Europe-US market. It is an indication that Ryanair had serious operational ambitions when it built up its stake in Aer Lingus, now frustrated by the EC's competition concerns. It may also be a recognition of the limits to growth in the intra-European LCC market.

For the European network carriers, Ryanair on the long haul horizon must be a worry despite their initial dismissive reactions. Lufthansa and Air France have been willing to absorb very heavy losses on their intra-European operations, as LCCs have captured point-to-point traffic and undermined yield, in order to assure feed to their intercontinental hubs. Now they face the prospect of an LCC attacking their point-to-point long haul business, and not just economy passengers, as Ryanair also plans to offer a premium cabin.

There are, however, a series of questions about how Ryanair will make its long haul airline work, how it will establish its cost advantage, and when it will be able to start up.

The key may be the 787 price that Boeing will be able to provide to one of its most favoured customers. But Boeing isn't under any particular pressure to discount, having a firm orderbook of about 550 units and delivery slots booked up until 2011/12. Maybe Ryanair, which is one of five airlines consulting with Boeing on the 737 replacement programme, has already started to negotiate (speculation surrounds a 30-unit order for an "undisclosed" purchaser revealed in mid April). The alternative is a deal with Airbus on the A350.

Ryanair will transfer its economies of simplicity to the long haul sector, selling only point to point tickets and only through the internet. Marketing will be high-profile but low cost; the €10 headline fares have already generated great publicity. The carrier will continue to eschew interlining and connecting services, though at its main bases, Stansted in particular, it should pick up a significant volume of self-connecting business passengers flying into STN from obscure points on the Ryanair network, flying out on the long-hauls (without, of course, any hope of compensation if they miss their connection). Presumably coordinated coach services will transport passengers to city centres, a source of ancillary income to add to onboard sales, car hire agreements and hotel booking commissions.

Ryanair could potentially launch transatlantic services from Frankfurt Hahn, Marseilles and probably Bergamo, though Paris Beauvais, Rome Ciampino and Girona are runway restricted. It will be interesting to observe customer reaction - fares are of course the main selling point but long haul non-connecting travellers might also be attracted to the lower stress levels offered by some relatively uncongested, simple lay-out airports compared to the majors' hubs.

www.aviationeconomics.com

CONTENTS

PUBLISHER

Aviation Economics

James House, 1st Floor
22/24 Corsham Street
London N1 6DR

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

e-mail: info@aviationeconomics.com

Delta: From bankruptcy to industry-leading financials?

Aviation Strategy
is published 10 times a year
by **_Aviation Economics_**

Editor:
Keith McMullan
kgm@aviationeconomics.com

Contributing Editor:
Heini Nuutinen

Contributing Editor:
Nick Moreno

Sub-editor:
Julian Longin
jil@aviationeconomics.com

Subscriptions:
info@aviationeconomics.com

Tel: +44 (0)20 7490 5215

Aviation Economics
Registered No: 2967706
(England)

Registered Office:
James House, 1st Floor
22/24 Corsham St
London N1 6DR
VAT No: 701780947

ISSN 1463-9254

Having fended off a hostile takeover bid from US Airways back in January, Delta Air Lines is now on course to emerge from Chapter 11 as a standalone entity at the end of April. The Atlanta-based carrier, which has been in bankruptcy since September 2005, has made a comprehensive effort to reshape itself. It looks to be a perfect example of Chapter 11 transformation, but are its business plan forecasts realistic?

Delta still needs final creditor and bankruptcy court approvals for its Plan of Reorganization (POR), which was originally filed on December 19 and amended in late January. The plan must be approved by at least 51% of the creditors and two-thirds of the dollar amount of claims. The voting deadline is April 9, and the bankruptcy court has scheduled a confirmation hearing for April 25. If all goes well, Delta hopes to emerge from Chapter 11 on April 30 or shortly thereafter and re-list its stock on the NYSE (under its historic ticker symbol "DAL") in the first week of May.

Creditor approval is virtually certain. The official committee of unsecured creditors and the two official retiree committees all support the plan; after all, they have worked very closely with Delta's management in the past two months in finalising key aspects of the POR. No major new objections have been raised. And, as of the end of March, there appeared to be no competing plans in the works.

Back in January, Delta made some important concessions and ceded authority in return for the creditors' committee not supporting US Airways' hostile bid, which was withdrawn on January 31. Most importantly, the creditors' committee gained the right to appoint 10 of the 11 post-bankruptcy board directors (of which three had to be current directors). Delta also agreed to exclude from its new charter and bylaws any poison-pill provisions that could be used to block future merger deals.

The unsecured creditors, which will be major shareholders in the reorganised company, merely wanted to make sure that Delta's board and leadership would be open to potential future mergers and acquisitions, should such opportunities arise. But those moves certainly added an unusual twist to the final months of Delta's Chapter 11 reorganisation.

In recent weeks, Delta and the creditors have finalised the company's post-bankruptcy compensation plans, corporate bylaws and the board of directors. The new board, announced on March 30, includes seven new appointees - all current or former executives of large US companies. Ex-Continental chief Gordon Bethune, who acted as advisor to the creditors' committee on the US Airways bid, is not included, but ex-Northwest CEO Richard Anderson is. Ex-Eastman Kodak CEO Daniel Carp will be chairman. The one director guaranteed a board seat is Delta's CEO - currently Gerald Grinstein, 74, who will retire after the post-bankruptcy board has named a successor.

Delta has had Chapter 11 exit financing commitments in place since late January. Unlike US Airways, but like UAL, it has raised no new equity. It has lined up $2.5bn in secured debt financing from a group of prestigious financial institutions, including JP Morgan, Goldman Sachs, Merrill Lynch, Lehman Brothers, UBS and Barclays Capital. The financing, which has competitive terms and comprises a $1bn first-lien revolving credit facility and $1.5bn in secured term loans, will replace Delta's $2.1bn DIP financing and boost its cash position. Since it is all secured financing backed by attractive collateral, risks to the lenders are obviously minimal.

Finally, Delta has accomplished something that bankrupt companies usually avoid until well after their emergence from Chapter 11: it held a "2007 Investor Day" at its Atlanta headquarters on March 27. This was despite the fact that many shareholders got burned in the lead-up to the Chapter 11 filing and those still hanging on will receive nothing when the current stock is cancelled upon Chapter 11 exit. But, based on what happened with US Airways and United, many analysts will be keen to quickly reintroduce coverage of Delta. The many hours of management presentations (also via the Internet) were extremely helpful.

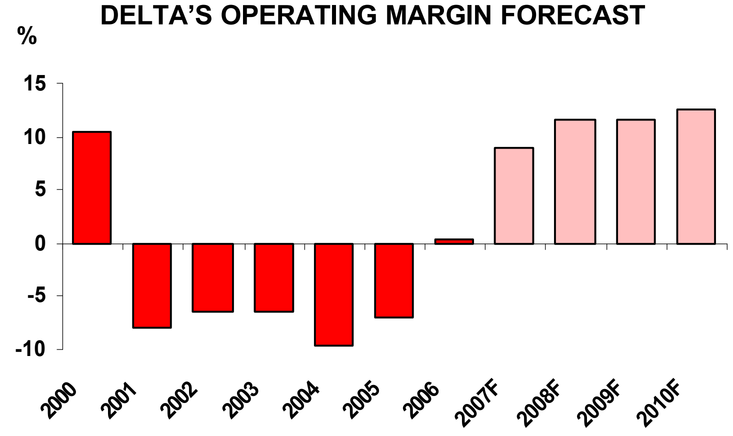
Delta's ability to hold an investor day at this stage may be another example of the reduced stigma associated with bankruptcy. But another reason is that Delta has a great story to sell. First, the airline has achieved an impressive financial turnaround in the past 18 months. Second, like United a year ago, Delta emerges from bankruptcy with a formidable global network.

Financial turnaround

Ironically, Delta entered the post-September 2001 industry crisis in great financial shape. It had earned double-digit operating margins and net profits in the region of $1bn for five consecutive years up to and including 2000. The famous (and much-maligned) 1994-96 "Leadership 7.5" project had made it the lowest-cost major network carrier in the US. Delta retained that cost structure in the boom years of the late 1990s, thanks to a favourable four-year pilot contract in April 2006, low-fare subsidiary Delta Express (October 2006) and tight cost controls. As a result of a mid-1990s restructuring, Delta also had a strong balance sheet and investment-grade credit ratings.

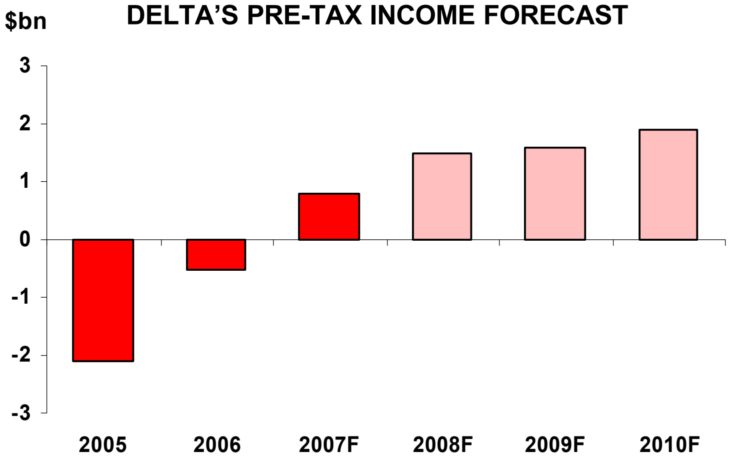
But the strong balance sheet turned out to be a mixed blessing: it enabled Delta to continue to tap the capital markets for funds to a much greater extent than the other legacies, despite losing just as heavily post-2000. Also, Delta was unlucky with the timing of its labour negotiations: it happened to be the last major carrier to sign an expensive pilot deal before September 2001, making its pilots the highest-paid in the industry. Between 1999 and 2003, as its unit costs surged from 8.80 to 10.58 cents per ASM, Delta not only lost its CASM advantage but

DELTA'S OPERATING MARGIN FORECAST



Note: Excludes projected profit sharing payments in 2007-2010
Source: Forecasts from Delta Investor Presentation, 27 March 2007

DELTA'S PRE-TAX INCOME FORECAST

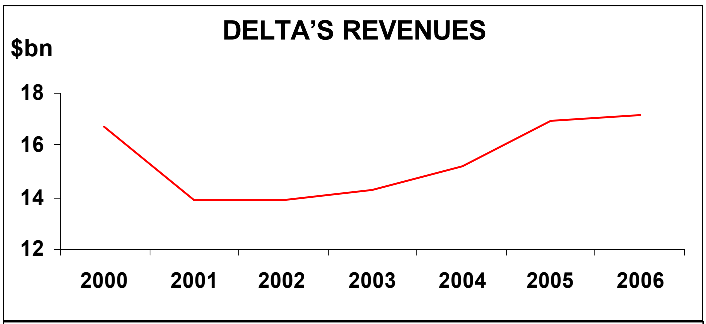


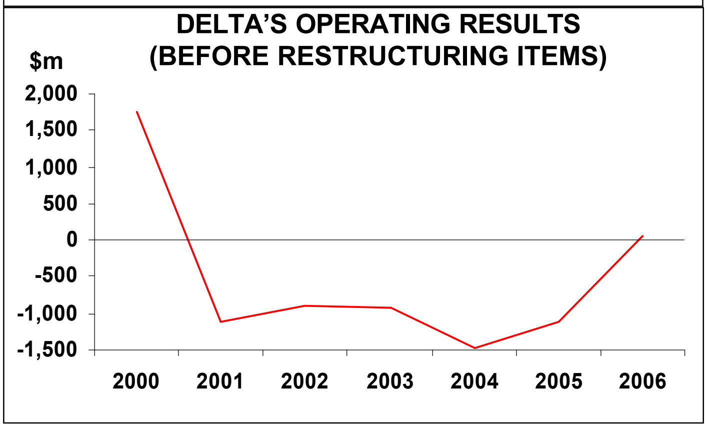
Note: Excludes projected profit sharing payments in 2007-2010
Source: Forecasts from Delta Investor Presentation, 27 March 2007

became one of the highest-cost large network carriers.

