Aviation Strategy

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Business travel conundrums

Traffic overall continues to recover from the September 11 atrocity. Business traffic, however, remains in the doldrums. Is this cyclical or has there been some sort of structural change in demand?

According to the ATA, full fare tickets for US domestic travel were down 20% on an annual basis in February while overall traffic was just 11% lower than in 2001. British Airways' traffic statistics for March show premium traffic down 9.2% while non-premium traffic fell by only 2.1%.

Although general economic indicators do not show a recession, the parts of the economy responsible for generating the boom business travel conditions of the late 90s have drooped. The cavalierly price-insensitive e-commerce sector has all but disappeared, while a dearth of M&A activity has grounded many of the investment bankers. The low-cost carriers in Europe have not only managed to capture a substantial share of business travellers, they are also waging a psychological battle - to persuade business people that it's OK, even cool, to be seen on a low-cost carrier.

Two fundamental questions are being asked about business-class strategies. First, are the global alliances delivering the benefits of seamless service that they promised?

The alliances were able to offer the prospect of connecting globally on a collection of carriers sharing the same standards of service on the ground and in the air, a product which, it was thought, would be able to command some premium pricing. But so far the alliances have not been able to offer an alliance-wide FFP, which is the perk that is probably most prized by a regular business traveller.

Nor is it clear that the alliances have been able to exploit their economies of scope. The alliances are matched with very powerful buyers - the travel purchasing departments of major corporations and financial institutions, which have no interest nor incentive in committing their travel purchases to a single alliance. They negotiate on an airline-by-airline basis for corporate clients. This raises the question of whether all the management time spent strategising and harmonising is really cost-effective.

The second issue revolves around the issue of the differential that evolved between published business-class and economy-class fares. During the business travel boom, the US Majors and British Airways, in particular, opened up the gap between business and economy fares to a ratio six or seven to one. BA, unintentionally, projected the message that business-class passengers were to be totally pampered while economy-class travellers were to be just tolerated.

Now market forces are closing the gap to a ratio two or three to one, but airlines are very reluctant to take the lead on this initiative. They, very understandably, worry about the elasticity of demand for business travel, suspecting that it is very inelastic and that a fare reduction will simply reduce revenues.

American Airlines tried to impose "value pricing" in the mid-90s, splitting fares into four transparent classes. It didn't work, largely because of the aggressive response of its competitors. America West seems to be trying something similar at the moment with major cuts in walk-up fares, but it is small player in the business travel market.

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The Commission's search for competence

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Ever since the European Commission started to be involved in air transport in the eighties, it has wanted to increase its area of responsibility beyond the borders of the internal market. The three packages of aviation legislation adopted in 1987, 1988 and 1992 covered fares, capacity, competition rules, licensing and market access on intra-EEC routes only.

When the second package was adopted, the commission believed that it was time to claim external competence. It was clear however that the existing web of bilateral air services agreements between Member States of the Community and third countries would have to be left in place. What the Commission was hoping for was that it should be allowed to monitor the on-going negotiations, a fact of life in aviation bilaterals. The nationality clause, a fixture of bilaterals, was targeted by the Commission.

It was recognised that the change from bilaterals between individual countries to a Community regime would raise important and complex questions. The allocation of traffic rights (this was before open skies), and capacity provisions would eventually need to be allocated on a Community basis. Not surprisingly, Member States were not prepared to abandon their prerogatives at this time.

The first, big step towards Community competence was taken by the Commission in 1990, when it claimed that it had exclusive competence under Article 113 of the Treaty, which gives the Community exclusive competence in matters of foreign trade.

The Commission thus proposed a draft Council decision on "consultation and authorisation procedures for agreements concerning commercial aviation relations between Member States and third countries". Still treading carefully however, the Commission had written in the proposal that while the Community had competence, implementation remained with the Member States, subject to monitoring.

There were no takers. This attempt to establish Article 113 as the legal basis for Community competence was simply ignored by the Council of Ministers and rejected by the European Parliament.

Two years later, when the Council of Ministers adopted the final package of legislation, which created an internal market in civil aviation, the Commission published a Communication on Air Transport Relations With Third Countries. It provided for the Community to have full competence for external aviation relations but would allow a transitional period of five years. During that period, bilateral negotiations would be subjected to internal consultation machinery and subjected also to compliance with Community law and policy.

An internal Community machinery involving a committee to be chaired by the Commission was proposed for the allocation to Community carriers of any rights obtained as a result of a Community negotiation.

Rights obtained by a Member State had to be available on a non-discriminatory basis to all Community carriers established in that country and competition rules were to be applied to third country routes.

It was proposed that negotiations should be made at the Community level when the strength of the negotiating partner and the size of the market would justify it. The US was naturally given as the prime example of such a third country to be handled at the Community level.

