

BA's strategic bubbles

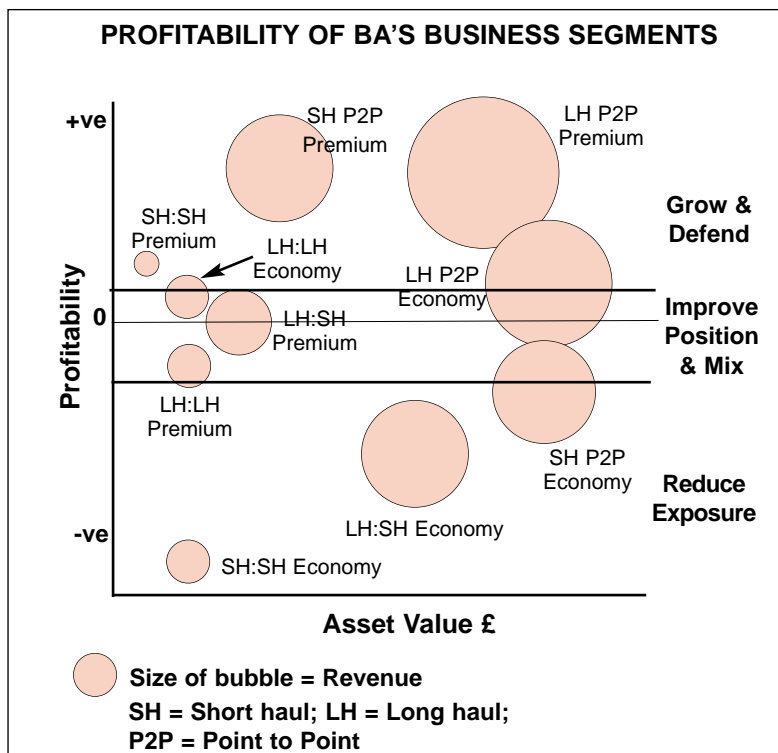
BA's new business class product has been well received, but the airline is still not persuading investors of the viability of its business plan, as evidenced by its feeble share price performance.

In order to clarify its strategy BA has produced the following chart. The bubbles represent BA's various business segments, the bigger the bubble the bigger the revenues. Their position on the chart depends on two things - their profitability and the value of assets (aircraft) that are associated with the segment.

The idea, at its most basic, is to grow and defend its most profitable segments, mostly the point-to-point premium services, both long and short haul. In segments like long-haul point-to-point economy, BA aims to enhance its market position and improve the yield mix. As for long/short haul connecting economy traffic, that is targeted for deflation.

The bubbles will not only float upwards if BA's plan succeeds, they will also drift to the left so further improving the company's RoI. In other words, as the airline downsizes, say from 747 to 777-types, less capital will be tied up in the various segments.

One problem facing BA is the extent of the yield increase that it will have to return to the profitability level of 1996/97. According to our calculations, BA is going to have to push average yields up by 2% in 2000/01, 8% the next year and 4% the following year, even



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assuming that load factors move up to 70% from the present 66.9%. This would give BA a net profit of about £350m in 2002/03 (this year, 1999/00, will probably end up at around -£250m).

This yield target is very ambitious - no airline, as far as we now has achieved such a yield improvement. And business-class fares from London are by some way the highest in Europe now. Perhaps there are more operating cost savings to be made, from the Internet, for example, but that isn't clear yet.

BA has to focus more on all its customers to have a chance of charging higher premium fares. Yet staff morale doesn't seem too wonderful at present, and is unlikely to improve when the airline downsizes and lays off employees. Adapting one of Gordon Bethune's ideas (see pages 18-19) might be helpful - promise the staff bonuses related to the number of business and economy travel awards the airline receives rather than to

some arbitrary target imposed by management.

Oneworld implications

There is also the question of the implications of BA's new strategy for its oneworld alliance partners. BA is in effect downplaying its role as a network carrier (note the outsourcing to Go and the decision to sell Air Liberte). In effect, it is becoming a larger-scale Virgin Atlantic. So there is a greatly diminished role for mutual feed, and the urgency of BA's need to establish a full codesharing agreement with American must have faded (American in any case seems to be becoming more interested in its Swissair/Sabena connections).

American would still be extremely valuable to BA if the two carriers were able to consolidate and control key trunk routes on the Atlantic. But surely the regulators wouldn't permit that, even as a trade-off for full open skies.

US low-cost carriers reassert themselves

While the high-cost US major carriers are now expected to report reduced earnings in 2000, the prospects for many of the low-fare new entrants and the regionals, as well as Southwest of course, remain very favourable.

According to James Parker, analyst at Atlanta-based SunTrust Equitable Securities who focuses on what he calls the "growth airline sector", the lower-cost operators will continue to gain market share from the large carriers and have sustainable 13-30% annual earnings growth rates.

Not so long ago, it looked like the majors were getting the upper hand. In 1996-1998, they became more price competitive, thanks to more sophisticated yield management systems and the ability to subsidise cheap seats with higher business fares. This helped stem the flow of price-sensitive traffic to the low-fare sector.

However, in 1999 the market share trend turned back in favour of the low-fare airlines as business travellers, fed up with paying fares that

had risen by 49% since January 1996 (while leisure fares declined by 13%), began shifting to the coach cabin or to low-fare airlines.

As a result, many low-fare operators reported strong yields and earnings growth last year. And the majors are now under pressure to make up for the business traffic revenue shortfall by raising leisure fares, which would shift even more traffic to low-fare carriers. (Northwest is trying to tackle

UNIT COST TRENDS (Cents/ASM)

	Majors	Low cost carriers	Difference
1993	8.86	8.43	0.43
1994	8.91	6.92	1.99
1995	9.08	7.68	1.40
1996	9.45	8.83	0.68
1997	9.51	8.62	0.89
1998	9.56	7.65	1.91
1999	9.63	7.90	1.73

Source: SEC, SunTrust

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the problem by reducing business fares with its "Bizflex" initiative, though PaineWebber analyst Sam Buttrick believes that the move is "potentially net revenue dilutive".)

The majors may become more restrictive in offering very cheap seats through the Internet, because the impact appears to be a net dilution in revenue. In any case, price-sensitive travellers are more likely to hit the web sites of low-fare airlines first. Internet bookings represent about 10% of low-fare airlines' total bookings (and as much as 17% of AirTran's), compared to 3.5-7% for the majors.

Also, unit cost differentials between the majors and low-cost carriers are likely to increase further over the next few years. The major carriers remain under pressure on the wage front and may even lose some of the benefits achieved with the low-cost subsidiaries. For example, United's pilots have succeeded in bringing B-scale United Express wages up to the level of the mainline pilots.

Frontier and AirTran have proved that low-fare airlines can co-exist with the majors at hubs, as long as they are careful not to offer excessively low fares or try to substantially expand market share.

While the regional airline sector has shrunk with Delta's acquisition of Comair and ASA, Parker points out that the sharply improved profitability of Frontier and AirTran and

the IPO of WestJet have expanded investment opportunities in the growth airline sector. His best picks, though, are Southwest and its European "refined version" Ryanair. Frontier and AirTran are recommended as "more aggressive investments".

PERCENTAGE OF TOTAL BOOKINGS VIA THE INTERNET

Low cost carriers	
AirTran	17%
Southwest	15%
Frontier	7%
WestJet	5%
US majors	
US Airways	7.2%
Delta	7.0%
Northwest	6.5%
United	4.0%
American	3.5%
Continental	3.5%

Source: SunTrust

A3XX: the question of space

Despite an absence of definite commitment to the A3XX from target airlines, the project will be given a major boost if the UK government agrees to provide £540m (\$865m) of launch aid to BAE Systems. Unconfirmed reports at the end of February suggested that the funds would be forthcoming (for an explanation of launch aid see *Aviation Strategy*, December 1999).

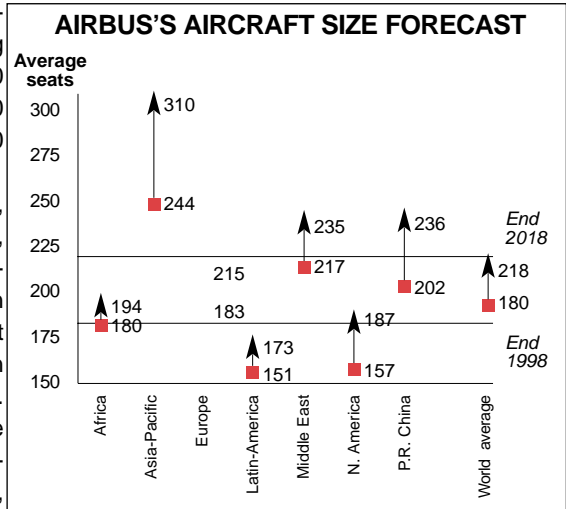
If the aid does materialise, Airbus will be able to claim acceptance of its rationale for developing the A3XX. Basically, Airbus argues that exponential growth in air traffic combined with congestion at the main hubs will make a shift to the super-jumbo inevitable. Also, the unit operating costs of such an aircraft will be compelling. Future trends in aircraft size, according to Airbus, are shown in this chart.

Whereas Airbus has an almost visionary approach in its presentations of future aircraft demand, Boeing is more prosaic. Its representatives tend to point simply to the actual evolution of long-haul operations over the past ten years, which has been a fragmentation of markets and a down-sizing of aircraft types. Moreover, Boeing argues that closer examination of traffic patterns at the main hubs indicates that traffic congestion will

actually be alleviated by upsizing from 120 to 150 seaters, from 150 seaters to 180 seaters, etc..

Jurgen Weber, CEO of Lufthansa, made a very interesting observation at a recent European Aviation Club meeting. Asked if the Singapore-Frankfurt route, where a Lufthansa

747 takes off within minutes of a SIA 747, were not a natural for the A3XX, he replied no. The reason is that there is not room at Frankfurt for Lufthansa to increase the feeder services that would be needed to fill an A3XX. The alternative strategy, as the market develops, would be to introduce direct operations from Singapore to Hamburg, Munich, etc using A340s.



Canada: From inefficient duopoly to what?

The Canadian duopoly was constructed on a unstable platform of egregious debt, even by airline industry standards. Competition between Air Canada and Canadian was limited to bouts of sporadic fare wars, the intensity of which has decreased in recent times. Onex's attempt to acquire and merge the two Canadian carriers finally broke open a situation that had been stalemated for years. And the resulting confusion in political circles allowed Air Canada to finally acquire its arch-nemesis. How will the Canadian industry evolve now?

The short-term strategic choice for Air Canada is simple: focus on strengthening its monopoly positions and move quickly on costs. This includes cutting domestic distribution costs, reducing capacity, initially on the thicker routes (to avoid public scrutiny) and rationalising fleet types. An employee attrition programme should target the first 2,500 of what may eventually have to be a 8,500-10,000 if Air Canada is to be prepared for the next downturn.

In order to effectively leverage Canadian's assets, Air Canada has implemented an asset strip strategy, reminiscent of the Frank Lorenzo approach to his Eastern Airlines acquisition of over a decade ago. It has, for example, now taken over exclusive and valuable routes rights like Tokyo.

With this process all but complete, negotiations with debt holders have become even more one-sided. There is comparatively little left in Canadian that Air Canada wants, and it could simply abandon the remainder of the airline if debt holders prove "unreasonable".