But, because Delta's balance sheet was still relatively strong in 2002 and 2003, it could do nothing but watch helplessly as United and American, in their Chapter 11 and near-Chapter 11 situations respectively, extracted significant cost concessions from their pilots in 2003. In other words, Delta happened to be financially strong at precisely the wrong point in the industry (pilot contract) cycle.

In the five years up to and including 2005, Delta's net losses before special and restructuring items totalled $7.5bn, including losses of $2.3bn and $2.2bn in 2004 and 2005, respectively. Total lease-adjusted debt surged by a similar amount, from $11.2bn in





2000 to $18.9bn at the end of 2004.

Delta did manage to garner up $5bn of annual cost reductions and revenue enhancements before its bankruptcy, including $1.1bn of pilot concessions and $1.8bn savings from other employee groups. But it was not enough and the company filed for Chapter 11 on September 14, 2005 (coincidentally on the same day as Northwest).

Delta's financial turnaround in Chapter 11 has been swift and strong. The leadership noted at the late-March investor event that the company's economic performance had improved by $2.1bn in the past 16-17 months, despite a $1bn higher fuel bill.

The airline attributed the past year's improvements to revenue and cost measures implemented in Chapter 11, revenue and network productivity improvements, in-court restructuring initiatives and labour cost reductions. However, 2006 was a good year for all legacy carriers - Delta's own comparisons show that while the two Chapter 11 carriers (Delta and Northwest) saw their pre-tax income surge by about $1.6bn, Continental's also rose by $1bn and AMR's by $908m.

Delta earned its first operating profit in six years in 2006 - a marginal $58m on revenues of $17.2bn. Significantly, the airline generated $1.2bn of free cash flow last year - its first positive free cash flow since 1998. The net loss before special and restructuring items was $406m, representing a $1.8bn improvement over 2005. The reported 2006 net loss was $6.2bn, which included the same amount ($6.2bn) of reorganisation charges, a $310m accounting-related charge and a $765m income tax benefit.

The full-year, second-half and fourth-quarter 2006 operating margins were still measurably below those achieved by other legacy carriers. However, Delta argued that if the second-half results were adjusted for a common fuel price of $2 per gallon and for the now-terminated pilot pension plan, it was already "in the middle of the pack" with a 5.5% operating margin.

The Chapter 11 reorganisation

Delta's reorganisation plan estimates an initial equity value of about $10bn and a recovery to unsecured creditors of 62-78 cents on the dollar (76-100 cents in the case of regional subsidiary Comair). The unsecured creditors will receive primarily new Delta common stock to settle their claims. Contrary to earlier expectations, Delta no longer plans an equity rights offering, which would have allowed creditors to buy additional shares.

The bulk of the new stock will go to the unsecured creditors, which hold $15bn in claims ($14.2bn for Delta and $800m for Comair). Most of the claims are from groups that are not traditional holders of equity (US Bancorp, Bank of New York, etc.), so there is likely to be a large initial turnover. Delta's pilots (current and retired) and the Pension Benefit Guaranty Corporation (PBGC) will also be major initial shareholders, due to their $3.3bn and $2.2bn respective claims. Delta's non-union employees will be allocated a 3.5% ownership stake, while management employees will get about 2.4%.

After the Chapter 11 filing, Delta set a goal of achieving $3bn in annual financial improvements by the end of 2007. That target was reached a year ahead of schedule, so additional cost cuts and revenue enhancements are now expected in 2007.

Much of the financial improvement has obviously been achieved through the usual in-court restructuring facilitated by Chapter 11: debt, lease and facility restructurings, aircraft lease renegotiations and rejections, vendor contract renegotiations and labour cost reductions.

However, Delta's reorganisation has been notable for the wide-ranging efforts made to re-engineer the company, rather than just cut costs, reduce debt and shore up the balance sheet. Some of the $3bn financial improvement has come from higher revenue generation and network productivity improvements. The key accomplishments have included simplifying the fleet by retiring four aircraft types, right-sizing domestic operations, undertaking significant international expansion, increasing point-to-point flying and right-sizing and simplifying domestic hubs.

Delta has used the Chapter 11 process to reject, return or sell a significant number of aircraft - the tally at year-end was 188. It had reviewed facility agreements at 55 locations and rejected or restructured leases at airports such as Dallas, Orlando and Tampa. At the end of March, negotiations still continued in respect of various aircraft and facility agreements.

Recently amended contracts with several regional partners will facilitate cost savings this year. Two deals announced in March incorporate lower fees and some reduction in 50-seat RJ flying; partners Mesa and Republic are receiving unsecured claims of $35m and $91m, respectively. Delta also anticipates significant savings through Comair's Chapter 11 restructuring. However, Delta has assumed its contract obligations with ASA and SkyWest. It has also granted Mesa a new contract to operate 14 CRJ-900s and signed up ExpressJet and Mesaba's Big Sky unit as new regional partners.

The key labour milestone was a comprehensive agreement with ALPA, effective June 2006 and amendable at the end of 2009. The pilots agreed to reduced pay rates and benefits, changes in work rules and the termination of their defined benefit pension plan. In return, ALPA is receiving a $2.1bn unsecured claim and $650m in unsecured 15-year notes. A similar deal was clinched with the flight dispatchers (the only other union at Delta), which are also receiving an unsecured pre-petition claim.

The pilot wage and work rule concessions are expected to result in $280m annual cost savings in the contract period. Other employee groups have contributed an aggregate $600m-plus in annual savings in the form of pay and benefit reductions and staff cuts, and retiree healthcare benefit changes will result in a further $50m saving.

The termination of the pilot defined benefit pension plan, effective September 2006, reduced Delta's pension obligations by $5.2bn to $7.6bn at the end of 2006. Other retiree benefit obligations were reduced by $859m to $1.2bn. The PBGC, which took over the pilot pension plan at year-end, will be issued $225m in senior unsecured 15-year notes in addition to the $2.2bn unsecured claim.

Thanks to the Pension Protection Act of August 2006, which allows US airlines to significantly reduce their near-term pension funding obligations, Delta has been able to preserve its defined benefit pension plan covering ground employees and flight attendants. Funding requirements under that plan are expected to be only around $100m annually in the next few years.

One of Delta's most impressive moves - which just may help ensure continuation of the surprisingly strong staff morale seen in recent months (partly because employees united to oppose the US Airways bid) - is an unusually generous post-bankruptcy compensation programme. The company announced in late March, first of all, that its 39,000 non-union employees (excluding officers and directors) will receive $350m worth of stock and $130m in cash lump sum payments upon the Chapter 11 exit. This is separate from the benefits secured by the two unions as part of their concessionary new contracts. Such a broad-based stock award involving non-union workers is probably unprecedented for a company emerging from Chapter 11. Second, the non-contract employees will begin receiving pay increases this summer. Delta has made a commitment to move towards an industry-standard pay structure over time.

Delta is also introducing a generous profit-sharing plan that will pay out at least 15% of the company's annual pre-tax profit, with no thresholds. There will be new incentive performance awards and a new defined contribution retirement benefit, offered to enhance existing pension plans. All the employees (including the pilots and the flight dispatchers) will participate in those programmes.

These measures were reportedly explicitly designed to surpass what other airlines have offered when emerging from Chapter 11, to prevent unionisation (currently only 17% of employees), to ensure that people remain flexible to route and schedule changes and to maintain a happy frontline workforce as Delta strives to raise unit revenues.

Equally importantly, management and leadership pay and stock awards have been kept modest to avoid the sort of anger and criticism that UAL and other companies have provoked with their big top executive payouts upon Chapter 11 exit. While around 1,200 Delta management employees will receive restricted stock, stock options and performance stock representing about 2.4% of Delta's value (vesting over periods of up to three years), officers and directors will not receive pay increases until frontline employees have reached industry standard pay. CEO Grinstein has refused an exit bonus; instead, at his request, the company is setting up two charitable foundations to provide scholarship and hardship assistance for Delta employees.

Delta's business plan

Delta's business plan has three goals: closing the unit revenue gap with its peers, maintaining the lowest unit costs among the large network carriers and achieving top-tier financial and operational results. A further goal is to achieve an industry-leading balance sheet that will allow reinvestment.

Closing the RASM gap: The focus of the business plan is very much on revenues, because Delta's former strong revenue position (a decade or so ago) had by 2005 deteriorated to such an extent that its RASM was only 86% of the industry (ATA) average. The airline estimated that the 14-point RASM gap represented $2.5bn of lost revenues.

The airline believes that the RASM gap was driven by three roughly equally important factors. First, Delta carried the highest percentage of (lower-yielding) connecting traffic among the network carriers - partly because it had a 22% larger average gauge in domestic operations and because it had significant capacity at relatively small hubs such as Cincinnati. Second, in 2005 Delta had a much lower percentage of international traffic than its peers (low 20s, compared to an average of 35% for competitors). Third, and most challengingly, Delta's non-stop domestic yields are lower than the other networks' - reflecting factors such as a heavy East Coast presence, competition with AirTran at Atlanta and a tertiary position at New York (resulting in lower transcontinental yields than American's and United's).