Already then, the Commission identified issues where the bilaterals of the Member States were in breach of Community law. Of particular interest were the clauses on substantial ownership and effective control which conflict with articles of the Treaty forbidding discrimination on grounds of nationality and place of residence (in the Community), the inclusion of pricing, market sharing and pooling agreements were all in breach of EC competition rules and the acceptance by Member States of bilateral obligations in areas where Community legislation exists, as for CRS.

So there again, the Council rejected the Commission's claim of exclusive competence. It rejected Article 113 as the legal basis. Facing

this, the Commission asked the European Court of Justice for a formal opinion on the scope of Article 113. It also asked the Court whether Article 84(2) was the appropriate basis for aviation bilaterals. Two years on, the Court said Article 84(2) allows the Council to rule what Community provisions are applicable to air transport. This episode marked the end of the Article 113 experiment.

The year before, in 1993, the Council had set up a Council Aviation Group that would work according to the rules of procedure of the Council. The Aviation Group was to provide for the exchange of information, look at potential conflict between bilateral agreements and Community law and identify areas of common interest that could lead to Community negotiations. The Council had taken over the field.

Meanwhile, the US was busy negotiating open sky agreements with individual Member States. In 1995, the Commission asked the Council for a mandate to negotiate with the US. A year later, it was granted a mandate limited to areas where the Community legislation was affected, such as CRS and slots. The mandate however specifically excluded market access, the prize in any negotiation. In any case, the US rejected this and so in 1998, the Commission launched its complaint to the European Court of Justice in Luxembourg.

The TCAA concept

In the late 90s the AEA proposed its concept of the Trans Atlantic Common Aviation Area (TCAA). The Commission has welcomed the general concept even if it would probably quibble with the details.

The TCAA aims at replacing the current global regulatory regime born in Chicago in 1944, by a unified system. This implies that the European Community should be given a central role in future negotiations. While the idea is to start with the US, the concept is open to other regions of the world and could over time replace the Chicago regime.

Throughout that time the Member States continued to refuse any mandate to the Commission unless the complaint was withdrawn. The Commission stood its ground and everyone had to wait for the European Court of Justice to decide on the complaint.

European Court of Justice's Advocate General Tizzano published his opinion at the end of January 2002. His opinion clearly said that the open skies agreements (with the US) were in breach of Community law on the issues of fares of US-carriers on intra-Community routes, CRS and nationality clause, but it did not preclude the individual Member States to enter into bilateral agreements and to grant non-Community carriers access to fifth freedom rights between Member States.

So there was victory for all. The Commission claimed that it had won while some Member States said they only had to make minor adjustments to their bilaterals.

If the Court follows the Advocate General's opinion (which it may or may not do), his findings on CRS rules and fares on intra-Community routes will have limited impact. What is more important is that the Advocate General rejected the Commission's claim that the Community had exclusive competence on relations with third countries in aviation. The Member States will probably have to somehow put a Community halo to the traditional nationality clause.

While waiting for the European Court of Justice's decision, the Commission has opened another track toward extending its competence. It has taken the mantle to protect EU airlines against subsidisation of third country of third country airlines and their (potentially) unfair pricing practices.

It is believed that the Commission is reacting to recent developments in third countries triggered by the September 11 tragedy. This said, eyebrows were raised in those parts of the world, considering the past record of the EU in approving substantial state aid to Community flag carriers. Regardless of its merits, the Commission proposal is perceived as no more than Trojan horse towards increased competence and is likely to meet the fate of previous similar initiatives when it grinds its way through the Council machinery.This month the Commission again asked the Council to authorise negotiations for the European community's accession to ICAO. The Commission says that the expansion of EU competence in aviation makes it necessary for the European Community to become a member. It is far from certain that the Member States will oblige.

Australasia market post Ansett

The demise of Ansett after 60 years of operation, and the failure of the Tesna recovery plan (putting Anset(t) back on its feet) has left the Australasian market in the midst of a major change. Air New Zealand, now all but renationalised, is slimming back to its roots; Virgin Blue is in the process of taking over the position as Australia's second force airline and Qantas in the short run can rule the roost.

Australia is an almost unique aviation market. It is a country with a small population of 15m people, 85% of whom live in the four main conurbations of Sydney, Melbourne, Brisbane and Perth - yet the distances are huge and the 15% of the population who live outside these cities need air services to provide efficient transport links. As a result the domestic market can be highly profitable. And yet, the market has never been able to sustain more than two airlines. Ever since domestic deregulation, every new start-up has failed: and the consensus was that, had Ansett not failed last year, the latest start-up Virgin Blue might have gone.

New Zealand, with a population of 3.8m, is also highly urbanised. Half the population lives in Auckland, Christchurch and Wellington, nearly 30% of the population living in Auckland itself, and 75% of the population on the North Island.