US/Canada cabotage?

Internationally, a market the size of Canada can be covered well by one national airline brand with competition coming from external airlines. Domestically, however, the government is again faced with the need to legislate to create more competition. (It was clear back in the mid 80s that the Canadian deregulation process was seriously flawed - it was a response to the US change than

a recognition of Canadian market realities.)

There are a number of options for de-monopolising the Canadian domestic market. One is the complete opening of the Canada-US border in order to create would create a North American cabotage regime.

The result would probably not be reciprocal; US carriers would come north but Air Canada would not move south. The arrival of the US carriers would probably lead to additional competition on the key sectors, maybe 10 city pairs, but the rest would remain under-served or have their service cut altogether.

So, the delicate policy of cross-subsidy between major trunk routes and thin regional services, quietly maintained by Air Canada throughout the deregulated era, would be undermined. The consequence would be either a disintegration of the domestic network or a government-mandated minimum network - as in the regulated market of the 1980s.

Reaction to the new entrants

The second possibility is that the problem will be solved by the market through the emergence of start-ups. WestJet (see *Briefing*, pages 10-13) is the big hope, having already announced plans to start service from a mini-hub it will create at Hamilton (near Toronto) serving a number of cities both east and west of there.

Air Canada says it plans its own start-up airline using surplus smaller aircraft (737 or DC-9-30) within the coming year to compete with the newcomer. The government has ordered Air Canada not to start until September at the earliest.

The reality is that Air Canada will not have an easy time setting up its own low-cost subsidiary for the following reasons:

- Union scope clauses will be a major obstacle;
- Hamilton's traffic potential is very dubious - no carrier has ever planned a significant operation there;
- If Air Canada builds up Hamilton, it risks stealing Toronto traffic from itself at lower yields

• Now that Air Canada and Canadian are merging their Toronto operations in Terminals 1 and 2 this means that the higher cost Terminal 3 (the current Canadian terminal) will need new tenants, and attractive lease rates will be available for new entrants.

As for WestJet, it is just possible that it has made a mistake in pushing growth faster it can handle and leaving itself vulnerable. It may be spreading itself too thinly across the country and this may be part of the Air Canada strategy. Could it be that Air Canada need only build a paper airline at Hamilton to lure WestJet out of its slower, successful growth strategy?

One must also contemplate the plight of the domestic Canadian consumer and the prospects for equitable competition in the domestic Canadian market. It would appear that government must go beyond simply controlling the monopoly, which its current poorly constructed draft legislation purports to do, and provide incentive for start-ups to enter new markets.

A system that ensured that lower fares were linked to lower unit cost structures might provide some incentive to compete. This would have the effect of reducing Air Canada's ability to discount in markets in response the entry of carriers with lower cost structures.

Other provisions such as mandated FFP membership at fair cost and redemption rate, guaranteed slots and terminal access at key airports would also prove positive in stimulating investor interest. In addition, the government must mandate minimum service levels (frequencies and capacity) for the many communities where air travel is a necessity.

Onex returns?

Finally, it is possible that a much larger game is still in the process of being played out, maybe featuring the return of Onex (*Aviation Strategy*, Sept. and Nov. 1999).

By the end of this summer the new Air Canada (Canadian having been mostly absorbed or cut back) will have emerged. Regulatory issues will have been addressed. Canadian Airlines debt holders will have been dealt with.

At this point another Onex approach would be far less contentious, and Air Canada's poison pills may be strong enough. Air Canada's cash position took a hit from its protective actions last year, and Star may not be able to come to the table two years in a row to rescue Air Canada. In Onex's eyes, the value of Air Canada would be greatly enhanced as it would have completed the difficult tasks in the merger process.

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Turboprop manufacturing: reports of death exaggerated

The signs for manufacturers of turboprop aircraft are perhaps not as catastrophic as some commentators would have us believe. Admittedly, in 1999 orders were placed for 462 regional jets (see *Aviation Strategy*, February 2000), while the manufacturers of turboprop aircraft could muster just 169 aircraft sales. But there are significant niches for turboprops, and the ruthless rationalisation of the industry means that the surviving manufacturers have a better chance of achieving viability or even profitability.

British Aerospace ceased production of the Jetstream 41 in 1997, and the last ATP was delivered at the end of 1998. Production of Fokker aircraft ended in 1997. The final Saab 2000 aircraft was delivered in the summer of 1999.

Just as the large jet market can only support two players - Boeing and Airbus - and the regional jet market three players - Bombardier, Embraer

and Fairchild Dornier - the 35-seat-plus turboprop market is now dominated by two players - ATR and Bombardier. (Although CASA recorded 19 sales in 1999, 16 of these were to Merpati, its tame customer in Indonesia.)

It would also be wrong to suggest that turboprops now only sell in less sophisticated markets, the list of European and US airline orders putting the lie to this. Roughly 30% of the turboprops sold in 1999 went to European carriers and a further 30% to North American airlines.

SAS is one airline that may point the way ahead. It has 22 firm orders for Bombardier's 70-seat Q400, which it will use in its SAS Commuter fleet to serve thin short-haul routes. It is also asking manufacturers to provide offers for 20 70-90 seat regional jets, indicating that there are separate niches for both types of aircraft.

A major problem for all turboprop manufactur-

ers is the second-hand market. As airlines shift from mainline turboprops to regional jets, the second-hand market is being flooded with cheap and unwanted turboprops. This is undermining the pricing of new aircraft.

ATR and Bombardier are officially optimistic about their turboprop prospects. But, while Bombardier can fall back on its regional jet programme if sales of turboprops do dry up, ATR does not have the same option. This explains the rumours abound that a formal ATR tie-up with Embraer is on the cards, given ATR's parent, Aerospatiale Matra, already has a shareholding in the Brazilian manufacturer. Specific plans from the manufacturers are summarised below.

ATR

Some 37 ATR42 and ATR72 aircraft were delivered in 1999, which, although respectable, is a far cry from the early 1990s when annual deliveries topped 60 aircraft. With 36 new orders placed for both types in 1999 ATR has at least been able to meet its quota target. ATR has forecast that it will build on average some 30 ATR42/72 aircraft a year in this decade, which, it says, is a level where it can show a profit. Nevertheless, the order backlog remains very thin with just six ATR42 aircraft and 14 ATR72s outstanding.

Bombardier

The Canadian manufacturer has the largest product range in the class. The Q200 is a 37-39 seater, the Q300 a 50-56 seater and the latest version, the Q400 is a 68-78 seater. The Q400 received its US certification in February 2000 and has since been introduced into revenue service by European launch customer SAS Commuter which has in total 22 firm orders for the type. Bombardier enjoys a healthy backlog for its turboprops, 84 aircraft, with the Q400 accounting for 61 of these.

CASA

The latest version from the Spanish/Indonesian joint venture, the CN235-300 received type certification in July 1998. Without the backing of the Indonesian domestic carrier, Merpati, and defence orders the future of this programme would be in doubt.

Embraer

Production continues of the EMB-120 Brasilia aircraft at Sao Jose although in very small numbers, some 12 aircraft only in 1999. With no recorded new sales in 1999, this production rate is unlikely to increase this year. Despite this, and the manufacturers success in the regional jet market, Embraer is considering other developments of the existing EMB-120ER model including an all-cargo version and a combi.

Fairchild Dornier

Despite the successful launch of its jet products - the 328Jet, 428Jet and 728Jet - the manufacturer continues to produce the 19 seat Do-228 and the 32 seat Do-328 turboprop. However with only 11 new sales between both types in 1999 how much longer Fairchild will continue producing the type is open to question. The Metro 23 continues to be built, and has proved successful with the integrators in the form of the Expediter cargo version, but worryingly no new orders for the type were recorded during 1999.

LET

The Czech-based manufacturer, now owned by Ayres Corporation of the US, is seeking to gain certification later this year for its 40 seat L-610G turboprop aircraft. Whether the aircraft will be able to attract any orders is another matter as it is pitched in the middle of the ground currently dominated by the regional jets. Ayres can at least be comforted by the fact that its other major aircraft type, the LM200 Loadmaster, received a further 25 firm orders from FedEx in 1999, bringing the total ordered to 75 aircraft plus 175 options.

Raytheon

The Beech 1900D, which entered service in 1991, is one of the few 19 seat turboprops still in production. In 1999, some 50 of the type were delivered and the company forecasts that it will produce roughly three aircraft a month this year. The company predicts that the annual demand for 19-seaters will be around 35-50 aircraft a year for the next ten years.

Aviation Strategy

Analysis

	Beech 1900D	Emb -120	ATR 42-500	ATR 72-500	CN-235	Metro 23	Do- 228	Do- 328	Dash 8 Q200	Dash 8 Q300	Dash 8 Q400	Total
European airlines												
Air Dolomiti			1	1								2
Air Nostrum				5								5
Alitalia Express				3								3
Augsburg Airways											5	5
Binter Canarias				1								1
Capitaneria di Porto			1									1
Cimber			1									1
Eurowings			5									5
Federico II Airways								1				1
Jersey European									3	1	4	8
SAS Commuter											2	2
Tarom			2									2
Tyrolean											5	5
Uni Air											6	6
Wideroe										2	1	3
European total	0	0	9	11	0	0	0	1	3	3	23	50
North American airlines												
Aeromar			2									2
Air Labrador	1											1
Air Wisconsin								6				6
Horizon Air											15	15
Piedmont									9			9
Voyageur	16											16
N. American total	17	0	2	0	0	0	0	6	9	0	15	49
Asian airlines												
Air Nippon										3		3
Impulse	5											5
MBA									1			1
Merpati					16							16
National Jet									2			2
Asian total	5	0	0	0	16	0	0	0	3	3	0	27
Others												
Air Austral				1								1
Air Guyane			1									1
Air Marshall Islands								2				2
Air Venezuela					3							3
Arkia			1									1
Changan Airlines											3	3
Iran Asseman				2								2
Jet Airways				5								5
New Central							2					2
Palestinian										2		2
Transasia				2								2
Unannounced	11			2						3	3	19
Others total	11	0	2	12	3	0	2	2	0	5	6	43
TOTAL	33	0	13	23	19	0	2	9	15	11	44	169

How to sell an airport

Recent announcements that both Zurich Airport and the Irish airport group Aer Rianta, will be seeking public listings (the former this year, the latter probably not for a couple of years) has once again turned the focus of attention of governments, investment bankers and investors to the airport sector. In this article *Aviation Strategy* outlines the important issues in considering an IPO in the airport sector.

Two recent privatisations in Asia in the airport sector highlight the differences between success and failure. In November 1999, Malaysia Airports, which operates 37 airports in the country, including a 50 year concession to run the new Kuala Lumpur International Airport (KLA), was successfully floated on the Kuala Lumpur stock exchange, the issue being twice oversubscribed. The first stage of the privatisation involved the sale of 18% of the shares sold to domestic retail subscribers raised some M\$495m (US\$130m). The Malaysian government is eventually expected to sell down its stake to 52% with international institutional investors invited to participate in the secondary offering.

In sharp contrast, the IPO of Beijing Capital International Airport (BCIA) was met with investor indifference. One problem with the share issue was perceived as overly optimistic pricing. The shares in BCIA were priced at only a modest discount to the overall Hong Kong market on a current year price-to-earnings multiple basis. Previous privatisations in China have had mixed fortunes, and international investors want to see attractive rather than aggressive pricing of new issues.