Consequently, while in Chapter 11 Delta has focused on fixing those problems. First, it has right-sized domestic operations, among other things, by utilising smaller aircraft; this led to a 16% reduction in domestic capacity in 2006. Second, Delta has grown internationally by shifting widebody aircraft from domestic to international routes; international capacity rose by 21% in 2006. Third, the airline has increased point-to-point flying and right-sized and simplified domestic hubs to achieve a greater local traffic mix.

As a result, Delta's length-of-haul adjusted PRASM surged by 17.8% in 2006, compared to an industry average increase of 10.7% (in a relatively healthy overall revenue environment). The airline reduced the RASM gap by seven points, to 93% in 2006. The aim is to achieve industry parity by the end of 2008.

Having restructured its network and operations, Delta is now focusing on improving the basic product in order to establish itself as "the airline of choice". In the first place, this has meant improving on-time performance and customer service, increasing the frequency of aircraft cleaning and upgrading in-flight entertainment. Delta has also invested in new technology, products, equipment and facilities in Atlanta to improve all aspects of the customer experience.

Unlike United, Delta has not introduced any type of "premium economy" service, and it does not really have a brand - things that would help attract business traffic and make a mark in markets such as New York and Los Angeles. In other words, Delta is not doing anything exciting or extraordinary - just positioning itself as a good network carrier. But Delta's top executives indicated at the investor event that "revitalising" the brand would follow after Chapter 11. The priority is to "absolutely nail down and execute our two-product strategy" before considering premium economy maybe in a couple of years.

Best-in-class CASM? Following the $5bn pre-bankruptcy cost cuts, Delta eliminated $2bn from its cost structure while in Chapter 11 - through improved productivity, fleet simplification and renegotiated contracts. As a result, the airline has reduced its mainline non-fuel CASM by 20% in the past three years, from 8.99 cents in 2003 to 7.20 cents in 2006, despite a 6.6% capacity reduction in that period. Significantly, Delta projects a further non-fuel CASM decline in 2007, to 6.60 cents. That would mean a 27% unit cost reduction in four years.

Delta is claiming that it is emerging from Chapter 11 with the lowest unit costs of any network carrier and that it is closing the gap with LCCs. According to Delta, its mainline stage-length adjusted non-fuel CASM of 6.93 cents in the second half of 2006 was 12-13% below American's and Continental's and 15% below United's though still above Northwest's 6.78 cents. However, when adjusted for the elimination of the pilot pension plan, Delta's 2H06 CASM of 6.71 was below Northwest's. The full-year projected CASM of 6.60 cents would even bring Delta close to US Airways' LCC-type CASM of 6.54 cents.

These comparisons have to be taken with a pinch of salt, because each airline comes up with a different set of figures. Furthermore, what matters the most is what your main competitors' cost levels are. AirTran has claimed that it has actually increased its cost advantage over Delta despite the latter's bankruptcy.

Delta's aim is to sustain a low average unit cost and it recognises that the process is a "never-ending battle". The airline enjoys some inherent cost advantages: a flexible workforce (due to its minimal unionisation) and a main hub (Atlanta) at a low-cost location.

Industry-leading profits? Delta's business plan projects an amazingly swift financial recovery this year and continuation of strong results in 2008-2010. After only breaking even operationally in 2006, the airline is forecasting a 9% operating margin in 2007, subsequently increasing to the 11-13% range. On a pre-tax basis, Delta anticipates a turnaround from a $452m loss in 2006 to an $816m profit in 2007, to be followed by profits of $1.5bn, $1.6bn and $1.9bn in 2008, 2009 and 2010.

Those forecasts assume 2-4% capacity growth in 2007 (domestic down 1-3% and international up 14-16%), to be followed by 3% annual growth from 2008 onwards. RASM growth is expected to be 4% this year (compared to 1.5% growth for the industry) and 2% in later years. Fuel is assumed to be $2.06 per gallon in 2007 (including taxes), subsequently increasing by 5% annually. Mainline CASM is expected to decline by 7% in 2007, with further reductions in later years.

Many Wall St. analysts have considered Delta's projections "aggressive" or overly optimistic and have questioned them basically on three grounds. First, as one analyst asked, "how can Delta catapult itself from industry laggard to leader profitability-wise in 6-12 months?" Second, can Delta realistically expect to fully close the RASM gap given its heavy exposure to the East Coast and LCCs and in light of the continuing RASM improvements at competitors? Third, would it not be unprecedented to have such strong profits for four consecutive years? What are the GDP growth assumptions?

The 2007 profits are probably achievable because they are largely based on the cost cuts accomplished in Chapter 11 but that came too late to help the 2006 results. Those cost cuts (the pilot pension plan termination and other Chapter 11 deals) will contribute $739m and lower fuel prices could add $107m to this year's bottom line, while a $171m profit sharing will represent a new expense. The $593m revenue contribution (from improved RASM and capacity growth) needed to achieve the projected $816m pre-tax profit is also likely to materialise, given that recent domestic fare increases have stuck and international routes are apparently performing better than expected.

But the longer-term revenue trends are less encouraging. AirTran will continue to be an aggressive competitor at Atlanta. Delta's new focus on New York will bring it into closer contact with Continental and JetBlue, which are currently really fighting it out in the New York area, and potential new transcontinental entrants such as Virgin America. The North Atlantic market, which is a primary focus for Delta, is likely to see increased price competition as a result of the new EU/US agreement. Delta's argument that it can return, on a sustainable basis, to the 12% operating margins seen in the late 1990s seems a little idealistic.

Industry-leading balance sheet: Delta will emerge from Chapter 11 with one of the strongest balance sheets in the industry. Its total lease-adjusted debt has been reduced from $18.6bn in June 2005 to $10.9bn in 2007. Lease-adjusted net debt (after the deduction of cash reserves) has fallen by 55% in the same period, from $16.9bn to $7.6bn, with a further reduction to $6.2bn expected in 2008. Cash reserves at the end of 2006 amounted to $3.5bn, of which $2.6bn was unrestricted - an adequate 20% and 15% of last year's revenues.

According to Delta's annual report, debt maturities (excluding amounts subject to compromise) amount to $1.5bn in 2007, $2.2bn in 2008, $392m in 2009, $1.3bn in 2010 and $2.4bn thereafter. Operating lease payments amount to $1.3bn in 2007, $1.2bn in 2008, $977m in 2009 and $915m in 2010. Capital lease obligations are running at about $100m annually. Delta has $3bn of aircraft order commitments, of which $523m are for 2007, $823m for 2008, $960m for 2009 and $712m for 2010.

Delta anticipates free cash flow in excess of $1.5bn per year in the four-year plan period, which will allow reinvestment in the business as well as continued debt reduction and hopefully credit rating improvement. Investing in baggage handling and ground facilities at various locations will be early priorities.

The airline calls its Net Operating Losses (NOLs) a "significant asset"; they amount to $7.8bn and can be used to offset regular taxable income in full until depleted.

Delta has said that it will continue to seek opportunities to unlock shareholder value, including further monetisation of assets. This may include spinning off wholly-owned subsidiary Comair. Delta sold its other former regional unit, ASA, to regional carrier SkyWest for $425m in August 2005.

Network strategy and plans

Delta's network restructuring has featured a sharp domestic to international shift. In the fourth quarter of 2006, the airline's North American ASMs were down by 11.8% year-over-year, while North Atlantic capacity was up by 27.6% and Latin American capacity by 18.5% (Pacific ASMs were unchanged). The strategy was possible because Delta had a large inventory of widebody aircraft suitable for international operations that were causing revenue dilution in the domestic market.

Since filing for Chapter 11, Delta has added 60-plus new international routes, with many more planned for 2007 and 2008. The airline is moving from a domestic/international capacity split of 80/20 in 2004 to a 60/40 split over the next couple of years; the long-term goal is 50/50.

In addition to becoming more international, Delta is looking to get a more globally balanced network. This means focusing near-term growth on Asia - one of the few large gaps in its network - at the expense of Europe, which saw significant expansion in 2006. Delta's business plan calls for increasing the Asia/Middle East/Africa regions' share of international capacity to 22% by 2009 (from just 3% in 2005), while Europe's share would fall from 70% to 50% and Latin America/Caribbean's share would remain unchanged at 27-28%. That would be similar to Continental's nicely balanced international network.

The new strategies have strengthened Delta's two principal international gateways, Atlanta and New York, while the smaller hubs have contracted. In October 2006, Delta's capacity was 30%, 16% and 5% down year-over-year at Cincinnati, Salt Lake City and Los Angeles, respectively. However, RASM was up at all of the hubs - either due to profitable international growth or reduced capacity - and Delta will resume growing also at Los Angeles and Salt Lake City. The airline is looking to develop Los Angeles as a gateway to Latin America.

Domestic plans: Delta's top priorities in the next two years will be to boost its presence in New York and improve Delta Connection's seriously lagging operational performance.

Delta is the largest carrier in terms of departures at JFK and LaGuardia combined but is not getting its share of premium traffic. The airline is determined to rectify that and attain sustained profitability in New York through measures such as increasing domestic connectivity, upgrading the transcontinental product, implementing an international flight bank split at JFK (this spring) and improving facilities at JFK.

However, JFK poses a tough challenge, because key competitors there have spent years strengthening their positions and building new facilities. Delta will not be able to match American's $1.1bn spending on a new terminal - its current JFK plans feature only $50m spending. Although Delta apparently has got its long-term strategy at JFK sorted out, its facility plans are still up in the air. According to CFO Ed Bastian, the airline "needs to be looking at alternatives" to its current facilities, as competition heats up.

Asia: This year's growth will focus mainly on Asia, spearheaded by new JFK-Mumbai and Atlanta-Seoul flights. The 777-200LR opens many new markets - for example, Delta would like to operate Atlanta-India - and there will also be expansion through codeshares. Delta is seeking Atlanta-Shanghai route authority from March 2008; it is the only large US international carrier without service to China. The airline is proposing daily non-stop 777 flights, with codeshares beyond Shanghai with its partner and future SkyTeam member China Southern.

Europe: Since September 2005 Delta has added nine new European destinations, many of them in Eastern Europe: Budapest, Bucharest, Copenhagen, Dusseldorf, Edinburgh, Kiev, Pisa/Florence, Prague and Vienna. The profitable expansion has been facilitated by the domestic widebodies. Delta is the largest US carrier on the transatlantic, serving 31 destinations.