Both countries have a vibrant inbound tourist market - heavily focussed on Europe, North America and North Asia. However, because of the very long haul nature of these markets, they are highly subject to competitive forces. Equally they each have a vibrant outbound tourist market.

A little bit of history

In the regulated era, Australia maintained a strict aviation policy - government-owned QANTAS (aka Queensland and Northern Territories Airline Services) flew all international air services (and could only carry oddleg passengers domestically), government-owned Australian (previously known as Trans Australian Airways) could only fly domestic routes and privately owned Ansett (50% TNT and 50% News Corp) could also only fly domestically. In 1990 Australia deregulated the industry as much as it could. Importantly it agreed a common aviation area with near neighbour New Zealand across the Tasman Sea. Following this, there was an effective reverse takeover by Australian of Qantas.

Up to then New Zealand only had its national carrier Air New Zealand (formerly Tasman Empire Airways). Ansett had previously moved in to provide domestic competition on the main New Zealand routes. Following deregulation Air New Zealand felt that it had to do something strategically to offset the competitive impact on the other side of the Tasman. Being so disadvantaged by its home base position at the ends of the earth it started using Brisbane as a transfer hub. Ironically, Qantas had won the opportunity to take a 20% stake in Air New Zealand's privatisation in 1989 (in competition even more ironically among others with British Airways). ANZ meanwhile took the decision to muscle in on its part-owner's turf by acquiring a 50% stake in Ansett.

This caused a typical aviation problem in that Ansett had started flying internationally and as Air New Zealand was not Australian it could not retain a majority ownership of the international services. A reasonable compromise was established allowing ANZ control over the domestic operations and minority interest in the international. In 2000 ANZ took over the remaining 50% of Ansett, frustrating Singapore Airlines which had wanted to invest in Ansett but ended up instead taking 25% of ANZ.

Qantas itself was privatised in 1995. In the preprivatisation process British Airways won the beauty parade and took a 22% stake. Fairly swiftly, in anticipation of the

development of the oneworld alliance, BA and Qantas established a joint venture and coordination on the Kangaroo routes. It wasn't long before Qantas sold its stake in ANZ - and then took over operations of the Ansett New Zealand services.

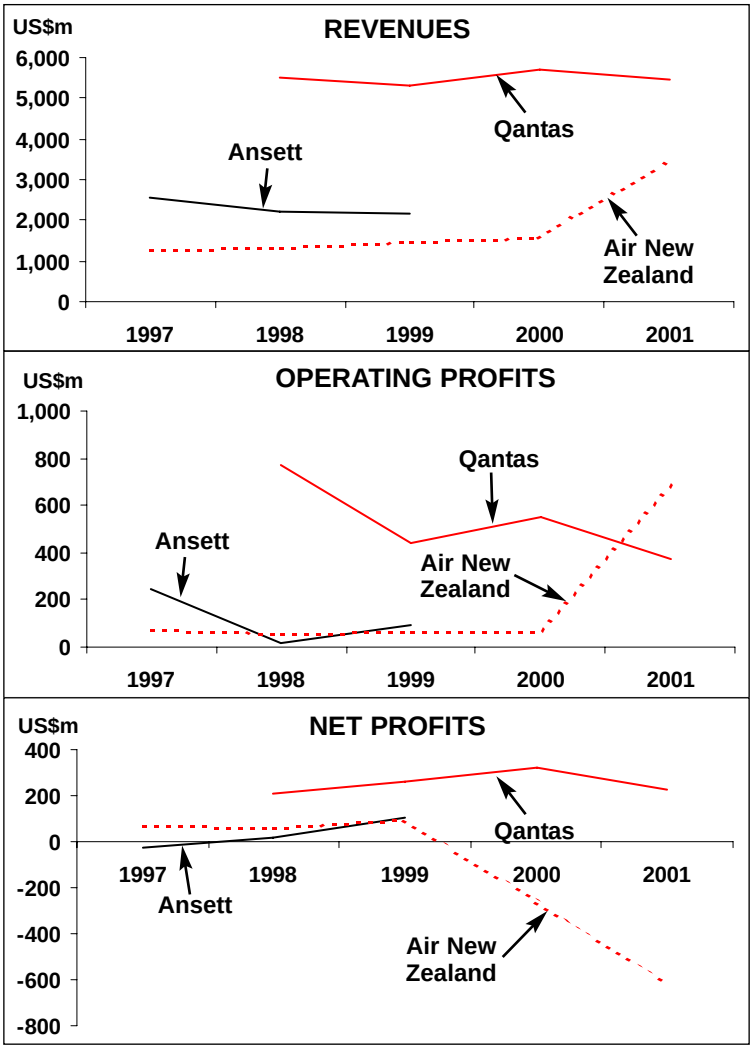
Following the establishment of the Star Alliance, Air New Zealand and Ansett both joined in, with even closer cooperation with Singapore Airlines.