The main difference between the two issues however can be summed up in two words, growth and strategy. KLA presented a clear company strategy, and investors were comfortable with Malaysia's economic recovery story. But fund managers looking at BCIA were concerned that funds raised were being

used to repay debt rather than improve and expand facilities. Concern also was voiced as to whether the Chinese economy and its airlines would be able to generate attractive traffic growth rates for the airport.

So what are the main issues that confront an airport when coming to the market? What do retail investors and professional fund managers look for when making an investment decision? A thorough understanding of the following items is a prerequisite for a successful flotation:

- Current commercial performance;
- Future capital expenditure requirements;
- Passenger and cargo growth expectations;
- Regulation regarding the determination of aeronautical charges; and
- Competition from existing or new airports.

Current performance

Investors will gain confidence from a management team whose track record bears favourable comparison with a peer group of other airports. To carry out comparisons, analysts will use a variety of measures usually relating various types of profit or cashflow (EBITDA) to price (stockmarket valuation) or, the current vogue, EV (Enterprise value - stockmarket capitalisation plus debt plus capitalised leases).

On the operational side, relevant measurements include:

- Total revenues per work load unit;
- Aeronautical revenues per work load unit;
- Operating costs per work load unit; and
- Average spend per passenger.

Capital expenditure

Investors will want to understand the planned capital expenditure plans of the airport and feel comfortable that the plans are warranted by expected traffic growth. Capital expenditure can have a profound impact on an airport's cash flow and capital structure,

and hence on an airport's self-financing capability and its user charges. It is sometimes useful to plot historic capital expenditure rates of different airports against incremental passengers gained in order to benchmark capex projects.

Growth and internationalisation

A natural selling point is a strong growth rates. Aer Rianta will score well here given the recent and forecast GDP growth rates for the "Celtic Tiger" economy. One important factor here is the strategy adopted by the main airline serving the airport - privatisation candidate Schiphol Airport is a harder sell now that KLM has adopted a downsizing strategy.

Success in international markets may be an important factor. For instance, Aer Rianta, through Aer Rianta International, has already made successful investments in airports such as Birmingham and Dusseldorf.

For Zurich, the omens look well set. The partial privatisation of the airport is set for autumn with the Canton of Zurich expected to raise some SFr500m (\$333m) from the sale of a 28% stake in the airport. The growth story is strong. Passenger numbers rose 8.3% in 1999 to 21m, and the airport has plans to double its capacity to 34m by 2004. Forecasts suggest that passenger numbers could reach 42m by 2020 if the airport can successfully target transfer traffic.

Regulation

It is vital the government gets the right balance between preventing market abuse (most airports are natural monopolies), encouraging efficiency and quality for airport users (passengers and airlines), and providing an adequate return for investors and allowing for further investment requirements.

Investors, and indeed the management of the airport, prefer to see a regulatory system that is fair, transparent, and predictable. It should also be flexible enough to take account of major market changes - for example, BAA was given scope to increase aeronautical charges to compensate for the loss of duty-free revenue.

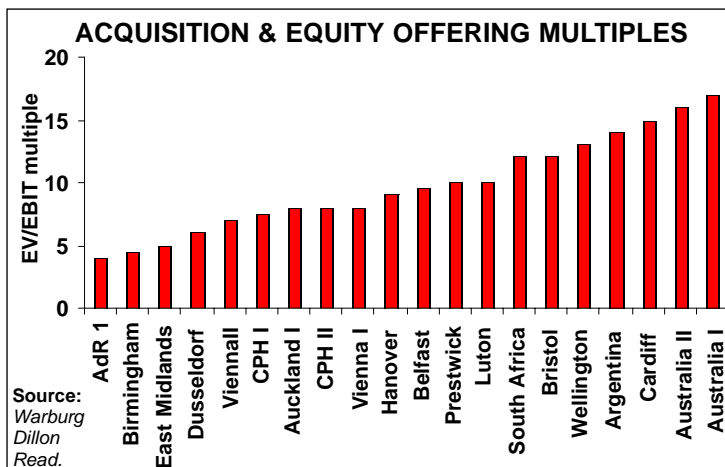
Competition

Competition can come from the development of new or existing airports or from hubs in different countries. In the case of Aer Rianta there has been some speculation regarding the development of a new Dublin airport, and this will have to be resolved before an IPO can take place. In the case of Zurich, which has a prime focus on attracting transfer traffic, investors will need to understand how the airport will compete against Charles de Gaulle.

In Europe investors also have to make a judgement on how airports will be able to recover in the medium-term from the loss of duty-free sales. As duty-free was only abolished in July last year, it is too early to tell how successful the different retail strategies adopted by different European airports have been at clawing back lost revenue. European airports with a high percentage of intra-EU traffic, such as Aer Rianta (85%), will be less attractive to investors than those that enjoy a high proportion of intercontinental passenger traffic, such as Schiphol (55%).

Pricing

In terms of pricing of the equity offered, investors in Europe at least have a reasonably broad range of airports to act as a peer group. As well as quoted airports/airport groups such as BAA, Copenhagen, Vienna and Aeroporti di Roma, investors are able to glean from reports and accounts from airports such as Brussels, Frankfurt, Manchester, and Aeroports de Paris, financial and operational data.



WestJet: The Southwest formula, expertly executed

WestJet Airlines, the successful Canadian low-fare operator which went public in July, was quick to announce ambitious growth plans after Air Canada's acquisition of Canadian Airlines was approved by the regulators in late December.

The Calgary-based carrier, which has so far focused on the Western region, will start a major expansion drive into eastern Canada this month (March). This will include developing a new hub in Hamilton (Ontario). WestJet has also decided to replace its fleet of old 737-200s with new aircraft. It has just signed an LoI with Boeing to purchase up to 50 new 737-600s or 737-700s and made arrangements with GECAS to lease another 10-20 aircraft of the same type.

These moves are a strong signal of WestJet's intention to grab all the new domestic route opportunities that will result from the current industry restructuring (the two largest carriers rationalising and integrating their operations). In the words of CEO Stephen Smith, "It is our intent to become Canada's low-fare, short haul carrier".

Another advantage from WestJet's point of view is that the regulators will be extra vigilant of predatory behaviour or anticompetitive practices, now that the domestic market will be 80% controlled by Air Canada. The government has just introduced legislation, which is expected to pass with little opposition, giving the Canadian Transportation Agency new powers to monitor and prevent Air Canada from abusing its virtual monopoly.

While most of the conditions attached to the merger (surrendering some slots at Toronto, for example) had no direct relevance for WestJet, there was one important issue: Air Canada's plans to operate a low-fare subsidiary in the East.

This issue was resolved to WestJet's satisfaction as Air Canada was ordered to delay any such plans until at least September 2000.

This will give WestJet a useful headstart in a new and unfamiliar region. But otherwise, since commencing operations in February 1996, the upstart carrier has not only proved that it does not need protection - it has been financially successful and inflicted severe damage on the incumbents.

Despite its small size, WestJet successfully fended off concerted attacks from Canadian in 1998. Faced with plummeting yields and heavy losses, the larger carrier was forced to pull back, realign its key Western network and match fares on a more selective basis. Simply, WestJet was one of the factors that led to Canadian's downfall.

Had Canadian found a way of continuing as an independent entity, it would have probably stayed out of WestJet's way by focusing on the high-yield segment and forgetting about plans to introduce its own no-frills service in the West. Air Canada, in turn, would have continued to court WestJet as a potential ideal codeshare partner in western Canada.

WestJet has been profitable since its inception, and in the past three years its operating margins have exceeded 10%. This is remarkable by low-fare new entrant standards, particularly in the light of the negative publicity following the ValuJet crash in May 1996 - just three months after WestJet took to the air.

The company has continued to perform well despite the relatively weak economic climate in Canada and the imposition of substantial Nav Canada charges on the airlines a year ago. Its third-quarter operating margin of 17.7% was

WESTJET FLEET GROWTH							
	Number of aircraft at year end:						
	1996	1997	1998	1999	2000E	2001E	Plans after 2002
737-200	4	6	11	15	20	20	To be phased out in 2002-2004
737NG leased	0	0	0	0	0	4	6 delivered in 2002. 10 options held for delivery by 2008
737NG purchased	0	0	0	0	0	?	LoI on 20 firm orders and 30 options. No specified delivery date
TOTAL	4	6	11	15	20	24?	

Source: SunTrust Equitable Securities.
Note: Letter of Intent signed with Boeing on February 24th.

among the best reported by airlines of any size in North America. In 1999 WestJet more than doubled its operating and net profits to C\$30.5m and C\$15.8m respectively, representing 15% and 7.8% margins. Revenues rose by 62% to C\$203.6m. Fully-diluted earnings per share also more than doubled from 28 cents to 58 cents, which was in line with expectations.

Much of WestJet's financial success is attributable to its relatively conservative growth strategy of adding 3-5 aircraft per year. This has enabled it to steadily increase revenues, maintain strong load factors and retain low unit costs. After four years, it still operates only 15 aircraft, serving 12 cities.

Of course, year-over-year capacity growth continues to be impressive as the base is still so small. In 1999 ASMs surged by 40%. Since that was more than matched by traffic growth, the load factor was a healthy 72.3%. And, despite all that, yield improved by 15% to 22.5 Canadian cents per RPM.

Although WestJet's unit costs surged by 10% to 13.9 Canadian cents last year, much of that was due to the introduction of the second phase of Nav Canada charges and a sharply higher employee profit sharing payment (up from C\$1.7m to C\$6.6m). Excluding those items, unit costs rose by just 3% despite the hike in fuel prices.

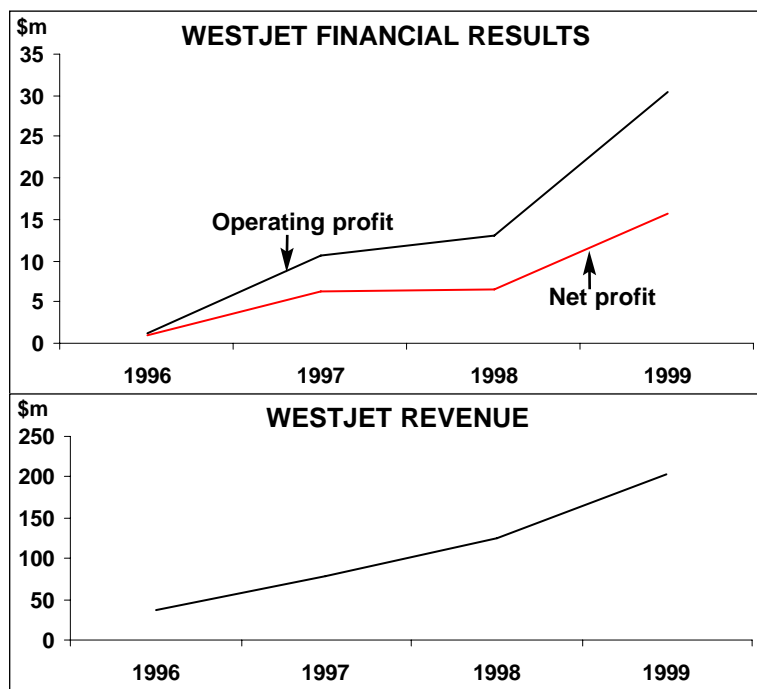
Adequate capitalisation has also helped. Around C\$28m was raised from the original investors in 1995 and through a rights offering to institutional and retail investors in January 1996. This and the subsequent strong cashflow enabled WestJet to buy all its aircraft while keeping debt to a minimum, making it possible to go public successfully at an early stage.