Delta has supported a liberalised US/EU agreement from its inception, believing that a good cost structure and strong balance sheet will enable it to compete. The top priority is to gain access to London Heathrow, in the first place from Atlanta but also from JFK - routes that the carrier describes as "huge opportunities". In October 2006 Delta bought United's New York-London route authority for $21m; however, under the current ASA it cannot serve Heathrow and has to operate to Gatwick. Having paid United $13m when the deal closed, Delta will not have to make the four subsequent annual payments of $2m due in 2007-2010 if the liberalised US/EU agreement becomes effective.

Delta executives indicated on March 27 that the airline would immediately start investigating how to secure Heathrow slots. One obvious source is SkyTeam partner Air France, which is unlikely to want to operate London-New York but would probably be happy to include its code on Delta-operated flights on that route. Delta, Air France, Alitalia, CSA and Korean have benefited from antitrust immunity in the US since 2002.

Latin America & Caribbean: Delta had added or announced more than 40 new routes to Latin America and the Caribbean since the autumn of 2005. There was a major growth spurt in November/December

2006, when 16 new routes were added in 22 days. Currently 58 destinations are served in the region, mainly from Atlanta and to a lesser extent from New York. This year will see some further growth to Latin America, also from new gateways; most recently, Delta has announced plans to add Los Angeles-Belize City and Fort Lauderdale-Santo Domingo flights in June.

Fleet plans

Delta had a mainline fleet of 440 aircraft at the end of 2006, down from 480 a year earlier. The mainline fleet consisted of eight 777-200ERs, 21 767-400ERs, 59 767-300ERs, 24 767-300s, 121 757-200s, 71 737-800s, 16 MD-90s and 120 MD-88s. Firm orders included five 777-200LRs (plus six options) and ten 737-700s, all for delivery in 2008-2009. Delta has also signed a letter of intent with a third party to lease ten 757-200ERs from July-November for seven years and three 757-200ERs from early 2008 for five years.

Delta also has 50 737-800s on firm order, but it has agreed to sell 48 of those aircraft to third parties immediately after they are delivered in 2007-2010. These sales will reduce the aggregate mainline aircraft order commitments from $3bn to $1bn over the next four years. However, in January the bankruptcy court allowed Delta to place a $1.1bn order for 30 76-seat CRJ-900s (plus 30 options), which will be operated by regional partners.

The domestic down-gauging is achieved by transferring 767-400ERs to international markets and adding 737-700s - and in the future 100-seaters - domestically. The goal is to reduce the 22% domestic gauge gap with the industry to 6%.

Delta is in much less of a hurry than American to retire its MD-80s, because its aircraft are 5-10 years younger, have full electronic cockpits (keeping training costs lower) and have market-rate financings. When ownership costs are taken into account, the MD-88's unit costs are lower than the 737-800's. But Delta has quite a gap between the 144-seat MD-88s and the 70-seat RJs - in the future it will be addressing the issue of whether to get a smaller-gauge aircraft into mainline.

Delta has about 30 internationally capable mainline aircraft coming in the next three years. The 777-200LRs open up a whole series of markets that the airline was not previously able to serve. However, Delta still regards the 767-300s, especially with winglets, as competitive aircraft and well-suited to the North Atlantic.

Nevertheless, re-fleeting is going to be one of Delta's top priorities after it emerges from Chapter 11. The key question will be where the airline stands regarding the 787. Would the 787 be mainly for growth in longer-haul markets or would it replace the 767s?

But the Delta board's first task will be to select a new CEO. Grinstein, who is (unfortunately) retiring, has made it clear that he would like an internal candidate to succeed him because "Delta is an unusual entity and understanding the social network is critical". The two internal front-runners are CFO Ed Bastian and COO Jim Whitehurst - both very impressive candidates, except that they both sounded just a little too bullish on industry mergers when grilled about that subject at the March investor event.

By Heini Nuutinen

Aeroflot battles through chaotic times in Russia

Aeroflot is starting to post significant profits, but the airline is battling against a shambolic Russian aviation industry and a government owner whose indecision continues to hold back Russia's flag carrier. Can Aeroflot overcome these external challenges, or is the airline destined to fall back into the ranks of Europe's niche carriers?

Aeroflot was established in 1923, not long after the end of the Russian civil war, but in 1992 the state airline was divided up into hundreds of regional airlines, with international routes remaining together as Aeroflot Russian International Airlines (ARIA). Later that decade 49% of ARIA was sold to employees, and Aeroflot started building up a domestic network again.

At the start of the current decade its name was modified yet again, to Aeroflot Russian Airlines, and today the airline serves almost 100 destinations in 53 counties around the globe, including 36 in Europe, five in North and Central America, two in Africa, five in the Middle East, nine in Asia and eight in the CIS.

Aeroflot has a 21% share of international traffic to/from Russia and 17% of the domestic market, but international passengers accounted for 62% of Aeroflot's revenue in 2005, and most of Aeroflot's profits come from scheduled routes into Europe. Though more profitable, the reliance of Aeroflot on international traffic means "the company is more vulnerable to external shocks", according to one Russian analyst, and a key part of the company's strategy is to win a much greater share of the domestic market, both in trunk routes and those routes that feed into international services. But perhaps a more important rationale for the domestic push is that Aeroflot wants to build up its position prior to Russia joining the WTO (expected sometime this year), which will oblige the government to open up domestic routes to foreign airlines.

Aggressive expansion began in the domestic market in 2004, and Aeroflot currently serves 25 Russian destinations, but the aim is to grow domestic traffic by more than 20% in 2007 through both new routes and greater frequencies, with a target of a 30% market share domestically by 2010.

Though Aeroflot's yield lags behind all its major western competitors, it is improving (see chart, page 12), and according to Deutsche Bank analysis "the growth in domestic routes will not lead to a deterioration in the quality of its revenues, as domestic yields are only marginally lower than international yields."

In 2006 Aeroflot carried 7.29m passengers - 8.5% up on 2005, but somewhat short of the targeted 8.3m for the year. Load factor reached 70.1% in 2006 (see chart, page 13), one percentage point up on 2005. Excluding its wholly-owned regional subsidiary Aeroflot-Don, mainline Aeroflot carried 6.7m passengers in 2006, which is identical to the 2005 figure. Aeroflot is aiming for 8.3m passengers in 2007 (including its subsidiaries), representing a 14.6% rise, and believes this will be achieved through better fleet utilisation, higher frequencies and better connection with SkyTeam partners. Overall capacity will rise by 11% this year, although this varies greatly by segment, and particularly internationally. There are capacity growth targets of 19.5% on routes to CIS destinations, 16% on European routes and 8.2% to Asian destinations excluding Japan. Traffic to North America (Aeroflot operates 15 flights a week to four US destinations - New York, Los Angeles, Seattle and Washington DC), the Middle East and Japan is forecast to rise by less than 2% this year.

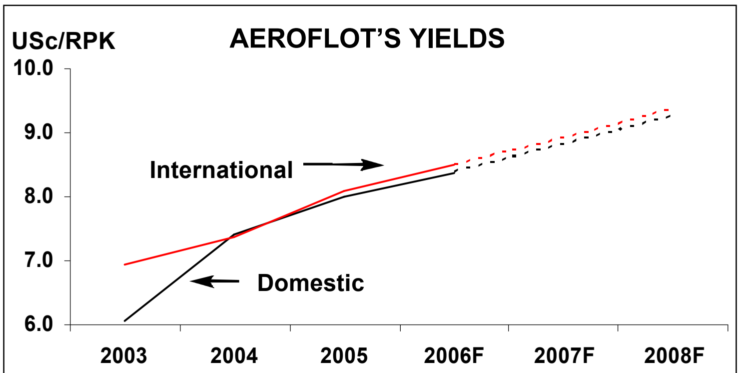
European capacity will increase despite the refusal of the Russian aviation authorities last year to allow Aeroflot to extend its operations in St Petersburg from the current domestic network to up to 30 European destinations. Instead the authorities reserved a European route monopoly at the airport for the airline created by the merger of St, Petersburg-based Rossiya Airlines and Pulkovo Airlines in October 2006 (now operating under the name Rossiya, and owned 100% by the government).

Nevertheless, Aeroflot's domestic expansion in the rest of Russia will mean a further increase in staff numbers. At the end of 2005 the Aeroflot group (including regional subsidiaries) employed around 18,500 staff, of which 17,064 were in airline operations. Though Aeroflot has a relatively bloated employee base that makes productivity poor (see graph, page 14), staff costs are relatively low in Russia compared with western Europe, and employees accounted for 14.9% of costs in 2005 - a percentage considerably lower that at any of its major European rivals.

Aeroflot has, of course, been trying to reduce costs for several years, but the prime motivation for this has been fuel prices, which doubled in Russia over the 2003 to 2005 period. Fuel costs of $741m in 2005 were 49% up on 2004 and accounted for 32.3% of total costs (25.3% in 2004). As a reaction to the rising fuel bill, Aeroflot increased fares by around 15% in 2005, and while international passengers carried remained flat, domestic passengers carried rose by 17.6% in 2005. But Aeroflot hedged only 6% of its fuel needs in 2005, and though fuel costs rose by "just" 26.3% in the first nine months of 2006, to $691.1m, the airline says it is now considering hedging up to 30% of its fuel needs every year. And although the current reduction in fuel prices comes as a relief to Aeroflot, the fact that Russian aircraft are much less fuel efficient than western aircraft has led to an overhaul of the entire fleet. And as a higher proportion of the fleet will be owned going forward, this will also lead to a reduction in aircraft leasing costs (which totalled approximately $180m in 2006).

Other cost-saving initiatives include the construction of a new $100m headquarters for Aeroflot in Moscow (not far from Sheremetyevo), which will be completed in 2010. Once finished, this will save the airline the $10m a year that it currently pays for renting various offices throughout Moscow.

Aeroflot is also tackling distribution costs through a encouraging a higher proportion of telephone and online bookings; the airline is still too dependent on selling tickets via the Russian travel agent network, which accounted for 30% of all sales in 2005.



Source: Rye, Man & Gor Securities.

Good prospects?

Results for full 2006 are likely to be encouraging. In the first nine months of 2006 net profits rose 46.2% to $186.3m (under IFRS standards), with operating profit rising 36.8% to $246m and revenue up 15.7% to $2.1bn. Full year results are expected to come in at $2.66n in revenue, with net profits reaching $218m, more than 14% up on the 2005 figure (see graphs, page 15).