Capital market restrictions

As publicly owned entities, both Qantas and ANZ suffer capital market problems. In ANZ's case this is more than averagely extreme. According to the normal bilateral agreements an international carrier to be designated and accepted on a route has to be substantially owned and operated by nationals of the home country. To satisfy this requirement it was necessary in ANZ's case that a New Zealand company took a major stake. This was done at the time by Brierley Investments. New Zealand decided that foreign ownership could not exceed 35% of the equity to satisfy this rule and the share capital was split between A and B shares, with only the A shares ownable by New Zealand nationals.

This has now changed following the restructuring and effective renationalisation: the New Zealand government holds a golden share to guarantee route rights (the Kiwi share) and no non-Kiwi individual or company is allowed to own more than 10% of the equity.

For Qantas, the rules were set at a more relaxed rate - only if foreign ownership were to exceed 50% might there be a problem. In the event it was the same: since BA held a 25% stake only one third of the free capital in privatisation was available for international investors and two thirds had to be owned by Australian nationals. Neither the Australian nor the New Zealand capital markets are that large - the ANZ 'B' shares regularly attracted a high premium to the domestic 'A'; Qantas has on various occasions had to invoke the repurchase option allowed by its articles of association to maintain 50% national ownership.



There is now the start of debate in Australia about relaxing the foreign ownership cap (on the realistic assumption that ownership does not always mean control). This seems to be a consequence of Qantas's capital requirements over the next decade, the fact that Qantas has a market capitalisation in excess of BA's, and approaching that of American Airlines and that the Australian stock exchange does not value transport stocks that highly. However, although the ruling enshrined in the bilateral air service agreements has never been tested in international law, there is a reasonable (and nasty) tendency by other nations who feel hard done by to refuse traffic rights to any airline they may think to be outside the rules.

AUSTRALASIAN FLEET

	In service			On order (options)			In store	
	Qantas	NZ	DJ	Qantas	NZ	DJ	NZ	AN
A320								16
A330				13				
A380				12 (12)				
737-200							3	
737-300	22	14	1					19
737-400	22	7	4					
737-700	1		6			4		
737-800	6		4	9		2		
747-200	4							
747-300	6							
747-400	25							
747-400LR				6				
767	38	13						8
BAe 146	24							10
TOTAL	**124**	**34**	**15**	**40 (12)**	**0**	**6**	**3**	**53**

Note: *DJ = Virgin Blue.*

Qantas: exploiting its luck

Qantas has enjoyed great luck over the past two years. In 2000 it was the official carrier for the Sydney Olympics. In 2001 Ansett went bust.

Following the demise of its erstwhile competitor it has been left with a 85% market share of domestic services, which is unsustainable (apart from anything else, it does not have the aircraft or the ground capacity). The demise of Ansett and the retrenchment at ANZ leaves the oneworld alliance the only one operating global services into Australia. The sole domestic competitor, Virgin Blue, is avowedly a low cost, no frills operator, which, by definition, cannot accept transfer or connecting passengers.

Nevertheless, Qantas was hit in the aftermath of September 11- but overall comparatives are clouded by the excessive profitability achieved during the Sydney Olympics in the prior year period. In the six months to December 2001 the group achieved a year on year increase in revenues of 11% to A$5.7bn (US$3.1bn), a 16.5% increase in costs to A$5.4bn and a 42% fall in EBIT to A$270.5m and a similar fall in after tax income to A$153.5m.

Capacity grew by 6% and traffic fell by 2%. The group lost some A$15.5m on its international services with a seat factor down slightly to 76% and a like-for-like yield decrease of 2.6% compared with a profit of A$286m in the prior year period. This reflects a 30% fall in US traffic in the immediate aftermath. Domestic services in contrast showed a like-for-like jump in yields of nearly 6%, a near one point fall in load factors to 80.1% and a hike in operating profits 0f 53% to A$180m.

Qantas is reacting strongly to the change in the market dynamics. It is accelerating the disposal or retirement of older 747s (in the short term putting them into the domestic market where needed); it is deferring deliveries; and it continues to re-evaluate and rationalise non-performing routes.

However, the failure of Ansett has created an opportunity that it is now poised to take before Virgin Blue gets its act together to look at international services. It will be setting up a "low cost" international leisure airline for the next summer season, using the Australian brand, based in Cairns. It will start with a fleet of four 767s (with plans to increase this to twelve) flying initially to Japan, Taiwan, Hong Kong and Singapore and connecting to the Gold Coast.