The July 1999 IPO, which gave WestJet a listing on the Toronto Stock Exchange, sold 10% of the equity and raised C\$25.8m in net proceeds. The bulk of those funds were earmarked for aircraft purchases. The share price has risen by more than 70% since the offering.

WestJet's balance sheet remains strong with long-term debt of C\$29m (just 21% of total capitalisation) and stockholders' equity of C\$94m at the end of 1999. Cash and short term investments were C\$51m, up from \$13m a year earlier.

Successfully replicated business plan

WestJet's business model is a close replica of Southwest's. Both utilise 737s and



operate point-to-point, single-class, no-frills service in niche markets. Like Southwest, WestJet looks for underserved and over-priced markets, enters them with fares 50-70% below what was previously available and offers one-way peak and off-peak fares. It strives for a fun and friendly image and an informal, people-focused corporate culture. It is ticketless and relies mostly on direct sales.

The main differences - WestJet's small size and lower flight frequencies (1-3 per day on most routes) - reflect its younger age and the much smaller size of the Canadian domestic market. Another difference is WestJet's supplemental strategy of operating charters to serve smaller cities, develop new markets and boost aircraft utilisation.

In the past, WestJet's leadership has often talked about the pre-1986 Pacific Western, Canadian's predecessor, as another role model. PWA, which also operated 737-200s, was very successful in the West before it overstretched itself with acquisitions.

Like Southwest, WestJet places much emphasis on quick turnarounds (about 30 minutes, compared to Southwest's 20) and high aircraft utilisation (9 hours daily, compared to Southwest's 12). It also tries to minimise ground handling and other airport service costs by subcontracting those activities.

Its main advantage are unit costs that are much lower than those of competitors on a stage length adjusted basis. According to SunTrust Equitable Securities, in January-September 1999 WestJet's unit costs were 9.2 US cents per ASM, compared to Air Canada's 11.8 cents and Canadian's 7.9 cents. But its average stage length was just 380 miles, compared to Air Canada's 1,012 and Canadian's 1,470 miles.

Adjusting to Southwest's average stage length of 440 miles and excluding the high Nav Canada charges would appear bring WestJet's unit costs within one cent over Southwest's level, despite the differences in fleet sizes.

Perhaps, one of WestJet's biggest accomplishments has been to come closer than any other low-fare carrier to emulating the way Southwest treats its people. It recruits service-oriented workers, trains them well and motivates them to outperform through productivity and profit-based incentives. The workforce benefits from profit-sharing and stock ownership programmes, and there are no unions.

Analysts have praised WestJet's management for its focus and discipline about sticking to the business plan, rather than being tempted to experiment with new markets and strategies (which many other new entrants have done to their peril). For example, WestJet was just as hesitant to move into eastern Canada as Southwest was about braving the US Northeast.

Much of this credit goes to Clive Beddoe, WestJet's founder and chairman, who has kept a tight rein on costs and the pace of expansion. Beddoe also had the foresight to bring in one of

the highest-calibre low-fare airline experts, David Neeleman, to provide the blue print for a successful operation. Neeleman had co-founded Morris Air, which Southwest bought in 1993, and now looks likely to repeat the success with JetBlue in New York.

One of the biggest surprises has been WestJet's ability to reproduce the famous "Southwest effect" in western Canada. Traffic volumes in many of the markets doubled or tripled between 1995 and 1997, following WestJet's entry. Even the largest markets, like Calgary-Vancouver, grew by 40-80%.

WestJet's strategy has been to "educate the market about how economical air travel can be", as its advertising budget is rather limited. To its amusement, the incumbents matching the fares spent heavily on advertising, which actually helped everyone. Furthermore, WestJet was soon the main beneficiary of all that publicity as the bigger carriers had to withdraw from the markets or limit the availability of the low fares due to losses.

Expansion to the East

The eastward push represents a major strategy change for Westjet. Only a year ago, its leadership seemed determined to avoid the East and the transcontinental markets for fear that such operations would stretch the organisation, increase costs and compromise on-time performance.

But the markets are now less crowded - no longer the main battleground between two large carriers. WestJet said that it now sees a "window of opportunity" to connect eastern Canada with its network in the West and that the past four years have proven that the demand is there for its service in a variety of markets.

The carrier will start by linking Hamilton with two of its existing cities, Winnipeg and Thunder Bay, when an additional aircraft becomes available this month. It will be the first airline to provide jet service in those markets. Ottawa and Halifax will be added in the spring and Montreal by mid-summer, subject to airport negotiations.

By the summer, those five routes will each have 1-3 daily frequencies. There will also be two daily flights linking the hubs, Calgary and Hamilton, with one-stop service via Thunder Bay and Winnipeg. Plans for 2001 envisage strength-

THE WESTJET EFFECT

Number of passengers (000s)	Pre-WestJet		% change
	1995	1997	
Edmonton-Kelowna	14.5	85.9	491%
Regina-Kelowna	3.5	14.4	317%
Saskatoon-Kelowna	4.2	14.8	250%
Kelowna-Victoria	12.2	40.9	236%
Calgary-Kelowna	25.8	78.9	206%
Edmonton-Victoria	43.2	123.3	185%
Calgary-Victoria	63.3	161.7	156%
Top three markets			
Calgary-Vancouver	422.2	674.0	60%
Edmonton-Vancouver	243.2	437.9	80%
Calgary-Edmonton	271.6	374.6	38%

Source: WestJet IPO prospectus (June 1999).

ening the connection between the East and West networks.

Hamilton, a steel town just 44 miles from Toronto, was chosen as a hub for its central location and large local market on the densely populated western shore of Lake Ontario. Air Canada is thinking of making Hamilton the base for its own proposed low-fare venture (see pages 4-5).

These plans have received a unanimous thumbs-up from analysts, who see eastern Canada as a major source of earnings growth for WestJet. There appear to be no concerns at all about WestJet entering Air Canada's prime domain.

Then again, WestJet is determined to stick to the strategy that has worked for it in the West. It can also be trusted not to overextend itself. The fact that the Canadian market does not seem big enough for two major carriers probably means that WestJet will remain a niche operator.

In the IPO prospectus, WestJet ruled out scheduled transborder expansion for the foreseeable future on grounds of current market conditions, the relative value of the US dollar and the wealth of domestic opportunities. However, as for Southwest, it may only be a matter of time.

Fleet plans

WestJet's intention has always been to rejuvenate its old 737-200 fleet, which currently has an average age of 23 years. It has been adding some 1980s-vintage aircraft and retiring some of the oldest ones, with the aim of moving to new-generation used 737s and, eventually, brand new aircraft. This year's plans call for five more 737s, to bring the fleet to 20 aircraft by year-end.

But the days of utilising old aircraft are coming to an end for low-fare new entrants everywhere, because of image considerations and the higher fuel prices. Carriers like Frontier have now ordered new aircraft, while JetBlue decided that starting with brand new A320s was the most viable option.

For WestJet, the prospect of becoming a nationwide carrier tipped the balance in favour of new aircraft. After evaluating the latest 737 models and the A320 family aircraft, the carrier announced in late February that it would acquire 737-600s or 737-700s, powered by CFM56 engines. This was a welcome boost for Boeing,

which has lost many orders to Airbus over the past year. Like JetBlue, WestJet will purchase most of the aircraft from the manufacturer but, in order to secure some early deliveries, has made separate arrangements with a lessor to take some on operating leases.

It has signed some type of Lol with Boeing to place firm orders for 20 aircraft, either the 125-seat 737-600 or the 142-seat 737-700, valued at around C\$900m including spares. There are 30 options, all with delivery slots before 2008. The agreement with GECAS covers 10 firm and 10 options on the same aircraft type, with deliveries beginning in the second quarter of next year.

These deals will enable WestJet to add up to 70 new aircraft over the next eight years. The plan is to use the first four leased aircraft arriving in 2001 for growth, while the six leased aircraft due in 2002 will facilitate the retirement of some of the 737-200s. The plan is to operate just one aircraft type once the fleet replacement process has been completed by 2008, and that type looks likely to be the 737-700. The new fleet will significantly help WestJet retain its unit cost advantage over competitors.

Prospects

Analysts see continued strong profit growth for WestJet in the foreseeable future. The First Call consensus estimate is a 35% increase in earnings per share in 2000. SunTrust Equitable Securities believes that earnings growth will be 20-25% annually over the next several years.

The main drivers will be additional aircraft and expansion in eastern Canada, which is likely to produce continued 30-40% annual capacity growth. Parallels are being drawn with Southwest's expansion on the US East Coast, which seemed risky initially but turned out a huge success as the carrier stuck to its proven formula.

Like Southwest, WestJet is regarded as a good long term investment. However, in the short term, WestJet has an edge in one important respect. It is extremely well hedged for fuel, having locked 90% of its fuel requirements through June 30 into a maximum price of \$16 per barrel. After that it will pay \$18 per barrel, though if the price of crude falls below that level, it is expected to get the lower price.

By Heini Nuutinen

Braathens: reeling from Scandinavian market share battle

The last financial year to 31 December 1999 was an *annus horribile* for Norway's principal domestic airline, made only slightly more palatable by improved results in the fourth quarter. But it is now putting in place measures that should help it recover from the effect of its vicious market share battle with SAS.

Preliminary full year results released in mid-February indicate that while revenues increased by 4.4%, operating expenses shot up by a huge 16%, plunging the airline heavily into the red. Total operating revenue reached Nkr6,661m (\$860m), offset by expenses of Nkr6,811 (\$880m), resulting in a gross operating loss of Nkr150m. The net loss for the group came to Nkr612m (\$80m), compared to Nkr23m in the previous period.

The poor result is attributed to a number of largely external factors. The downturn in the Norwegian economy, combined with the opening of the new Oslo Gardermoen Airport, created severe over-capacity in the Norwegian domestic market, causing a collapse in yields. Lengthy start-up problems at the new airport and a shortage of air traffic controllers badly affected punctuality, and were a significant contributor to Braathens' difficulties, as was the airline's experience from its forays into neighbouring Sweden.

Without the proceeds from the sale of assets, the financial picture would have been even more depressing. During the

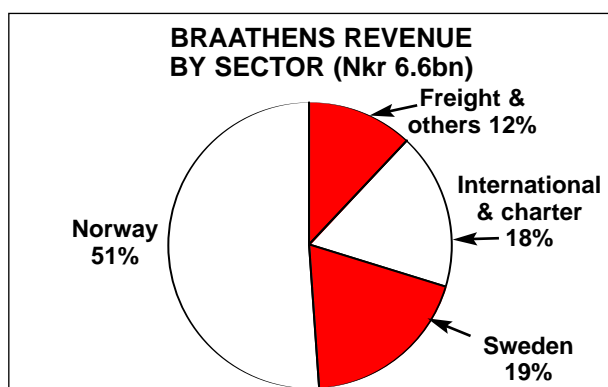
year, Braathens sold two 737-400s for Nkr340m, and sold and leased back eight 737-500s and one 737-400 at a sales price of Nkr1,540m. In addition, Braathens also sold its shares in Equant NV, gaining Nkr77m, and leased back buildings at the airport, but making a loss of Nkr25m on the sale. Capital gains totalled Nkr668m.