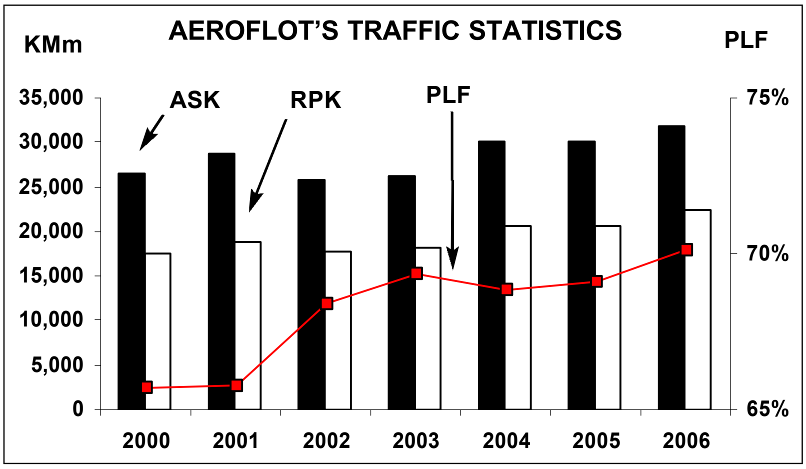
In 2007 Aeroflot's revenue is forecast to grow by 21%, although net profit will remain just above the $200m level, according to Aeroflot CEO Valery Okulov. The latter is due primarily to the need to devote increasing amount of capex to upgrading Russian equipment (which in 2006 included installation of wing enhancements and lighter internal fittings on Tu154s in order to reduce fuel consumption); to the requirement to invest in domestic expansion eastwards; and to the fact that the change to IFRS from Russian accounting standards will reduce net profit by an estimated $100m in 2007, according to Aeroflot.

The good news is that Aeroflot is relatively strong financially. Its debts have been cut substantially, and as at the end of September 2006 Aeroflot's long-term debt was just $106m, while cash and cash equivalents stood at $63m.

Crucially, this year Aeroflot is being boosted by two key strategic developments. 2007 will be the first full year in which Aeroflot reaps the benefits of being in the SkyTeam global alliance (which it joined in April 2006). Aeroflot already codeshares with Delta and has asked for permission to codeshare with fellow SkyTeam members Continental and Northwest. Aeroflot estimates the revenue impact of joining SkyTeam at around $20m a year, but perhaps the more valuable benefit is the raising of some of Aeroflot's operational and commercial practices to the standards requited by SkyTeam. This has included a new reservations system (supplied by Sabre), a proper internet booking facility and the installation of self-service check-in kiosks at Sheremetyevo - all standard practice at international airlines, but not at Aeroflot prior to 2006. The new infrastructure boosted revenues by around $15m in 2006, Aeroflot believes, although the capital cost of the upgrades is considerable.

The second key development is the imminent provision of an efficient, modern hub in Russia (which Aeroflot has never had), when a long-awaited new Terminal Three opens at Moscow's Sheremetyevo airport, the airline's base, at the end of the year. Sheremetyevo has experienced severe overcrowding for several years, but Aeroflot and its partners will transfer all their flights at the airport into the new $430m terminal, which will have a capacity of 10m passengers a year. The terminal will enable easy transfer between domestic and international SkyTeam flights, and also allows Aeroflot to connect passengers arriving on European flights through to connections into Asia and east Russia, with Okulov talking of developing a "bridge between Europe and Asia".

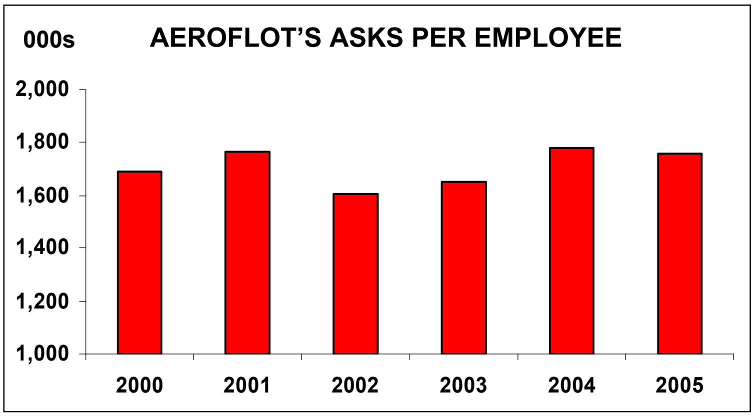
The terminal will boost Aeroflot's profit line by around $20m per year, it is estimated, and Aeroflot is financing the project by selling 45% of the development to two state-owned Russian banks in exchange for $130m in cash as well as a 13-year, $475m loan. In the first part of that deal Vnesheconombank (VEB) bought 20% of the terminal in January, while Vneshtorgbank (VTB) will buy another 25% later this year. After these deals the "net" cost to Aeroflot of the terminal is believed to be around $150m. It's also possi-



ble that Sheremetyevo airport itself may buy another 25% of Aeroflot's share.

The bad news is that at some point over the next few years Aeroflot is going to take a huge hit on its bottom line from the loss of a peculiar hangover from the Soviet era - fees paid by international airlines overflying Siberia. These are collected on the government's behalf by Aeroflot, but the airline retains a staggering 70% of the fees for doing so. It's difficult to calculate the precise amount that this benefits Aeroflot, as the airline does not separate out the overflight revenue/profit. In Aeroflot's 2005 accounts, within "other revenue" there is an "airline revenue agreements" category, which includes overflight revenue as well as revenue from codesharing and pooling; this totalled $357m in 2005. One analyst estimates that overflights were worth $277m in 2004 alone (representing 13% of total revenue in that year). This goes straight to the profit line, with the only deduction being tax. To be fair, other analysts say the figure is lower, at around $100m-$150m per year, although this is still a substantial sum. Following talks with the European Commission, Russia has agreed to abolish these charges by 2012, but the Commission is now putting pressure on Russia to speed up the timetable for abolition, and pressure will intensify once Russia joins the WTO.

A slightly more intangible challenge for Aeroflot is improving passenger service over the next couple of years, although in-flight catering and entertainment has improved substantially recently. However, Aeroflot has



to balance improved services with the need to cut costs - last year the airline introduced a paid-for service for alcoholic drinks in economy class as part of the drive to compensate for higher fuel prices.

Domestic chaos

Aeroflot is facing the same problems as the rest of the Russian aviation sector - increasing penetration by foreign carriers combined with rising fuel prices and an over reliance on ageing, fuel-inefficient Russian aircraft.

In 2005 (the latest year for which data is available) foreign airlines accounted for just over 31% (7.3m passengers) of the international market to/from Russia, with Aeroflot carrying 21% and five other airlines/groups (Vim-Avia group, Sibir, Pulkovo, AirUnion group and TransAero) accounting for 32%. The domestic market is more fragmented, with Aeroflot, Sibir, the AirUnion group (KrasAir, Domodedovo Airlines, OmskAvia, Samara and SibAviaTrans), UTair and Pulkovo accounting for 57% of domestic passengers - although the rest is divided between more than 150 much smaller small airlines.

So far foreign LCCs have not had a major impact in the Russian market. Air Berlin and germanwings operate a handful of routes, but as yet neither easyJet nor Ryanair fly to Russia - although easyJet is believed to be looking at the potential for the market. However, in January the first Russian-based LCC was launched - SkyExpress, which operates a couple of 737s on routes from Moscow's Vnukovo airport to Sochi (a leisure destination), Rostov-on-Don (home of Aeroflot-Don) and Murmansk. The airline was launched by the owners of KrasAir, two Russian investments funds and a number of private investors, although the European Bank for Reconstruction and Development bought a 20% stake in December 2006 for an investment in the region of $10m-$20m.

SkyExpress tickets are sold online and, most importantly, via the network of 40,000 post offices in Russia, as well as a mobile phone retailer. Flights are being offered for as little as $19 and the airline hopes to tap into the large proportion of the population that cannot currently afford to fly (the average salary in Russia is $4,800 per annum). Ironically, despite the plethora of airlines after the break up of Aeroflot, the number of domestic passengers has fallen from 130m to less than 20m a year in the last 15 years, thanks largely to the increase in fares.

SkyExpress will add another six leased 737s through the year, with a planned network of eight domestic routes by the summer and a target of 1.2m passengers carried in 2007. The longer-term target is to build a fleet of 44 aircraft, and if these plans come into fruition this will be a major challenge to Aeroflot, not least because it will encourage other LCCs in the domestic market.

However, the challenge that Aeroflot faces from foreign and domestic competitors are being exacerbated by the chaotic state of the Russian aviation sector, which - while not as bad as in the immediate period after the break-up of the USSR in the 1990s - is still in a state of flux. The core problem is that the industry is still fragmented, even though over the 2000s the number of Russian airlines has halved, from around 400 to less than 200. That's still way too many, even for a country as huge as Russia, particularly as the vast the majority of these operate a handful of obsolete aircraft and - crucially - cannot afford to upgrade to western aircraft.

These so-called "babyflots" continue to survive only because they were handed aircraft and other assets for free in the 1990s, but as Oleg Sudakov, analyst with Rye, Man & Gor Securities in Moscow, says, "these smaller airlines will go out of business when their aircraft are fully depreciated, or else they will be acquired by larger companies".

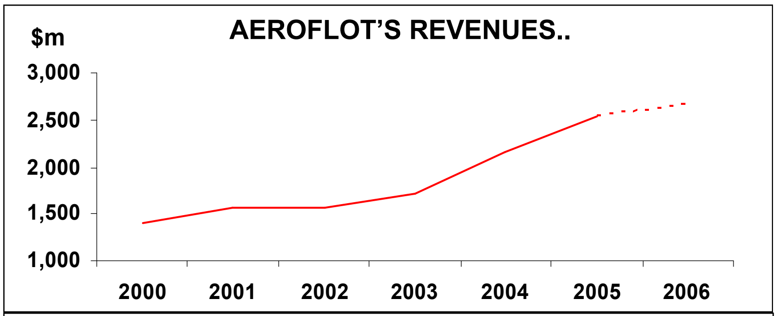
The problem is, this consolidation is happening at a sluggish pace, and so the Russian government - mindful of the concern about the growing presence of foreign airlines in the country - is now frantically trying to reduce the sector into to a handful of carriers that are more robust financially, which can replace ageing aircraft with modern western equipment and that are strong enough to establish hubs throughout Russia (and so lessen the dependence of the aviation industry on Moscow).