This is an innovative attempt at creating a low-cost long-haul subsidiary. Other characteristics of the airline include:

• There will be a single cabin with relatively high density seating;

•The fare structure will be simple, but there will not be "very low fares";

• Rather than selling through the internet or call centres, Australian will rely on traditional distribution channels, but the in the second phase, probably involving service from Sydney, internet sales will be promoted;

• Free meals will be part of the service as will IFE, and it will offer a FFP;

• There may be an interlining agreement onto Qantas service;

• It has not yet been specified whether Australian will be associated with oneworld;

• All employment costs will be lower than at the parent, but it will not yet attempt to replicate the high efficiency levels of the successful low-cost short-haul carriers;

• It will normally operate on already-established routes, mostly replacing existing Qantas service, to smaller gateways;

• The routes on which it operates have bilat-

eral restrictions in terms of entry and capacity;
• High aircraft utilisation may be supported by the availability of Qantas backup equipment;
• It may sell block belly space to Qantas but probably won't have an independent freight service;
• Most of its non-core services - ground handling, catering, maintenance, etc. - will be outsourced to Qantas

ANZ: back to its roots

The company's attempt to shore up its finances earlier in 2001 through the raising of a NZ$280m rights issue was not enough to allow it to continue - and at the beginning of 2002, the government stepped in with a NZ$850m bail out - leaving the state with 85% equity share.

As a consequence, Brierley and Singapore Airlines have each been diluted down to less than 6%. The management has been completely reshuffled and the strategy has been totally refocused to concentrate on the company's roots.

It will have some serious strategic questions to answer. One of the main quandaries it has always suffered is how to maintain an effective long haul network - it only really works for operations to London (and maybe Frankfurt on good days). The traffic on the long-haul routes is primarily tourist and VFR and so very low net yield, while the flights cover half the circumference of the earth, which means that every airline in between is competing for the same traffic). However, it still maintains a slight cost advantage over Qantas for leisure routes into the Pacific region.

In the six months to December 2001 the group achieved revenues of NZ$2.6bn (US$ 1.1bn) down from NZ$4.3bn in the prior year period. Ansett was put into administration on September 12 2001, after which date the group could no longer consolidate the results. Like for like continuing operations generated revenues of NZ$1.8bn down 9%. Group and ANZ operating results fell into the red with a group loss for the six months of NZ$174m compared with NZ$115m profit in the prior year period. For the six months the group suffered a net loss of NZ$377m down from a NZ$4m profit a year before.

Virgin Blue: finally a successful new entrant?

In 2000, following on from the successful sale of 49% of Virgin Atlantic to Singapore Airlines for a remarkable price, Sir Richard Branson set up a low cost operation - Virgin Blue - in Australia to provide services between the major city pairs. It was either wonderful foresight or great fortune to set up a low cost airline in a constrained and traditional market, and then have one of the duopolists fail.

It now has a fleet of 15 737s flying to Adelaide, Cairns, Canberra, Darwin, Gold Coast, Launceston (Tasmania), Mackay, Melbourne, Perth, Sydney, and Townsville. It has been doing reasonably well - and far better than any other new entrant into the Australian market, even though this is probably because it had not yet had the time to fail. However, following the Ansett and Tesna failure, it is pushed into the forefront. Virgin has sold a majority stake to Australian based Patrick Corp for A$260m, which will give it the domestic ownership to qualify it to fly internationally. As a privately held company there is very little financial information available, although it says that it is profitable.

Although Qantas may have taken the lead in announcing the establishment of Australian, it should not be long before Virgin expands out of the country. It is reputed to have had talks with Air New Zealand for a tie up in some form and is said to have been in talks with Star. Now with the backing of the Patrick Corp it has started talking about taking on some of the former Ansett assets - and is re-evaluating its future fleet needs.

However, Virgin is a low fare, low-cost, single class airline using a single aircraft type. The danger is that it will be seduced into developing international routes requiring different aircraft types to try to compete with Qantas, that commit to linking into Star to provide feed, and that it will change what is potentially a very successful business model .

Fairchild Dornier's insolvency: an RJ duopoly now?

On March 21 2002 Fairchild Dornier officially launched its new 70-seat RJ, the 728. In his speech the manufacturer's chairman, Chuck Pieper, said "a partner is critical, it's crucial and the sense of immediacy is real". Less than a month later the Bavarian and US-based manufacturer has filed for insolvency.

After running out of cash after March's wages had been paid, Fairchild Dornier has been compelled under German law to put itself into the hands of the administrators. Its immediate future rests with HypoVereinsbank AG, Bayerische Landesbank and Kreditanstalt fur Wiederaufbau, who have agreed that they will provide the embattled manufacturer an immediate bridge loan of $20m.