A further sale and lease back transaction for three 737-500 aircraft was completed in January 2000. The proceeds of Nkr450m were also used to prepay debt. The capital gain of about Nkr175m will be booked against the first quarter of the current financial year. The airline plans to sell and lease back another 737-500 during the second quarter.

Braathens has a letter of intent for the sale and lease back of buildings at Stavanger Airport, where it has its technical base, which should result in a sale price of Nkr240m and a capital gain of approximately Nkr160m. The sale and lease back of its head office at Fornebu is another project being worked at for implementation in the first quarter.

Also on the cards is the outright sale, or a joint venture, of its engine workshop. The workshop specialises in CFM 56-3 and -7 engines (as used in the 737), and has built up an enviable reputation for quality and on-time performance. The joint-venture approach has already been set in motion in the ground handling sector, where Braathens has transferred its third party ground handling activities (apart from services for its alliance partners) at Gardermoen to Servisair Norge AS, in which Braathens will have a minority holding. All these measures are being used to reduce financial liability, although it also strips the company of assets, which could be a risky strategy.

When these transactions are completed, and an outstanding 737-700 is delivered in March, Braathens will have a fleet of 35 air-



craft, of which six 737-700s are owned and three leased, with 21 737-500s and five 737-400s also leased.

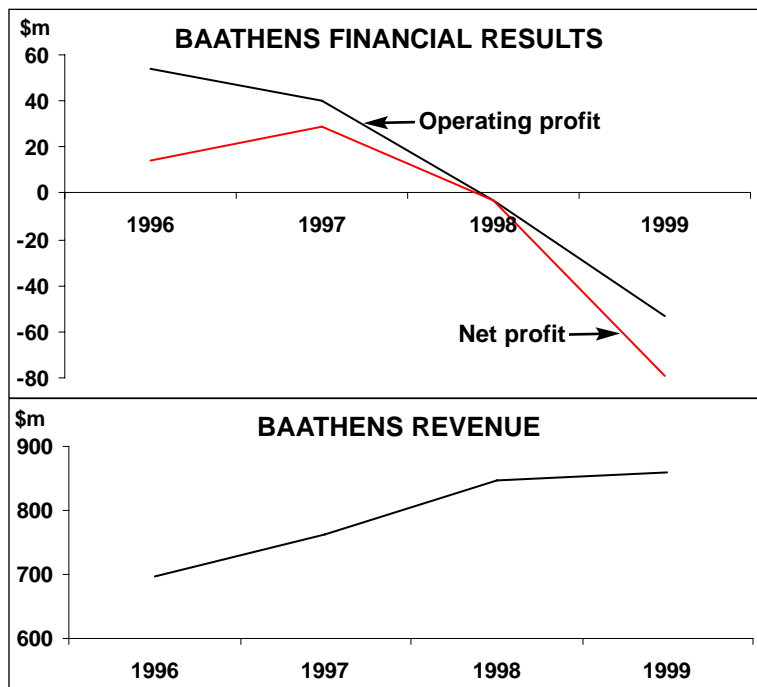
In the longer term, Braathens has options on about ten 737-700s, which are likely to replace earlier types. Braathens Malmö Aviation's fleet comprises ten BAe 146-200s, one 737-300 and four Fokker 100s, all leased. The 96-seat 146-200s are being replaced this summer by newer 112-seat Avro RJ100s, which will be acquired through a lease agreement with BAE Systems Asset Management. The 737 has been retired and, together with the four Fokker 100s, will be sub-leased to other operators during the remaining three-year lease period.

Domestic dismay - the Gardermoen effect

Domestic services account for around half of Braathens' operating revenues, and as such are vital for the airline's survival. The shape and terrain of Norway makes air travel essential, thus ensuring a strong market, which supports a total of nearly 11m passengers a year (the country's population is 4.4m).

To understand last year's slump, it is necessary to go back into recent history. Norway's market was heavily regulated until European liberalisation. (The EC's Third Package was applicable in Norway because the country participates in the European Economic Area although it is not an EU member.)

However, liberalisation has no practical effect as the slot restrictions at Fornebu Airport kept a stranglehold on the domestic sector. This shut effectively shut out would-be competitors to the incumbent airlines



Braathens and SAS, which had shared the spoils more or less on an equal basis.

Then in October 1998, the opening of Oslo's new Gardermoen Airport, with masses of spare capacity, swept away the restrictions overnight. The result was a frantic scramble for increased market share, led by SAS, which increased its domestic capacity in Norway by 25-30%.

Braathens followed suit, although its capacity boost was somewhat less at 15-20%. The competitive landscape was further altered by a newcomer, Color Air, which began scheduled services in August 1998 with a fleet of three 737-300s. The ensuing battle for market share, while adding many new flights and frequencies, inevitably resulted in lower fares and depressed yields.

The real problem, says Braathens' VP Corporate Affairs Frode Geitvik, was that the 5.5% traffic growth generated was not real, but hyped and, together with the drop in fares, could not be sustained. Additionally, the fall in the oil price at that time brought Norway's oil exploration and production business almost to a halt, and as the oil industry was among Braathens' biggest clients, the effect on its business traffic was devastating.

BRAATHENS FLEET PLANS

	Current fleet	Orders	Remarks
737-400	5		
737-500	21		
737-700	9	1	Plus 10 options
Total	35		

Punctuality problems at the new airport, largely due to teething troubles and shortage of air traffic controllers, exacerbated the situation, with the net result that the airline's full-fare business traffic slumped by 15-20% at the beginning of 1999. With Braathens' passenger traffic being approximately two-thirds business, this fall-off represented a body blow. According to Geitvik, this is now down to 10%. The airline is not likely to get the rest back, because of changes in travel patterns due to the less convenient location of the new airport and the unlikelihood of the oil industry recovering to the heights achieved during the last two decades - in spite of a renewed hike in oil prices.

Color Air, with no real critical mass, soon succumbed and ceased operations last September. While this had little real effect on domestic capacity, Braathens and SAS were both forced to retrench. Braathens cut several routes and frequencies from Oslo, reducing its overall domestic capacity (measured in ASKs) by 12%. SAS made cuts of 5%.

Market shares - return to status quo

In terms of market share, it is back to the status quo, with Braathens successfully defending its position, taking 48.5% of the total domestic market. While this is down by 1.5 percentage points from that prior to the price war, it can be explained by being exactly half of the share enjoyed for a short period by Color Air. Braathens expects no domestic growth in 2000, but hopes for a slight improvement in business traffic.

The poor financial result has put any future plans on the back burner. Priorities number one, two and three for the last few months, says Geitvik, have been "to stop the bleeding".

Braathens claims that it is on the verge of succeeding. Fares have gone up by around 10% and are moving towards an acceptable level, and yield improvements are already beginning to filter through.

Some of the actions taken - such as cutting capacity, eliminating the biggest loss-making routes, selling aircraft, and financial

restructuring - are showing signs of success. These measures are in addition to its "Improve 800" programme, whereby Braathens aims to cut Nkr800m off its costs by the end of 2001. In the first six months, Improve 800 has achieved savings of Nkr150m, mostly through a reduction in ground operations personnel and distribution.

Its E-Pass electronic booking system is making a substantial contribution to reducing costs and improving efficiencies. The system allows business-class passengers with a Wings membership card to book tickets over the Internet.

From a standing start at the beginning of 1998, the number of passengers using the facility exceeded 16,000 in one week last December and is continuing to rise. Braathens estimates that electronic distribution will save it between Nkr100 and 200m per year.

Swedish woes

In Sweden, Braathens has got badly burnt, especially on the former Transwede operations out of Stockholm-Arlanda. Since acquiring Transwede in 1996, and Malmö Aviation in 1998, now combined under the Braathens Malmö Aviation name.

This company has suffered a cumulative loss of Nkr705m, including Nkr307m for restructuring of the Swedish operations during 1999. These included redundancy payments to employees (which were cut from 900 to around 500), as well as lease and other aircraft expenses.

All routes out of Stockholm-Arlanda, to

BRAATHENS IN SWEDEN (Nkr millions)

	Revenues	Losses
1996	602	1
1997	634	20
1998	821	147
1999	1,213	230
Restructuring cost (99)		307
Total	3,270	705
	(\$420m)	(\$90m)

Lulea, Umea, Halmstad, and Oslo (now flown by mainline Braathens), as well as the Stockholm Bromma - Lulea route, have been closed down.

Instead, the airline is concentrating its activities in Sweden on the Stockholm city centre Bromma airport, and the profitable 'golden triangle' routes between Stockholm, Malmö and Gothenburg. A new management has also been installed.

Legal possibilities

Although it has taken a battering in trying to muscle in on SAS's stronghold, the final chapter on this saga has yet to be written. The Swedish competition authority has ruled that SAS's price cutting and bonus points inducements provided unfair competition. Apparently, if the decision is upheld, Braathens would have a case for suing SAS for the losses incurred in closing down its Arlanda operation.

Either way, Braathens has no intention of pulling out of Sweden altogether. It sees the market as a vital component in being able to offer network size within Scandinavia, without which its appeal to the international business passenger would be limited.

Only after the situation at home, and in Sweden, has been stabilised, will Braathens again focus on its international routes (it currently serves 10 cities outside Scandinavia).

The KLM alliance

The priority is strengthening the alliance with 30% shareholder KLM. Discussion on a possible joint-venture have been ongoing for some months, but have had to be put on hold, while the airline tackled its more pressing problems.

Last October, Braathens Group chief executive officer Arne Jensen said; "KLM and Braathens believe that closer co-operation will serve both airlines and enable Braathens to strengthen and further develop its market position."

The key objectives of such a joint-venture are revenue, profit and risk-sharing, as being pursued by KLM and Alitalia. Scheduled co-ordination, marketing, lounges, and frequent flyer programme benefits, have already been in place for some time.

The question remaining is not so much if, but when this joint venture will be cemented. A profitable Braathens would speed up the process, but at Braathens' own admission, profits will not be achievable until the 2001 financial year, although significant improvements in results are forecast for this year.

Such predictions, of course, can be influenced either way by external factors. Braathens depends on an improvement in Norway's economy, a return to sensible competition, and the development of alliance building. Nevertheless, it feels that it has put in place the necessary measures to extricate itself from the bear pit.

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Implementing a turn-around - the Bethune experience

Analysing the causes of an airline's decline and drawing up a turn-around plan is a challenging enough task for managers and consultants. Actually implementing a turn-around plan is another thing altogether.

It's very difficult to define the qualities needed in a chief executive whose job it will be to effect a turn around strategy at an airline in dire straits. Indeed, Gordon Bethune's potential wasn't entirely obvious to the board of Continental Airlines back in 1994 when they needed to appoint their tenth chief executive in ten years in an attempt to rescue a carrier that was again teetering on the edge of bankruptcy. The board prevaricated and procrastinated before appointing Bethune, then COO of Continental, as CEO of the ailing airline. Bethune's background was as vice-president customer service at Boeing and before that senior positions at Braniff, Western and Piedmont (airlines which did not survive deregulation).

The appointment turned out to be inspired. Continental recovered; its customer perception leapt; union conflict disappeared; and financial numbers turned from deep red to solidly black. It is now one of financially strongest of the US Majors, with a reputation for quality service. Bethune wrote about his experiences in a book originally published in 1998 entitled "From Worst to First".