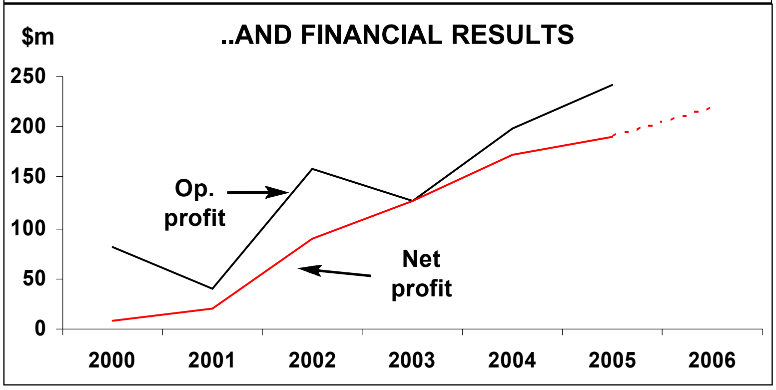
It's difficult to keep count, but at present the Russian government completely owns more than 55 airlines and holds stakes in around 60 others, and - unsurprisingly perhaps - within parts of the government there has been a growing lobby to reconsolidate the aviation industry around Aeroflot. Many regional governments in Russian also see Aeroflot as a white knight that can rescue debt-burdened and/or loss making local airlines. In 2006 the state property fund therefore proposed consolidating up to 100 state-controlled regional airlines back into Aeroflot, the effect of which would be to increase the government stake in Aeroflot to more than 75%. Some managers within Aeroflot are believed to favour this option, but most others, including CEO Valery Okulov, as well as important allies in the government, are fiercely opposed, and prefer Aeroflot to cherry pick the best regional airlines as needed.

The latter alliance of interests appears to have won the argument, and Aeroflot is likely to be helped in its more "selective" regional acquisition policy by the transfer of its former CFO, Yevgeny Bachurin, to the Russian civil aviation authority in May last year, where he is now responsible for the reconsolidation of the Russian airline industry. Last year Aeroflot therefore proposed taking over six airlines based in the east of Russia - Pulkovo (in which the state owns 100%), GTK Rossiya (100%), Dalavia (100%), Vladivostok Avia (51%), KrasAir (51%) and Sibir Airlines (25%). Combined with existing Aeroflot subsidiaries, this would result in a domestic market share of more than 50% for the group, and an international share of approximately 60%.

However, many of the airlines named by Aeroflot insisted they wanted to have a say in the process of consolidation, and some were fiercely opposed, particularly KrasAir, which heads up the AirUnion alliance of five Russian airlines. KrasAir is based in Krasnoyarsk and operates a mixed fleet of 40 aircraft, and instead proposed that the members of the AirUnion merge to form a decent-sized competitor to Aeroflot. It's also uncertain as to whether Rossiya (into which Pulkovo was merged late last year) wants to be part of Aeroflot, while Vladivostok will definitely not be part of Aeroflot's plans due to (depending on the source) either a willingness of the government to maintain competition in the region, a reluctance of Aeroflot to become involved with the airline, or a wish of the airline itself to remain independent. Sibir - which rebranded as S7 Airlines last year - is now due to be auctioned off by the Russian government early in 2007.

However, one of the airlines among those "chosen" by Aeroflot was receptive to the idea, and so in early 2007 the Aeroflot board gave formal approval for "Aeroflot-East" to launch via the takeover of Dalavia and another airline, Sakhalin Aviatrassy (SAT), which will be combined with Aeroflot's existing operations in the region. Dalavia is based in Khabarovsk and operates 25 Russian aircraft to around 30 destinations, with international routes to Japan, China and South Korea. It





AEROFLOT GROUP FLEETS

	Fleet	Orders	Options
Aeroflot Russian Airlines			
A319	8		
A320	10	2	
A321	7	3	
767-300	11		
DC-10-40F	4		
IL-86	7		
IL-96	6	6	
Tu-134	13		
Tu-154	25		
Sukhoi SuperJet-100	0	30	20
Total	**91**	**41**	**20**
Aeroflot-Nord			
737-500	4		
An-24/26	7		
Tu-134	10		
Tu-154	4		
Total	**25**	**0**	**0**
Aeroflot-Don			
737-500	2		
Tu-134	2		
Tu-154	9		
Total	**13**	**0**	**0**
Aeroflot total	**129**	**41**	**20**

carried 0.58m passengers in 2006. SAT carried 0.12m passengers in 2006 and operates 10 aircraft out of the island of Sakhalin on 14 mostly domestic routes, although there are services to Japan, China and South Korea.

Aeroflot-East will be based at Khabarovsk (30km from the Chinese border), where a hub operation is to be built up, although Aeroflot says it will take two years to bring the acquired airlines up to "Aeroflot standards". It's probable that other airlines will be rolled into Aeroflot-East at a later stage, and among the possibilities is Yamal Airlines, based in Siberia with a fleet of 22 Russian aircraft. Potentially also part of the new regional grouping will be former employees and aircraft of Mavial Magaden Airlines, a Siberian-based airline that operated six aircraft to local destinations as well as Moscow, St Petersburg and Alaska, but which suspended operations last year (leading to a hunger strike by employees in an attempt to get their outstanding wages paid).

Whichever regional airlines do become part of Aeroflot's eastern empire, the most likely mechanism will be that airlines are acquired in exchange for newly-issued shares in Aeroflot being given to the government, who will subsequently sell them in the open market, thus improving Aeroflot's liquidity.

Once established, Aeroflot-East will join the two existing major subsidiaries - Aeroflot-Don and Aeroflot-Nord.

Aeroflot Don is based in Rostov-on-Don in the south of Russia, and operates a fleet of 13 aircraft - all but two of which are Tu-134s or Tu-154s - on 17 domestic and regional routes, with the most important routes including Rostov to Moscow and St. Petersburg and handful of international destinations, including Frankfurt, Tel Aviv, Istanbul and Dubai. The airline carried 0.59m passengers in 2006 (1.9% down on 2005), but the first western aircraft - a pair of 737-500s on six-year operating leases from Pegasus - arrived in August last year, and another four will be added to the fleet during 2007 as it seeks to introduce more modern equipment to its key domestic and European routes. Aeroflot-Don had previously planned to introduce Fokker 100s into its fleet, but faced regulatory problems due to non-certification of the Fokker 100 in Russia, with the relevant authority (the Interstate Aviation Committee) reluctant to grant certification to a model that is no longer in production.

The airline dates back to the 1920s, and was previously known as Donavia Airlines until Aeroflot acquired a 51% stake 2000, after which it became Aeroflot-Don. The rest of the shares were held by Opt Invest, a Russian investment company, but at the start of 2007 Aeroflot bought all of the shares in a deal in which few details have been revealed.

Aeroflot-Nord carried 0.8m passengers in 2005 and is based at Arkhangelsk Airport in the north of the country, It was launched in 1961 as Arkhangelsk Airlines, before Aeroflot acquired a 51% stake in 2004 (with the rest being held by Aviainvest, although again Aeroflot plans to acquire a 100% stake as soon as possible). The airline operates a fleet of 25 aircraft (with the only non-Russian types being four leased 737-500s, introduced last year) on more than 30 domestic and international routes, including services to Norway, Sweden and Finland. The 737s had initially been considered an a temporary measure, with the airline's management reportedly favouring an order for new An-

148s, but the influence of its parent is likely to result in further 737 leases.

Elsewhere, Aeroflot pulled out of a deal to buy a majority stake in Moscow-based charter airline Continental Airways in 2005 after concern about tax reimbursements owed to the airline by the Russian government, as well as about ambiguity over who the actual owner of some of the Continental shares was. Instead, in 2006 Aeroflot set up Aeroflot Plus, its own VIP charter operation that uses the last IL-86s in the Aeroflot fleet and three older Tu-154s. In contrast to elsewhere in Europe, the Russian charter sector has been growing strongly in the last couple of years, based on increasing traffic flows to popular Russian holiday destinations.

Another carrier being linked with Aeroflot is Ural Airlines, a 26-aircraft carrier with a network that overlaps considerably with Aeroflot's regional routes, but which is attractive to Aeroflot as the airline's management owns 73% of its shares, with just 27% held by the state.

Fleet farce

In the late 1990s Aeroflot operated 120 aircraft - of which just 20 or so were western types (Aeroflot aircraft went through spate of accidents in the early 1990s) - with the fleet consisting of 12 different types. This variety of types and the large amount of unreliable and fuel-hungry Russian models was simply not viable for Aeroflot in the long-term. As fuel prices have risen through the 2000s so Aeroflot has tried to rationalise the fleet, but pressure to increase the pace of modernisation has also come from the SkyTeam alliance. The goal is to reduce aircraft types to four, but although the situation has improved, Aeroflot is still some way off achieving that.

With one major exception (see below), Aeroflot's fleet will be based on western aircraft from now on. New Russian aircraft development has been beset by many problems, not least of which has been an inability to define an accurate price per unit in advance. Although the Russian government recently decided to consolidate the remaining civilian (Ilyushin and Tupolev) and military (Sukhoi, MiG, Yak and Irkut) aircraft producers into one company - the United Aircraft Building Corporation - with the civilian aircraft makers under the control of the Russian defence minister Sergei Ivanov, it is too late to make existing models competitive with Airbus or Boeing.

Today Aeroflot's mainline fleet comprises 91 aircraft (see table, opposite), of which 40 are western models. On medium haul, Aeroflot's 25-strong fleet of Tu-154s will gradually be phased out by the end of 2010, with its replacement being the A320 family, of which the airline currently has 25 aircraft. Five A320s and A321s are on outstanding order, most of which are arriving on 12-year finance leases over the next year, but by 2010 Aeroflot will place an order for 45 A320s, according to Valery Okulov, which would be worth around €2.4bn at today's list prices.

On short-haul Aeroflot operates a fleet of 13 Tu-134s, a model that Aeroflot admits is both old-fashioned and uneconomical. The 76-seat Tu-134s are being phased out this year, either being sold or passed on to its regional or charter subsidiaries, and they will be replaced ultimately by 30 Sukhoi Russian Regional Jets (RRJs), for delivery in 2008 onward (with 20 more on option).

However, the order process for the RRJs went on for more than a year, largely due to the fact that as the Russian government owns a majority stake in both Aeroflot and Sukhoi, this triggered the necessity for a long-winded "related party" approval procedure. Whether the 95-seat RRJ has been purchased purely from a commercial viewpoint is doubtful. The Russian government is believed to have put pressure on Aeroflot to become the launch airline for the new model, and the order has been approved despite reported reservations by some airline executives on everything from the model's technical specifications and price to the feasibility of the delivery timetable. There was also a preference among some Aeroflot managers for the An-148 aircraft instead, complicated by the fact that the National Reserve Corporation (known as NRC, and a 30% shareholder in Aeroflot) has an interest in

Antonov, but that deal didn't happen after concerns that the unit price of the An-148 was too high.

Whatever the decision-making process, the RRJ order is worth around $630m (approximately 15%-20% less than list prices), and the aircraft will arrive on a mix of finance and operating leases. To fill the gap between the last of the Tu-134s and the arrival of the RRJs, some 737s will be leased on a short-term basis.