This is expected to be part of a total loan of $90m that will be backed partly by the German government and the local state government of Bavaria. Eberhard Braun, the interim administrator, is desperately looking for a strategic, long-term partner to invest in Fairchild Dornier's ambitious 728 and 928 family plans.

Two years ago, Clayton Dubilier & Rice, the US venture capital group, invested $300m to acquire a leading 71% stake, and Allianz Capital Partners (the equity capital arm of insurer Allianz AG) added $100m to bring the stake in Fairchild Dornier to 93% in an LBO in April 2000. The group received funds totalling $1.2bn, including the $400m of equity, as part of the financial rescue package.

Fairchild Dornier had recently negotiated a new financial package of $870m with its investors and banks, with German federal and state guarantees for up to $370m. However, payment was withheld as it was decided that Fairchild Dornier's plans were not viable without an industry partner.

Developing the 728 has placed Fairchild Dornier in $670m of debt, according to executive vice president Thomas Brandt. The 728JET had won 113 firm orders - including four for the 90-seat version - and 160 options. First deliveries were scheduled for late next year for Lufthansa CityLine, which committed to 60 firm plus 60 options of the aircraft. This compares with 167 and 55 orders for 70 and 90-seat versions of Bombardier's CRJ jet series; 30 of the 70-seat CRJ-700s have already been delivered. Lufthansa CityLine itself has ordered 20 of the CRJ-700s, the first of which was delivered in May 2001. Embraer's new 70-seat aircraft, the Emb170, flew for the first time on February 19. Embraer has 82 firm orders for the Emb170, with 128 options.

Fairchild Dornier also had a backlog of 59 firm orders for the 32-seat 328, but 21 aircraft destined for Hainan Airlines have been put on ice by the Chinese government after it decided to cancel RJ import licences and impose higher tariffs. The manufacturer also had to cancel its 428JET project.

In recent developments the insolvency

70 AND 90 SEAT REGIONAL JET ORDERBOOK

		Fairchild Dornier	Embraer	Bombardier
70-seat RJ	confirmed	113+160options	82+128options	167+133options
	unconfirmed	8	37	45
	Total	**281**	**247**	**345**
90-seat RJ	confirmed	-	30+77options	55+60options
	unconfirmed	4	25	54
	Total	**4**	**132**	**169**

Note: Bombardier have 33 CRJ700 in use, orders include CRJ700,CRJ900

Dornier orders include 728-ENVOY, 728-100, 928JET

Embraer orders include: Emb170, Emb 195

Source: ACAS

managers, Schultze & Braun, have announced that Fairchild Dornier are shutting down 328JET wing production at its US manufacturing plant in San Antonio, Texas, which employs around 700 staff. Severe cutbacks are also expected at Herndon, Virginia, where the company's sales and marketing, corporate communications, government relations, sales engineering and sales finance departments are based. No decision has been made yet about job reductions at Fairchild Dornier's headquarters in Oberpfaffenhofen in Bavaria, where national labour law makes redundancies much more difficult than in the US.

Fairchild Dornier's total order book is claimed to be worth $11.7bn at the moment, half of which are firm orders, and CEO Lou Harrington remains optimistic about a new strategic investor: "We have a very competitive product in the 728, in which we and our partners have already invested two years and $1 billion…we have an excellent order book".

ACA's commitment

In this order book 65 328JETS were ordered for Atlantic Coast Airlines (ACA). Thirty aircraft are still outstanding, and due to Fairchild's state of insolvency, ACA's chairman Kerry Skein flew into Munich to discuss the fate of the remaining 30 328s. Under the terms of the order contract the manufacturer is in breach of contract as a result of its insolvency filing. Fairchild Dornier has told ACA that they will complete the order even if they fail to find a partner/buyer.

Although administrator Eberhard Braun could not sign a guarantee for ACA, strong political will in Germany is more than likely to keep the 328JET line active, allowing completion of the order. ACA's CFO Richard Surratt says the airline is not sure what to do yet, ACA has an existing fleet of 30 328s, and senior management have begun discussions with two other RJ manufacturers to explore possible alternatives to taking delivery of the outstanding 328s.

Embraer and Bombardier, who between them have the lion's share of the regional jet market, must be quietly satisfied with Fairchild's predicament. The exit of Fairchild Dornier, following the bankruptcy of Fokker and the withdrawal of BAE Systems from the RJ sector, will leave a manufacturing duopoly. Then the challenge will be to avoid the mistakes Boeing made when it found itself in a duopoly with Airbus.

JetBlue: investors love the low-cost plus frills concept

JetBlue, which started service in February 2000, has adapted the classic low-cost formula to include some frills and an operation based at a major international airport - New York JFK. In February it issued an IPO prospectus, aiming to raise some $125-135m to fund the expansion of its A320 fleet, and in April the IPO was successfully launched and in fact raised $148m for the equivalent of about 15% of the equity.