The book offers some important insights into what it takes to lead a turn-around. Its faults are those of most management tomes - repetitiveness, for instance. Effective managers get used to reiterating ideas and hammering home their messages, but this gets tedious in a 294-page publication. And non-US readers just have to live with the American football metaphors.

Curiously little is mentioned about external factors. Continental benefited from the general industry upturn in the second half of the 90s, but the airline's turn-around is explained solely in terms of internal reforms. Also, there are very few references to Continental flying internationally.

The turn-around plan - the Go Forward Plan

- had four different elements each of which were given an inspirational title :

- Fly to win - product improvement and network redesign;
- Fund the Future - cost control and cash flow management;
- Make Reliability a Reality - punctuality and reliability; and
- Working together - incentivising the staff.

The limits to cost-cutting

All of these four programmes had to work together at the same time. What Bethune de-emphasised was cost reduction, which was the only consistent strategy that had been applied at Continental since Frank Lorenzo's controversial incumbency (Bethune used to open the cupboards in his office to reassure employees that Lorenzo wasn't still lurking around).

In a company as dysfunctional as Continental was then the priority was to restore form of confidence in the workforce and the passengers. Despite a severe shortage of funds the entire fleet was repainted (In the 80s Continental expanded through acquisition and merger, with the result that many of the planes still sported the livery of a defunct carrier - People Express, Eastern, Frontier, etc.).

At the same time Bethune embarked on a round of apologising - a very un-airline thing - to the key people the airline had alienated. Particular attention was paid to restoring the faith of the travel agents, which is slightly ironic has their commissions have since come under concerted attack from all the majors including Continental.

Of course, none of this confidence restoring would have been any use unless the airline stopped bleeding cash. Bethune hired a very efficient (and expensive) CFO who set about tracking cashflows by personally signing every cheque over a few thousand dollars. Creditors, who already had been through the unpleasant experience of two Chapter 11 bankruptcies, were told of the grim realities at the airline.

"From First to Worst" by Gordon Bethune with Scott Huler. Published by John Wiley & Sons, 1998.

Loans and lease agreements were renegotiated, aircraft orders were cancelled and workers were told that their promised wage increases were to be postponed.

As with most airlines in crisis, Bethune's new managers found that the internal information systems were hugely deficient, providing erroneous or out-of-date information on route and network profitability. Implementing efficient, accurate systems became a priority.

In fact, measuring is one of Bethune's obsessions. The quality of Continental's product was measured with reference of the DoT's monthly statistics on punctuality, misplaced baggage, denied boardings, etc.. For example, to begin with in each month that Continental made the top five airlines, all employees received a \$65 bonus. It doesn't sound much but it was enough to begin to restore some form of team spirit at Continental (the important point was that bonuses were linked to an external, objective measurement rather than a management-invented target). Then as the airline's fortunes gradually improved, the targets and the bonus trigger points - soon Continental had to be in the top three for punctuality.

The importance of predictability

For Bethune, one of the most important qualities that an airline can have is predictability. For the passengers, Continental became more valuable as it became more predictable, when its planes landed on time, when baggage arrived at the same airport as its owner. For suppliers and creditors, Continental became more valuable when they could be sure that they would be paid on time.

Predictability works internally as well. Employees who know precisely what is required perform better, according to Bethune: the checklist approach of the cockpit or the maintenance shop can be replicated throughout the organisation.

The harsh reality is that in any turn-around there are casualties. The new information systems in place allowed the management to be confident in closing down routes; it simply made no sense to cities where break-even was unattainable or just a remote possibility. Continental was also able to rationalise services with its codeshare partner America West.

Personnel had to be cut back but Bethune refused to follow the apparently easy route of buy-outs and early retirements. The people who tend to take those options are the ones who can afford to leave and find other jobs, in other words they tend to be the most valuable employees.

Continental's system was to ask higher level managers to rate every supervisory employee on a scale of one to four, one being very good and four being very poor. The fours were assessed over a year and those who were still fours at the end of the review got canned. According to Bethune, the final cut did not cause dissent or disconcertion, if anything it brought relief.

It appears that Continental employees had a really miserable time under Bethune's predecessors. Bethune himself says that they were regularly misled and sometimes lied to. By contrast, sharing information is a tenet of his regime - through newsletters, email, bulletin boards, etc. if an employee doesn't know what the airline's goals are and what his responsibility is, then it's his fault.

Of course, what really motivates employees is the prospect of real wage increases, and after years of disappointments and sacrifices the workforce was finally rewarded for its efforts as the company's profits re-appeared.

Key lessons

Given that most managers just don't have the drive or charisma or indefinable leadership quality or whatever of a Gordon Bethune what are the lessons of his approach? We highlight two.

First, most turn-around plans concentrate on two elements - finance/costs and markets/fleet. Continental added two more and gave them equal weight in the turnaround - service quality/reliability and staff morale/incentivation. The key to Continental's success was that all four elements were made to work contemporaneously.

Second, simplicity can be brilliance: from the beginning Bethune persuaded his staff to concentrate on one key aim of the strategy - reliability and punctuality, which could be measured objectively using the DoT monthly statistics. What gets measured gets managed.

Aviation Strategy

Macro-trends

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1991	114.8	65.2	56.8	120.9	84.3	69.7	80.0	53.1	66.4	267.6	182.0	68.0	397.8	257.9	64.7
1992	129.6	73.5	56.7	134.5	95.0	70.6	89.4	61.6	68.9	296.8	207.1	69.8	445.8	293.4	65.8
1993	137.8	79.8	57.9	145.1	102.0	70.3	96.3	68.1	70.7	319.1	223.7	70.1	479.7	318.0	66.3
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74.0	334.0	243.6	72.9	503.7	346.7	68.8
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73.0	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72.0
Dec 99	15.7	8.47	54.1	17.0	11.3	66.3	11.2	7.7	68.3	39.9	27.2	68.2	58.5	37.5	64.0
Ann. chng	6.2%	4.7%	-0.8	7.0%	7.5%	0.3	1.3%	-2.9%	-3.0	4.3%	2.8%	-1.0	5.0%	3.3%	-1.0
Jan-Dec 99	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
Ann. chng	6.5%	4.6%	-1.2	12.7%	11.3%	-1.0	-0.6%	2.6%	2.4	8.5%	7.8%	-0.5	8.1%	7.4%	-0.5

Source: AEA.

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1991	835.1	512.7	61.4	108.0	75.2	69.6	117.0	78.5	67.1	44.3	27.4	61.8	269.2	181.0	67.2
1992	857.8	536.9	62.6	134.4	92.4	68.7	123.1	85.0	69.0	48.0	27.4	57.0	305.4	204.7	67.0
1993	867.7	538.5	62.1	140.3	97.0	69.2	112.5	79.7	70.8	55.8	32.5	58.2	308.7	209.2	67.8
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62.0	300.3	212.9	70.9
1995	900.4	591.4	65.7	130.4	98.5	75.6	114.3	83.7	73.2	62.1	39.1	63.0	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	961.0	679.1	70.7	150.3	118.5	78.8	112.1	81.6	72.8	84.0	52.3	62.3	346.4	252.4	72.9
Dec 99	86.3	56.9	66.0										29.2	19.5	66.8
Ann. chng	4.5%	1.7%	-1.9										0.9%	-0.5%	-0.9
Jan-Dec 99	1,008.6	708.3	70.2										358.6	267.1	74.5
Ann. chng	5.0%	4.3%	-0.5										3.8%	6.0%	1.6

Note: US Majors = American, Alaska, Am. West, Continental, Delta, NWA, Southwest, TWA, United, USAir. Source: Airlines, ESG.

ICAO WORLD TRAFFIC AND ESG FORECAST

	Domestic			International			Total			Domestic growth rate		International growth rate		Total growth rate	
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK %	RPK %	ASK %	RPK %	ASK %	RPK %
1992	1,305	837	64.2	1,711	1,151	67.3	3,016	1,987	65.9	3.0	4.6	15.1	15.3	9.5	10.5
1993	1,349	855	63.3	1,785	1,205	67.5	3,135	2,060	65.7	3.4	2.0	4.4	4.8	3.9	3.6
1994	1,410	922	65.3	1,909	1,320	69.1	3,318	2,240	67.5	4.6	7.9	6.9	9.4	5.9	8.8
1995	1,468	970	66.1	2,070	1,444	69.8	3,537	2,414	68.3	4.1	5.4	8.5	9.4	6.6	7.8
1996	1,540	1,043	67.7	2,211	1,559	70.5	3,751	2,602	70.4	4.9	7.4	8.8	10.0	7.0	8.8
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
*1999	1,733	1,196	69.0	2,557	1,814	71.0	4,290	3,009	70.2	5.9	4.3	5.3	6.1	5.5	5.4
*2000	1,810	1,244	68.7	2,715	1,922	70.8	4,525	3,165	70.0	4.4	4.0	6.2	5.9	5.5	5.2
*2001	1,868	1,273	68.1	2,837	1,992	70.2	4,706	3,265	69.4	3.3	2.3	4.5	3.7	4.0	3.2
*2002	1,923	1,291	67.1	2,961	2,049	69.2	4,883	3,339	68.4	2.9	1.4	4.3	2.8	3.8	2.3
*2003	1,973	1,353	68.6	3,093	2,187	70.7	5,066	3,540	69.9	2.6	4.8	4.5	6.7	3.7	6.0

Note: * = Forecast; ICAO traffic includes charters. Source: Airline Monitor, July 1999.

DEMAND TRENDS (1990=100)

	Real GDP					Real exports					Real imports				
	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan
1992	102	98	102	102	105	113	103	112	109	110	107	101	115	104	96
1993	105	100	100	101	105	117	107	106	109	112	117	104	108	101	96
1994	109	103	103	104	106	126	117	115	115	117	131	110	117	107	104
1995	111	106	105	106	107	137	126	122	123	123	141	115	124	113	119
1996	114	108	107	107	111	152	135	128	128	126	155	124	127	116	132
1997	118	112	110	109	112	172	146	142	142	138	177	135	136	123	132
1998	122	115	113	112	109	173	150	152	150	135	196	144	147	133	121
1999	127	117	114	115	111	179	150	155	153	135	220	151	152	136	122
*2000	131	120	117	118	112	191	156	164	162	142	239	158	159	143	126

Note: * = Forecast; Real = inflation adjusted. Source: OECD Economic Outlook, December 1999.