It's on long-haul, however, that Aeroflot has managed to make itself look something close to incompetent, via a long-running saga over a new order that has still not been resolved. Aeroflot completed an evaluation of its long-haul fleet options back in 2005, identifying a need for up to 22 aircraft for delivery in 2009-2015. The A350 and the 787 were (and are) the favoured types for the order, but the decision has been complicated by the fact that Russian airlines have to pay a 20% import duty as well as 18% VAT on all imported aircraft. Previously Aeroflot has negotiated exemptions with the government on these import taxes and tariffs, usually by promising to buy a certain number of Russian-built aircraft at the same time, but this time around the government insists that it can no longer make an exception for Aeroflot (even though the airline is committed to buying six IL-96-300s). That's partly a negotiating tactic in order to pressure the airline into buying further Russian types, but a looming external factor in the situation has been talks over Russia's imminent entry to the WTO, in which aircraft import tariffs are a key discussion point. (since when Russia joins the WTO, taxes on western aircraft will have to be reduced substantially).

So while in early 2006 Aeroflot provisionally chose the 787 as its preferred model, a firm decision was delayed time and time again as Aeroflot negotiated with the government over a tariff exemption, and the government negotiated with the EU and the US over entry into the WTO. In April, Aeroflot was then "persuaded" to switch its preference over to the A350, a move that some analysts saw as a non-too-subtle Russian government response to perceived aggressive pressure exerted by the US over the terms of Russia's entry to the WTO.

But - as the year progressed - a firm order was still not forthcoming. Aeroflot's managers used the delay to make it clear that they preferred the 787 (and specifically the 787-8 and 787-9 stretch version), largely because it would be available earlier than the A350 (2010 rather than 2012). Yet another complicating factor became the Russian government's keenness to increase its influence in Airbus after Vneshtorgbank (VTB), a state bank, acquired 5% of EADS in the summer of 2006 for $1bn, and drew the Airbus group into supporting the struggling Russian aerospace industry.

A final decision between Airbus and Boeing was going to be made at Aeroflot's board meeting in September last year, but in the end the board decided not to make a firm order after the Russian government failed to make clear which manufacturer it wanted the airline to choose. Bizarrely, a few days later the privately-held NRC signed a preliminary agreement with Boeing to purchase 22 787s at prices fixed as of 18 months previously (roughly equivalent to a discount of $15m-$20m per aircraft on current list prices, and thus making the whole order worth around $3bn). In signing the deal, NRC paid Boeing around $40m to secure a month's option on production slots for the 787 in 2010 onwards, in the clear expectation that final approval from the board the government was just a matter of days away.

Inevitably perhaps, Aeroflot missed the November 1 deadline to confirm the NRC "order", and so Boeing awarded the production slots for the 22 aircraft to other customers. NRC was furious about the delay and persuaded Boeing to backtrack and extend the deadline to December 1, but - to no-one's surprise - Aeroflot/the government still could not make a confirmation by that date, and so the delivery slots were lost for good.

One senior Aeroflot executive describes the situation as "farcical", while another says the airline is "hamstrung" by the situation. The owner of NRC - Alexander Lebedev - a billionaire businessman who is a deputy of the Duma and a former KGB employee, didn't hold back in his reaction, saying that: "The bureaucracy of the government is very inept. The state has practically left the national airline with no modern long-haul planes, and losses from that decision will run into hundreds of millions of dollars." The NRC is threatening to sue the Russian government over its "dithering" in choosing between Airbus and Boeing, but that will not help the airline solve its fleet problem.

Further developments in the saga appear to occur every week, but the latest news is that Aeroflot has "changed" its analysis of its long-haul needs, and now needs a fleet of up to 45 long-haul aircraft, with differing capacities. This should have allowed the compromise of splitting requirements between Airbus and Boeing - even though that will not be optimal from an operating viewpoint - with orders for 22 A350XWBs worth $3bn, as well as 22 787s. The likelihood of this, however, depended on whom you spoke to, and other sources within Aeroflot indicated another, final twist in the story, with the growing coolness between the US and Russian governments potentially leading to a placement of the total (expanded) long-haul requirement with Airbus. If this occurs it will likely set off a storm of complaints from both Boeing and the US government, but as *Aviation Strategy* went to press, Aeroflot said it had indeed signed an MoU to buy 22 A350s, as well as a deal to lease up to 10 A330-200s, the latter of which will cover the minimum seven-year period until the A350s arrive.

If this deal is confirmed, the unavailability of the A350 XWB until 2014 at the earliest (and even this is subject to confirmation of the A350 production schedule) means that Aeroflot still has to find interim (and costly) solutions to its long-haul fleet needs - over and above the leased A330s. That has already resulted in extending leases on the eleven 767-300s Aeroflot currently operates, and extending the life of its six owned IL-96-300s, even though the model has relatively high operating costs. Aeroflot also has another six IL-96-300s on order, which will come on 15-year leases from the manufacturer - even though back in 2005 there were concerns from the Russian authorities over technical reliability of the model, particularly on the braking system. Those concerns led to a grounding of the existing IL-96s in Aeroflot's fleet in August that year (for 43 days), which took out just under half of the airline's long-haul capacity at the time and cost the airline a great deal of money. Hopefully the long-haul crisis will not persuade Aeroflot to hang on to its remaining IL-86s, which were supposed to be taken out of the fleet in November last year, although Aeroflot has apparently struggled to find suitable buyers or lessees.

On cargo, last December Aeroflot separated out its operations (it is currently the largest cargo operator in Russia) into a separate subsidiary called Aeroflot Cargo, though still fully owned by the mainline. Aeroflot currently operates four DC-10-40Fs from its cargo hub at Frankfurt Hahn, but they should be replaced on international routes by up to six MD-11Fs leased from Boeing Capital Corporation, and scheduled to be delivered this year and in 2008 (although they were originally supposed to be delivered from 2006 onwards, and there is no confirmation of this order yet). The DCs would then be reassigned to purely domestic Russian routes. Longer term, the cargo unit will look to order new aircraft, most likely to be 777s. Cargo generates around 10% of Aeroflot's revenues, and the group is looking to increase cargo volumes by 9% in 2007.

A bright future?

It's clear that Aeroflot is facing severe challenges at the moment, many of which stem from the government's inability to make sensible, timely decisions, whether on which aircraft to buy for Aeroflot or on the way forward to clear up the mess in the Russian aviation industry in general.

From Aeroflot's point of view it mattered relatively little which manufacturer the government chose for long-haul aircraft - just as long as the government did make a choice and that the airline received new western aircraft as soon as possible. But the chance of receiving new aircraft in the next few years has gone, and the cost to Aeroflot will run into tens of millions of dollars, if not hundreds of millions.

As for restructuring the Russian aviation industry, it's vital that the government does not bend to pressure to force regional airlines upon Aeroflot. There's no doubt that many of the smaller regional airlines will be loss-making for ever, and should either be allowed to go bankrupt or (more likely) receive continuing state help in order to survive,. This may necessitate wrapping up these airlines into a new state aviation concern - but one completely separate to Aeroflot.

On the positive side, the management team at Aeroflot is much improved (in November last year the airline successfully sued three former senior executives - including Nikolai Glushkov, a former deputy director - for embezzling millions of dollars from the company in the late 1990s). With (at some point) a new fleet, a continuing strategy of picking off the strongest regional airlines in order to secure feed, and the benefits of both SkyTeam and the new terminal at Sheremetyevo, Aeroflot can have a successful future, but it's vital that the state divests its remaining stake as a matter of urgency. Currently, the Russian government owns 51.2% of Aeroflot, with employees having 14% and NRC 30%, with a negligible free float of around 3%.

Although an ambitious (and unrealistic) plan by the state to privatise the airline by 2005 inevitably came to nothing, Russian government sources say that it wants to dispose of its stake in Aeroflot at some point, but there are no plans as yet for an IPO, either in the short- or long-term, (and anyway, this can't happen until Aeroflot is formally struck off the list of Russian "strategic enterprises" by the Russian president). Until that situation changes (and NRC is believed to be lobbying hard for an IPO), analysts will be sceptical about the long-term future of Russia's flag carrier.

By Nick Moreno

Spring Airlines: China’s self-styled “first LCC”

Three Chinese start-up airlines launched in 2004 but only Shanghai-based Spring Airlines seems to have survived. Spring reported a profit of RMB30.6m (US$3.9m) on revenues of RMB539.03m (US$69m) in 2006 with a fleet of five A320s. How does China's self-styled "first LCC" work?

Spring's distinction

Prior to 2004, when the Chinese government first allowed private investment in start-up companies, an Air Operator Certificate (AOC) was regarded as a valuable scarcity. The first few airline founders seemed to be investing for a fast buck, through obtaining AOCs and then selling shares to foreign airlines or via the IPO process. The emphasis on quick returns meant a lack of care in choosing management teams, operational bases, fleet planning and any route network development. The glory of owning a licence, however, faded quickly after 2004 and the start-up airlines' lack of efficiency has dissuaded further investment. This first group of Chinese start-ups is struggling to survive. The second group of start-ups, of which Spring Airlines is the most prominent, are motivated by and implementing a simple strategy: a vertical integration of the tourism and airline businesses.

Spring Airlines is a subsidiary of Spring Tourism Group, the largest tour operator in China. Following China's airfare deregulation in 1997, Spring Tourism began to purchase flights from the Chinese majors to carry tourists and quickly dominated the most popular tourism routes originating from Shanghai. Publicly, it was announced that Spring Tourism had launched an airline because it was constrained by the established airlines' routes, schedules and capacity, and had to have its own carrier to meet surging demand. Spring's real reason however, was that the relationship between China's airlines and tour operators was becoming trickier: as the airlines' finances came under pressure they attempted to recover their losses by increasing ticket prices to tour operators.

Spring Airlines was set-up in 2004 by two major shareholders: Spring International Tourism Company which owns 60% and the Spring Charter Flight Tourism Company which owns 40%, whose registered working capital is RMB80m (US$10m). Spring Airlines' Chairman, Wang Zhenghua, is also Chairman of the Spring Tourism Company and he owns 39% of the airline's shares. About 40% of Spring Airlines' traffic was provided by the Spring Tourism Group in 2006.