JetBlue achieved an operating income of $26.8m (before $18.7m of government aid under the Stabilization Act). Its operating margin, 8.4%, was only bettered by one US airline - Southwest. Its expansion has been rapid. Last year it carried 3.1m passengers on a network that comprises the New York-Florida, upstate New York and transcontinental. It has established a second operating base at Long Beach in California.

September 11 had an immediate and severe impact on JetBlue, but it managed to stay profitable, although its operating margin dropped to 4.2% in the final quarter of the year compared to 12.2% in the first half. Traffic has now recovered to the level expected before the terrorist attacks, although yields are still suffering. It did not, however, reduce capacity or lay staff off.

JETBLUE'S FINANCIAL RESULTS ($000s)

	1999	2000	2001
Operating revenues	-	104,618	320,414
Operating expenses			
Salaries, wages and benefits	6,000	32,912	84,762
A/C fuel	4	17,634	41,666
A/C rent	324	13,027	32,927
Sales/Marketing	887	16,978	28,305
Landing fees and other rents	447	11,112	27,342
Depreciation and amortization	111	3,995	10,417
Maintenance materials and repairs	38	1,052	4,705
Other operating expenses	6,405	29,096	63,483
Total operating expenses	**14,216**	**125,806**	**293,607**
Operating income (loss)	(14,216)	(21,188)	26,807
Airline Stabilization Act	-	-	18,706
Other income (expense)	685	(381)	(3,598)
Income (loss) before income taxes	(13,531)	(21,569)	41,915
Income tax expense (benefit)	233	(239)	3,378
Net income (loss)	**$ (13,764)**	**$ (21,330)**	**$38,537**

Like Southwest, it has been able to capture market share from its traditional rivals which were forced to instigate much more drastic cutbacks. For instance, US Airways closed down its MetroJet operation, which was its product to compete with low-cost airlines, and Delta significantly reduced capacity of its Delta Express service, its subsidiary leisure carrier on Northeast and Midwest to Florida routes.

Also like Southwest, JetBlue enjoys investor confidence. There is little doubt that the IPO will succeed in raising the required funds by the end of the month. None of the original venture capitalists - including George Soros, BancBoston Ventures, JP Morgan and all of JetBlue's senior management, who have put some $175m into the airline - are going to cash in at this point. Their redeemable preferred stock will be converted into common shares following the IPO, and they make take up some of the new shares, either directly or indirectly.

At the IPO share price of $27, JetBlue will have a total stockmarket valuation of about $1.1bn, and on paper the original investors will have more than quintupled their stakes. For comparison, the stockmarket valuation is almost the same as that of UAL Corporation, but is dwarfed by Southwest's $16.2bn and is less than half of easyJet's capitalisation. This stockmarket price also implies that analysts will be expecting at least a doubling of profits in 2002 (assuming JetBlue commands roughly the same p/e ratio as Southwest).

The reputation of JetBlue's CEO, David Neeleman, is extremely important in this regard. He was the president and one of the founders of Morris Air, bought by Southwest in 1993, developed the Open Skies reservation system, and set up WestJet, Canada's successful low-cost carrier. He has built up a management team that includes high-level expertise from Southwest and his previous ventures.

The financial community generally is now

JETBLUE'S LIABILITIES	
Long-term debt	$346m
Operating leases	$502m
Aircraft purchase obligations	$2,315m
Live TV	$151m
Others	$29m
Total	**$3,343m**

focusing almost all its attention on the low-cost or regional carriers while temporarily despairing of the mainstream network carriers. This means that not only are investors lining up to support JetBlue but also the airline currently has no problems finding funding for its ambitious expansion plans. Including long-term debt and lease commitments for its A320s and its contract with Live TV, JetBlue's liabilities add up to $3.3bn.

This might be considered as a daunting amount for a start-up airline with just 24 months of operating experience. But in

today's market it is likely that JetBlue will be able not only to finance its new A320s but also raise a cash surplus on each transaction, justified by the difference between the unit price it has paid Airbus and the appraised value of the aircraft.

The JetBlue model consists of the following elements.

New A320 fleet

The all-new A320 fleet, configured to 162 leather seats in mono-class, is central to JetBlue's strategy. Indeed, the newness factor is an even bigger selling point in the post-September 11 environment. JetBlue emphasises the security aspect by highlighting its kevlar doors and titanium bolts on the cockpit door, and now it is introducing cameras that will allow the pilots to monitor the cabins.

The homogenous fleet clearly delivers the standard benefits in terms of maintenance costs, aircrew training costs, scheduling flexibility and high average utilisation (12.6 hours per day in 2001, compared to 11.1 for Southwest). Utilisation is boosted by its transcontinental operations and in particular by its red-eye flights which keep A320s in the air throughout the night. Also, new aircraft are operationally more reliable.