Aviation Strategy

Macro-trends

COST INDICES (1990=100)

	Europe						US					
	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost
1991	106	109	103	105	108	88	100	102	102	101	103	84
1992	99	103	96	119	114	80	98	100	101	107	108	75
1993	100	100	90	133	118	82	101	98	99	116	115	67
1994	100	98	87	142	123	71	98	94	101	124	125	62
1995	99	97	86	151	128	67	99	93	98	129	127	61
1996	100	101	88	155	135	80	102	94	98	129	126	72
1997	102	105	85	148	131	81	104	94	100	129	129	69
*1998	107	105	84	151	127	71	108	96	106	127	134	61

Note: * = First-half year. European indices = weighted average of BA, Lufthansa and KLM. US indices = American, Delta, United and Southwest. Unit revenue = airline revenue per ATK. Unit operating cost = cost per ATK. Unit labour cost = salary, social charges and pension costs per ATK. Efficiency = ATKs per employee. Average labour cost = salary, social costs and pension cost per employee. Unit fuel cost = fuel expenditure and taxes per ATK.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)					Exchange rates (against US\$)						LIBOR 6 month Euro-\$	
	US	UK	Germany	France	Japan	UK	Germ.	France	Switz.	Euro**	Japan		
1991	104	106	104	103	103	1991	0.567	1.659	5.641	1.434	0.809	134.5	5.91%
1992	107	107	109	106	105	1992	0.570	1.562	5.294	1.406	0.773	126.7	3.84%
1993	111	109	114	108	106	1993	0.666	1.653	5.662	1.477	0.854	111.2	3.36%
1994	113	109	117	110	107	1994	0.653	1.623	5.552	1.367	0.843	102.2	5.06%
1995	117	112	119	112	107	1995	0.634	1.433	4.991	1.182	0.765	94.1	6.12%
1996	120	114	121	113	107	1996	0.641	1.505	5.116	1.236	0.788	108.8	4.48%
1997	122	117	123	114	108	1997	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
1998	123	120	124	115	109	1998	0.603	1.759	5.898	1.450	0.896	130.8	5.51%***
1999	125	122	126	116	108	1999	0.621	1.938	6.498	1.587	1.010	103.3	5.92%***
*2000	127	126	127	117	108	Feb 2000	0.624	1.964	6.586	1.616	0.996	111.0	6.12%***

Note: * = Forecast. **Source:** OECD Economic Outlook, December 1999. **Euro rate quoted from January 1999 onwards. 1990-1998 historical rates quote ECU. *** = \$ LIBOR BBA London interbank fixing six month rate.

WIDEBODY LEASE RATES

Model	Age	Rental (\$m)	Model	Age	Rental (\$m)	Model	Age	Rental (\$m)
747-100B	1969-76	90,000	L1011-1	1971-81	90,000		1979-81	120,000
747-200B	1971-75	140,000	L1011-200	1975-81	110,000	A300B4-200	1975-79	115,000
	1976-80	240,000	L1011-500	1978-83	135,000		1980-84	150,000
	1981-87	340,000	DC10-10	1970-78	105,000	A300-600	1985-92	310,000
747-300	1983-89	410,000	DC10-30	1977-82	260,000	A300-600R	1987-90	330,000
747-400	1989-93	740,000	DC-10-40	1972-76	105,000		1992-97	400,000
	1994-99	940,000	MD-11P	1990-93	600,000	A310-200	1982-89	180,000
767-200	1981-90	230,000		1994-99	700,000	A310-300	1985-89	245,000
767-200ER	1985-92	340,000	A300B2-100	1973-77	75,000		1990-97	340,000
767-300	1986-90	370,000		1978-81	85,000	A330-200	1998-99	725,000
767-300ER	1988-92	550,000	A300B2-200	1976-80	85,000	A330-300	1994-99	725,000
	1993-99	645,000		1981-82	95,000	A340-200	1993-99	600,000
777-200B	1995-99	805,000	A300B4-100	1974-78	95,000	A340-300	1993-99	770,000

Source: Aircraft Value Journal, Jan/Feb 2000.

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Airbus	Feb	US Airways	34 A321-200s		2001+	Conversion of A319 order
	Feb	Iberia	1 A340-300		2001	
	Feb	United	4 A319s, 5 A320s		2002+	
	Feb	Silkair	1 A320		2001	V2500 engines
	Feb 17	SAS	12 A321-100s	\$530m	3Q 2001+	Plus 10 options, V2500-A5 engines
	Feb 23	Dragonair	5 A320s, 1 A330-300		2Q 2001+	Plus 2 A330-300 options
Boeing	Feb	American	1 737-800			
	Feb	Undisclosed	2 777-300s			PW4000
	Feb	Undisclosed	2 757-200s			RB211
	Feb	Tombo	5 737-700s			
Bombardier	Jan 13	Nagasaki Airways	1 Dash 8-Q200		2001	
	Jan 28	Sunstate (Qantas)	1 Dash 8-Q300		March 2000	
	Feb 17	Shanghai Airlines	3 CRJ200s			

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

Aviation Strategy

Micro-trends

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US\$m	US\$m	US\$m	US\$m	m	m	%	Cents	Cents	000s	m	m	%	
American*														
Apr-Jun 98	4,497	3,889	608	409	64,471.8	46,075.9	71.5	6.98	6.03	20,901	9,512.3	5,317.6	55.9	87,076
Jul-Sep 98	4,583	3,958	625	433	65,920.1	48,093.9	73.0	6.95	6.00	21,457	9,739.3	5,466.1	56.1	89,078
Oct-Dec 98	4,152	3,857	295	182	64,317.3	43,811.6	68.1	6.46	6.00	19,805	9,526.7	5,060.1	53.1	90,460
Jan-Mar 99	3,991	3,954	37	158	62,624.3	41,835.4	66.8	6.37	6.31					
Apr-Jun 99	4,528	4,120	408	268	67,313.8	47,945.9	71.2	6.73	6.12					
Jul-Sep 99	4,629	4,603	547	279	67,972.2	48,792.9	71.8	6.88	6.26					
Oct-Dec 99	4,477	4,206	271	280	65,751.2	44,328.2	67.4	6.81	6.41					98,700
America West														
Apr-Jun 98	534	457	77	41	9,787.8	6,899.1	70.5	5.46	4.67	4,643	1,228.9	733.0	59.7	11,645
Jul-Sep 98	499	453	46	22	9,884.3	7,108.3	71.9	5.05	4.58	4,665	1,240.4	746.9	60.2	11,600
Oct-Dec 98	507	470	37	20	10,037.2	6,491.9	64.7	5.05	4.68	4,335	1,261.2	688.1	54.6	11,687
Jan-Mar 99	520	469	51	26	10,135.4	6,485.5	64.0	5.13	4.63	4,263				
Apr-Jun 99	570	494	76	42	10,446.0	7,204.8	69.0	5.46	4.73	4,724				
Jul-Sep 99	553	511	41	22	10,522.9	7,502.8	71.3	5.26	4.86	4,896				
Oct-Dec 99	569	532	37	29	10,594.0	7,307.8	69.0	5.37	5.02	4,822				11,575
Continental														
Apr-Jun 98	2,036	1,756	280	163	29,891.1	22,007.2	73.6	6.81	5.87	11,261	3,629.6	2,399.3	66.1	39,170
Jul-Sep 98	2,116	1,973	143	73	31,609.9	24,049.4	76.1	6.69	6.24	11,655	3,801.8	2,542.9	66.9	40,082
Oct-Dec 98	1,945	1,817	128	66	30,557.4	21,273.3	69.6	6.37	5.95	10,637	3,664.5	2,339.0	63.8	41,118
Jan-Mar 99	2,056	1,896	160	84	30,938.8	22,107.0	71.5	6.65	6.13	12,174				
Apr-Jun 99	2,198	1,942	256	137	32,448.3	24,009.1	74.0	6.77	5.98	11,493				
Jul-Sep 99	2,283	2,071	21	110	34,711.0	26,380.3	76.0	6.58	5.97	11,922				
Oct-Dec 99	2,158	2,073	85	33	33,771.2	24,094.4	71.3	6.39	6.14	11,347				
Delta														
Apr-Jun 98	3,761	3,167	594	362	57,175.5	43,502.6	76.1	6.58	5.54	27,536	8,189.9	5,049.5	61.7	74,116
Jul-Sep 98	3,802	3,250	552	327	59,017.9	45,242.3	76.7	6.44	5.51	27,575	8,486.8	5,196.9	61.2	75,722
Oct-Dec 98	3,448	3,128	320	194	57,810.9	39,947.7	69.1	5.96	5.41	25,531	8,244.1	4,699.3	57.0	76,649
Jan-Mar 99	3,504	3,148	356	216	56,050.3	39,163.9	69.9	6.25	5.62					
Apr-Jun 99	3,957	3,315	642	364	57,957.3	43,422.1	74.9	6.83	5.72					
Jul-Sep 99	3,877	3,527	350	352	60,710.8	45,528.3	75.0	6.39	5.81	27,183		5,258.2		72,300
Oct-Dec 99	3,713	3,705	8	352	58,265.1	40,495.3	69.5	6.37	6.36	25,739				
Northwest														
Apr-Jun 98	2,475	2,355	120	49	38,332.7	29,533.7	77.0	6.46	6.14	13,676	6,102.8	3,745.5	61.4	51,264
Jul-Sep 98	1,928	2,204	-276	-224	32,406.3	24,295.8	75.0	5.95	6.80	11,148	5,107.4	3,058.6	59.9	50,654
Oct-Dec 98	2,212	2,404	-192	-181	37,947.0	26,534.3	69.9	5.83	6.34	12,962	6,125.2	3,588.9	58.6	50,503
Jan-Mar 99	2,281	2,295	-14	-29	37,041.3	26,271.8	70.9	6.16	6.20					
Apr-Jun 99	2,597	2,333	264	120	40,541.5	30,900.2	76.2	6.41	5.75					
Jul-Sep 99	2,843	2,472	370	180	43,194.5	33,562.1	77.7	6.58	5.73					
Oct-Dec 99	2,555	2,461	94	29	39,228.3	28,618.2	73.0	6.51	6.27					
Southwest														
Apr-Jun 98	1,079	870	209	133	18,849.6	13,236.7	70.2	5.72	4.62	13,766	2,394.0	1,378.0	57.6	24,807
Jul-Sep 98	1,095	891	204	130	19,762.1	13,620.3	68.9	5.54	4.51	13,681	2,519.0	1,420.4	56.4	25,428
Oct-Dec 98	1,047	888	159	100	19,763.0	12,603.4	63.8	5.30	4.49	13,291	2,504.1	1,317.4	52.6	26,296
Jan-Mar 99	1,076	909	167	96	19,944.0	12,949.2	64.9	5.40	4.56	12,934				
Apr-Jun 99	1,220	966	254	158	20,836.9	15,241.7	73.1	5.85	4.64	14,817				
Jul-Sep 99	1,235	1,029	206	127	21,903.8	15,464.0	70.6	5.64	4.70	14,932				
Oct-Dec 99	1,204	1,050	154	94	22,360.7	15,047.8	67.3	5.38	4.70	14,818				27,653
TWA														
Apr-Jun 98	884	838	46	19	14,142.2	10,787.3	76.3	6.25	5.93	6,417	1,979.0	1,186.2	59.9	22,147
Jul-Sep 98	863	839	24	-5	14,293.8	10,531.3	73.7	6.04	5.87	6,273	1,999.7	1,150.0	57.5	21,848
Oct-Dec 98	747	813	-66	-79	13,452.4	8,731.6	64.9	5.55	6.04	5,574	1,863.7	982.8	52.7	21,321
Jan-Mar 99	764	802	-38	-22	13,352.4	9,205.2	68.9	5.72	6.01					
Apr-Jun 99	866	848	18	-6	14,274.4	11,130.9	78.0	6.07	5.94					
Jul-Sep 99	876	935	-59	-54	15,188.0	11,524.3	75.9	5.76	6.16	6,928	1,957.0	1,248.6	63.8	20,982
Oct-Dec 99	802	894	-93	-272	14,577.5	10,043.3	68.9	5.50	6.13	6,319	1,861.3	1,121.6	60.3	21,003
United														
Apr-Jun 98	4,442	3,972	470	282	69,101.7	50,152.2	72.6	6.43	5.75	21,935	10,453.0	6,202.6	59.3	94,064
Jul-Sep 98	4,783	4,088	695	425	73,913.5	56,283.7	76.1	6.47	5.53	23,933	11,255.3	6,847.4	60.8	94,270
Oct-Dec 98	4,281	4,090	191	54	70,620.9	49,484.4	70.1	6.06	5.79	21,616	10,774.4	6,182.8	57.4	94,903
Jan-Mar 99	4,160	4,014	146	78	67,994.5	46,899.8	69.0	6.12	5.90					
Apr-Jun 99	4,541	4,108	433	669	71,573.6	50,198.9	70.1	6.34	5.74					
Jul-Sep 99	4,845	4,226	619	359	74,043.0	55,628.0	75.1	6.54	5.71	23,765				96,700
Oct-Dec 99	4,480	4,286	194	129	70,715.9	49,172.2	69.5	6.34	6.06	21,536				96,600
US Airways														
Apr-Jun 98	2,297	1,923	374	194	22,818.3	17,567.1	77.0	10.07	8.43	15,302	3,107.6	1,895.9	61.0	40,846
Jul-Sep 98	2,208	1,938	270	142	23,267.3	17,639.5	75.8	9.49	8.33	15,290	3,166.1	1,898.2	60.0	40,660
Oct-Dec 98	2,121	1,943	178	104	23,318.8	16,112.3	69.1	9.10	8.33	14,202	3,171.1	1,754.5	55.3	40,664
Jan-Mar 99	2,072	1,983	89	46	22,745.8	15,405.8	67.7	9.11	8.72					
Apr-Jun 99	2,286	2,007	279	317	23,891.7	17,557.5	73.5	9.57	8.40					
Jul-Sep 99	2,102	2,213	-111	-85	23,006.6	17,205.6	71.7	8.76	9.22	13,984				40,613
Oct-Dec 99	2,135	2,256	-121	-81	24,705.9	16,714.2	67.6	8.64	9.13	14,075				41,636
ANA														
Jan-Mar 98	3,459	3,545	-86	-68	40,446.9	26,187.7	64.7	8.55	8.76	20,102				
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	3,399	3,355	44	73	42,415.9	27,404.4	64.6	8.01	7.91	21,449				
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	4,541	4,329	212	146	44,156	29,032	65.7	10.28	9.80	21,970				
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	SIX MONTH FIGURES													
Cathay Pacific														
Jan-Mar 98	SIX MONTH FIGURES													
Apr-Jun 98	1,677	1,682	-5	-20	28,928.0	19,237.0	66.5	5.80	5.81	5,208.0	3,481.0		66.8	
Jul-Sep 98	SIX MONTH FIGURES													
Oct-Dec 98	1,769	1,713	56	-45	31,367.0	21,173.0	67.5	5.64	5.46	5,649.0	3,847.0		68.1	
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,695	1,664	31	17	28,801.0	19,325.5	67.1	5.89	5.78		5,267	3,581.6	68.0	
Jul-Sep 99	SIX MONTH FIGURES													
JAL														
Jan-Mar 98	4,279	4,344	-65	-911	56,514.7	39,012.2	69.0	7.57	7.69	15,344	8,570.8	5,628.5	65.7	
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	4,463	4,262	201	133	58,439.5	40,413.9	69.2	7.64	7.29	16,008	8,959.7	5,725.4	63.9	
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	SIX MONTH FIGURES													