Low-cost rationale

Spring Airlines has styled itself as a low-cost carrier; its strategy is to adapt the LCC model to the Chinese market, which is characterised by a huge, low income per capita population. Importantly, Spring wants to avoid the mistakes of the established Chinese carriers. China's airlines have moved from an era of high growth and high profitability and entered a new stage of expansion with little or no profitability. From 1998 to 2003 the whole industry reported a total financial loss of more than US$1bn, although the period saw an average passenger growth rate of about 13% with more than 200 aircraft delivered to the airlines. Pricing deregulation, deflation from 1998 to 2002 and excessive competition were blamed for the financial loss, but the main reason was the inablility to lower operating costs.

Like other LCCs, Spring has used relatively high aircraft utilisation in order to lower operating costs. China's established airlines average around nine hours per day with the A320. Spring Airlines achieved 11 hours per day in 2006, reducing rental per flight hour by about 20%. The established airline employee to aircraft ratio is more than 200:1, a legacy of the past planned economy and ineffective mergers. Spring has a ratio of 100:1, reducing labour costs by more than 50%.

Normally, start-up airlines purchase revenue management systems or adopt a pay-as-you-use model provided by RM providers. The majority of China's airlines use reservation/distribution systems provided by Skytravel, a Chinese company owned by Air China, China Eastern and other smaller Chinese airlines. Skytravel charges about $3 for distributing one ticket. Spring Airlines uses a bespoke in-house system. Spring's IT department is planning to set itself up as a stand-alone, serving Spring and other customers.

SPRING'S COST AND REVENUE BREAKDOWN 2006

Passengers	97.7%
Cargo	1.8%
Other sales	0.5%
Total revenue	**100%**
Crew	6%
Fuel	43%
Airport charges	12%
Avation Construction Fund	4%
Maintenance	11%
Insurance	1%
Aircraft leases	15%
Other	2%
Salaries	5%
Total Costs	**100%**

Overall, Spring's goal is to achieve operating costs of about 30-50% lower than China's establishment airlines. In 2003 the Civil Aviation Administration of China (CAAC) issued a price directory for every domestic route, stipulating that fares could not be higher than 120% of the list price in the peak season or lower than 40% in the off-peak season. Spring's 2006 average fare was about 38% of the list prices set by the CAAC and now Spring and others are pricing tickets lower than 40% (see page 23).

The airline encourages website ticket distribution, while still selling greatly discounted group tickets to travel agents. Spring uses the established LCC yield management system but faces the problem that credit cards are not widely used in China, which limits the scale of online transactions. Even so, passengers purchasing e-tickets have continued to grow and accounted for 67% of total passengers in 2006.

Spring provides a no-frills flight service and charges for food and refreshments. This simplified service results in a cost saving of about US$2.5 per passenger. Revenue of about US$35,000 was raised from ancillary services last year, a relatively modest amount.

New base, new route

Currently Spring operates five A320s and a point-to-point model based at Shanghai Hong Qiao Airport. The bulk of its original passengers were tourists collected by Spring Tourism. Business passengers, however, generate about 20% more revenue than tourists and they are the airline's priority target. In December 2006, business passengers accounted for 62.5% of total passengers. Recognising the importance of the revenue advantage gained from business passengers and constrained by a lack of slots in Hongqiao Airport, the airline plans to set up another base in Sanya, a popular resort by the South China Sea. Once this base is established, Spring plans to carry tourists to/from Sanya on morning and evening flights and transport business passengers on Shanghai routes during the day, maximising tourist and business traffic revenue streams. With two bases established, the airline could establish a hub-and-spoke model.

Spring will stick to a point-to-point operation, which suits the Chinese internal markets. Only 8% of Chinese airline routes exceed 2,400km, while 61% fall between 930km and 2,400km and 24% between 465km and 930km. These stage lengths make a Western-style hub-and-spoke operation with several banks per day unfeasible in China.

Financial performance

In 2006 Spring Airlines transported 1.13m passengers on 6,713 flights, producing revenues of RMB539.03m (US$69m). 97.7% of the total revenue was attributable to passenger service and 1.8% came from cargo. Unlike its European counterparts, Spring only recorded 0.5% of total revenue from ancillary and merchandising services. The carrier obtained a load factor of 94.4%, the highest load factor among all Chinese passenger carriers.

Passenger numbers are expected to reach 2.6 million in 2007, a 232% increase from 2006. Another significance of the two-base operation is that aircraft utilisation could increase to 12 hours per day, further lowering Spring's operating costs.

Total direct operating costs (DOCS) reached RMB465m (US$60m). Fuel costs accounted for 43% of operating costs with aircraft lease rental accounted for 15% of the total direct costs. The third largest operating cost was for airport charges, which accounted for 12% of the total DOCS. Crew costs only accounted for 6% of the DOCS, as pilots and cabin crews serving China's airlines, except those recruited from outside China, are paid with a Chinese rather than international salary level.

The carrier's DOCS, administration costs, capital costs and sales cost in CASK terms were 24.5%, 68%, 75% and 55% lower than the average of China's airlines, respectively. Profit after tax in 2006 was RMB30.6m (US$4m, 655% higher than the average for Chinese airlines in RPK terms.

Although the airline is making efforts to secure and consolidate its Sanya base, supported by the Hainan Province Government, its prospects still heavily rely on Shanghai and its lucrative business traffic. Besides the shortage of slots at Hongqiao Airport, the change in market focus avoids head-to-head competition with Shanghai-based China Eastern and Shanghai Airlines. Hopefully, once the airline solidifies its presence in China's tourism market and grows its fleet and route network from its Sanya base, it will return to the Shanghai market with greater competitive power. At the moment there are no other bases planned.

In 2006, Spring Airlines announced earnings of RMB0.22 ($0.03) per passenger on ancillary revenues. Most passengers were tourists, who traditionally spend little inflight. Once business passenger numbers rise, inflight services revenue should increase as should hotel reservations and car hire services, which still remain underdeveloped in China.

Growth potential

Another potential area of growth comes with the reform of China's Airport Charge and Aviation Construction Fund. The former accounted for 12% (around RMB56m) of the airline's DOC and the latter 4% (nearly RMB19m). Airport fee regulations aimed at lowering airport charges are to be announced by the CAAC, but a much more significant improvement will come from the elimination of the Aviation Construction Fund, a de facto corporate tax for Chinese carriers. The legitimacy of the fund has been long been challenged by the airlines, it is unsure when the fund will be eliminated, but once ended all Chinese carriers will benefit.

Spring Airlines needs more capacity. The carrier currently has five A320s leased from GECAS and is approaching lessors for further aircraft. However, due to a dearth of A320s on the market, at the moment the lessors are dictating terms - high lease rates or a minimum lease of ten years. As the airline's financial position is improving, outright purchase seems attractive and is also possible. The airline has submitted a request to China's Reform and Development Committee to purchase 20 A320s. There are two problems, one political, the other fiscal: first, how many aircraft can the government be seen to allocate to the airline and then how can the carrier raise the finance for the aircraft. To raise funds, the airline needs to tap into the capital markets. Spring has two options: First, to sell equity to private or strategic investors or second to conduct an IPO. Introducing strategic investors to the airline is not on the airline's agenda and institutional investors might well require a high return in a few years. Hence the two options are not ideal for the airline. The IPO process has more appeal to Spring as it provides equity while leaving the current management to run the company. Spring intends to conduct an IPO in the next two years, but before this the airline needs to deliver financially. When and where to conduct the IPO and who to underwrite it remain undecided, but the airline will need to obtain China's Securities Supervision Committee's approval to have the IPO in an overseas stock market.

The second constraint is out-dated regulations and vested benefit groups behind the regulations. In 2006 the airline was almost fined by the Jinan Pricing Agency for selling tickets at a price of RMB1 (12 US cents). A regulation issued in 2003 justified the agency's decision that a domestic airline is forbidden to sell a ticket at a price of below 40% of the list price. Although Spring Airlines settled the argument by applying a special approval regarding pricing from CAAC and through negotiating with the agency, this event reflected a dilemma facing China's start-up airlines. Urged on by a state-owned and Jinan-based airline, which was seeing its market share dramatically shrink since Spring's entry into the market, the Jinan Pricing Agency used the pricing regulation to challenge Spring Airlines and protect the Jinan-based airline's interest. Although the out-dated regulations will be abandoned eventually, Spring will have to develop under these constraints in the foreseeable future.

Towards a Chinese Southwest?

Spring Airlines has not yet significantly impacted the market or created anything like a "Southwest Effect" in China. At the same time, China's established airlines still have paid little attention to the start-ups. By gradually entering China's key markets, such as Guangzhou and, in future, Beijing, and some overpriced routes, Spring Airlines will eventually engage in fierce price wars with the incumbents. Spring's disadvantage is its comparably weak financial position, but the question is how determined and how capable the incumbents are to wage a broad price war against a start-up and how low the prices can go, given the incumbents' high and inflexible cost structure.

Air safety remains Chinese public's concern. China's airlines have achieved a record of no accidents for five years. Given Chinese air transport industry's explosive growth, its weak air traffic control system and many foreign and fledgling pilots' joining the airlines in recent years, the air safety risk is expected to grow. To address this issue, Spring Airlines has adopted a stringent safety procedure and employs experienced domestic as well as foreign pilots.

There is a risk derived from the two-base operation model. The success of the model relies on the smoothness of the whole operation and dispatch reliability. Given the low efficiency of airport handling and air traffic control in China, the airline is taking a risk that might be beyond its control.

Another potential risk comes from the possible conflict between Spring Tourism and the airline business within the group. The airline's rapid expansion relies on the stable existing market provided by Spring Tourism. On the other hand, the airline provides sufficiently low airfares to the tourism company to ensure tourism's success. With the airline's ownership getting complicated, how the two businesses ensure a harmonious working relationship will prove challenging.

SUBSCRIPTION FORM

Please enter my Aviation Strategy subscription for:

☐ **1 year (10 issues-Jan/Feb, Jul/Aug combined) @ £390 / €625 / US$650, starting with the ________ issue**

Delivery address

Name ____________________

Position ____________________

Company ____________________

Address ____________________

____

____

Country __________ **Postcode** __________

Tel __________ **Fax** __________

e-mail ____________________

DATA PROTECTION ACT

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

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

☐ **Please invoice me**

☐ **Please charge my AMEX/Mastercard/Visa credit card the sum of £390**

Card number ____________________

Name on card __________ Expiry date ______

☐ **I am sending a direct bank transfer of £390 net of all charges to Aviation Economics' account:** HSBC Bank

Sort code: 40 04 37 Account no: 91256904

Invoice address (if different from delivery address)

Name ____________________

Position ____________________

Company ____________________

Address ____________________

____

____

Country __________ Postcode __________

PLEASE RETURN THIS FORM TO:

Aviation Economics

James House, 1st Floor

22/24 Corsham Street

London N1 6DR

Fax: +44 (0)20 7490 5218