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Airline group only.

Aviation Strategy

Micro-trends

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US\$m	US\$m	US\$m	US\$m	m	m	%	Cents	Cents	000s	m	m	%	
Korean Air														
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98	TWELVE MONTH FIGURES													
Oct-Dec 98	3,283	3,063	219	212	58,246.4	40,190.3	69.0	5.64	5.26	25,557		9,480.0		17,050
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
Malaysian														
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98	SIX MONTH FIGURES													
Oct-Dec 98	860	958	-98	-11			57.2							
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
Singapore														
Jan-Mar 98	2,336	2,080	256	258	39,093.6	26,224.3	67.1	5.98	5.32	5,822	7,303.0	4,951.5	67.8	
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	2,232	2,013	219	278	41,466.2	29,456.2	71.0	5.38	4.86	6,240	7,693.4	5,225.2	67.9	
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	2,421	2,130	291	341	41,725.5	30,843.7	74.9	5.80	5.10	6,537	7,958.5	5,540.3	69.6	
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	2,577	2,259	317	346	43,145.7	32,288.3	74.8	5.97	5.24	6,752	8,251.9	5,852.7	70.9	
Thai Airways														
Jan-Mar 98	631	558	73	610	12,211.0	8,522.0	69.8	5.17	4.57	4,000	1,715.0			
Apr-Jun 98	586	583	3	-121	12,084.0	7,963.0	65.9	4.84	4.82		1,700.0			
Jul-Sep 98	629	584	45	176	12,118.0	8,769.0	72.4	5.19	4.82					
Oct-Dec 98	727	647	80	170	12,599.0	9,195.0	73.0	5.77	5.14					
Jan-Mar 99	675			125										
Apr-Jun 99	651			93										
Jul-Sep 99														
Air France														
Jan-Mar 98	5,126	5,079	47	18										
Apr-Jun 98	SIX MONTH FIGURES													
Jul-Sep 98	5,088	4,894	194	228	49,724.0	38,070.0	76.6	10.23	9.84					
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	5,550	5,552	-2	56	51,394.0	38,242.0	74.4	10.80	10.80					
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	5,249	4,889	360	316										
Alitalia														
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98	TWELVE MONTHS FIGURES													
Oct-Dec 98	5,152	4,432	720	235	51,638.4	35,427.2	68.8	9.98	6.86	24,103			18,825	
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
BA														
Apr-Jun 98	3,783	3,497	286	217	44,030.0	31,135.0	70.7	8.59	7.94	11,409	6,174.0	4,157.0	67.3	62,938
Jul-Sep 98	4,034	3,601	433	357	46,792.0	35,543.0	76.0	8.62	7.70	12,608	6,533.0	4,630.0	70.9	64,106
Oct-Dec 98	3,585	3,431	154	-114	44,454.0	29,736.0	66.9	8.06	7.72	10,747	6,277.0	4,111.0	65.5	64,608
Jan-Mar 99	3,343	3,481	-138	-119	43,544.0	29,537.8	67.8	7.68	7.99	10,285	6,130.0	3,933.0	64.2	64,366
Apr-Jun 99	3,527	3,378	149	302	45,813.0	32,032.0	69.9	7.70	7.37	11,733	6,437.0	4,215.0	65.5	65,179
Jul-Sep 99	3,933	3,742	191	49	47,465.0	35,873.0	75.6	8.29	7.88	12,983	6,690.0	4,689.0	70.1	65,607
Oct-Dec 99	3,603	3,606	-3	-116	45,347.0	30,192.0	66.6	7.95	7.95	11,084	6,460.0	4,270.0	66.1	65,800
Iberia														
Jan-Mar 98														
Apr-Jun 98														
Jul-Sep 98	TWELVE MONTH FIGURES													
Oct-Dec 98	4,451	4,100	351	356	45,041.6	32,520.0	72.2	9.88	9.10	21,753		3,740.0		22,065
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
KLM														
Apr-Jun 98	1,702	1,572	130	105	18,600.0	14,290.0	76.8	9.15	8.45		3,177.0	2,365.0	74.4	35,666
Jul-Sep 98	1,865	1,675	190	121	19,363.0	15,984.0	82.6	9.63	8.65		3,359.0	2,583.0	76.9	33,586
Oct-Dec 98	1,673	1,661	12	-15	18,476.0	13,767.0	74.5	9.05	8.99		3,214.0	2,415.0	75.1	33,761
Jan-Mar 99	1,550	1,670	-120	-45	17,716.0	13,294.0	75.0	8.75	9.43		3,088.0	2,284.0	74.0	33,892
Apr-Jun 99	1,626	1,547	79	37	18,778.0	14,302.0	76.2	8.66	8.24		3,253.0	2,427.0	74.6	34,980
Jul-Sep 99	1,731	1,596	135	32	19,630.0	16,083.0	81.9	8.81	8.13		3,352.0	2,640.0	78.8	35,226
Oct-Dec 99	1,509	1,539	-30	-17	19,014.0	14,434.0	75.9	7.95	8.09		3,280.0	2,550.0	77.7	35,128
Lufthansa***														
Jan-Mar 98	2,902	2,860	42	223	23,742.0	16,236.0	68.4	12.22	12.05	8,778	4,618.0	3,171.0	68.7	54,849
Apr-Jun 98	3,507	3,081	426	289	26,132.0	19,489.0	74.6	13.42	11.79	10,631	5,078.0	3,575.0	70.4	54,556
Jul-Sep 98	3,528	3,167	361	198	26,929.0	20,681.0	76.8	13.10	11.76	11,198	5,231.0	3,748.0	71.6	54,695
Oct-Dec 98	2,929	2,106	823	96	25,530.0	18,259.0	71.5	11.47	8.25	9,819	5,204.0	3,676.0	70.6	55,368
Jan-Mar 99	3,301	3,210	91	64	25,445.0	17,942.0	70.5	12.97	12.62	9,658	4,972.0	3,435.0	69.1	56,420
Apr-Jun 99	3,322	3,012	310	97	30,500.0	22,279.0	73.0	10.89	9.86	11,444	5,626.0	3,993	71.0	53,854
Jul-Sep 99	4,049	3,677	382	184	31,335.0	23,866.0	76.2	12.92	11.73	11,891	5,699.0	4,142.0	72.7	
SAS														
Apr-Jun 98	1,323	1,149	174	107*	7,546.0	5,260.0	69.7	17.53	15.23	5,449				25,174
Jul-Sep 98	1,283	1,152	131	127*	8,283.0	5,843.0	70.5	15.49	13.91	5,714				26,553
Oct-Dec 98	1,368	1,266	102	46*	8,116.0	5,089.0	62.7	16.86	15.60	5,431				27,071
Jan-Mar 99	1,203	1,227	-24	-3*	8,062.0	4,713.0	58.5	14.92	15.22	5,017				27,110
Apr-Jun 99	1,357	1,294	63	60*	8,466.0	5,571.0	65.8	16.03	15.28	5,580				27,706
Jul-Sep 99	1,173	1,150	23	12*	8,450.0	5,667.0	67.1	13.88	13.61	5,589				27,589
Oct-Dec 99	1,257	1,180	76	144*	8,227.0	5,210.0	63.3	15.28	14.34	5,536				28,863
Swissair**														
Jan-Mar 98	SIX MONTH FIGURES													
Apr-Jun 98	1,907	1,766	127	86	18,983.8	13,138.7	70.5	10.05	9.38	6,922				9,756
Jul-Sep 98	SIX MONTH FIGURES													
Oct-Dec 98	2,167	2,076	117	165	20,476.8	15,391.3	75.2	10.66	10.11	5,277				10,396
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,932	1,877	55	57	23,411.0	16,130.0	68.9	8.25	8.02	7,784				10,715
Jul-Sep 99	SIX MONTH FIGURES													

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Pre-tax. **SAirLines' figures apart from net profit, which is SAirGroup. ***Excludes Condor from 1998 onwards. 4Q+ data are on IAS basis.

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