JetBlue currently has 61 A320s on order with a further 30 options (and purchase rights for a further 19). The fleet is planned to grow to at least 113 units by 2009 (about a third the size of Southwest today). JetBlue has the possibility of converting A320s into A319s or A321s, which would allow it to tailor aircraft types to different markets but retain all the benefits of fleet communality.

JetBlue also appears to be able to exploit its position as the only Airbus low-cost operator (Southwest, AirTran, WestJet, Ryanair and easyJet are all Boeing customers). Airbus has deferred pre-delivery payments of about $78m over the past three years, which has greatly assisted JetBlue's cashflow.

The depreciation policy is interesting - the A320s are depreciated over 25 years to a 20% residual value. This is rather more aggressive than usual for a low-cost airline: the annual depreciation cost for a $35m aircraft would be $1-1.5m lower than at easyJet in the early years of its operation.

JETBLUE'S A320 FLEET PLAN

	Orders	Options	In service
2001			21
2002	13		34
2003	13		48
2004	13	1	62
2005	12		74
2006	5	7	86
2007	5	7	98
2008		10	108
2009		5	113
Total	**61**	**30**	

Market stimulation

JetBlue's original concept was based on the theory that many of New York routes had been neglected following the demise of People Express in the late 80s. According to DOT statistics, from 1985 to 1999, the number of origin and destination passengers rose 77% nationally, but rose only 6% in the New York market.

JetBlue has demonstrated that its entry in underutilised markets stimulates traffic strongly. It targets fare-conscious leisure and

MARKET STIMULATION
Average Passengers Per Day Each Way

LaGuardia, JFK and Newark to:	4Q 1999	4Q 2000	Total market increase % increase	2000 -1999	jetBlue pax to/fr JFK 4Q2000
Buffalo	584	1,020	75%	436	441
Rochester	429	664	55%	235	312
Burlington	103	238	131%	135	113
Ft. Lauderdale	3,248	4,180	29%	932	556
Tampa	1,626	1,957	20%	331	268
Orlando	3,425	3,845	12%	420	258

business travellers who might otherwise have used alternative forms of transportation or would not have travelled at all.

The table below shows the market stimulation effect once JetBlue enters a market, especially the north New York state to JFK sectors where new passengers flying on the airline exceeded the total market growth.

Frills and branding

Frills include the leather seats and free LiveTV (a 24-channel satellite television service) at every seat, pre-assigned seating and a FFP, which is in the process of being introduced.

All this goes to branding JetBlue as an efficient low-cost with a bit of gloss and business-orientated service. The latest Zagat Airline Survey, ranked JetBlue as second out of 22 US airlines in the "overall," "comfort" and "service" categories for coach travel (Midwest Express was number one). It has also received plaudits from Conde Nast and *Business Traveller* magazine.

Distribution, pricing and YMS

JetBlue's distribution channels in 2001 were: travel agents, 7%; direct tele-sales, 49%; and internet sales, 44%. This is the highest percentage of web sales in the US, and has now risen to over 50%, but is far from the near 100% online sales achieved by the leading European low-cost carriers.

JetBlue's simplified fares structure is based on 14-day, 7-day and 3-day advance purchase fares and a "walk-up" fare in each market. The highest "walk-up" fare is set at approximately twice that of the lowest 14-day advance purchase fare. All fares are one-way and do not carry restrictions such as Saturday night stays, but they must be purchased at the time of reservation and are non-refundable. Bookings can be changed or cancelled prior to departure for a $25 change fee. Advance purchase fares are often 30%-40% below those existing in markets prior to JetBlue's entry; while its "walk-up" fares are generally 60%-70% below US majors' unrestricted "full coach".

The yield management system is reputed to be one of the most effective models designed for low-cost operations, based on the principle that fares inevitably increase as the departure date approaches. The system does not allow overbooking, reflecting the standard low-cost no refund policy. JetBlue's load factor in 2001 was 78.0%, higher than that of any major US airline.

Labour productivity and company culture

In 2001 JetBlue's operating cost per ASM was 6.98 cents, the lowest of the US Majors. This is partly due to the productivity of the fleet (and transcontinental stage) and partly due to the workforce.

JetBlue claims to have one of the most productive workforces in the industry, partly due to the use of part-time employees and new technology. For example, most of the reservation sales agents are part-time employees who work from their homes. A significant number of employees participate in a stock option plan, and all employees, including part-time employees, will be able to participate in an employee stock purchase plan after the IPO.

JetBlue puts great store on its culture, which, it states " is built around our five key values: safety, caring, integrity, fun and passion". This may sound a bit naff, but it does work and it is clear that this intangible asset is present at all the successful "low-costs".

As a new airline, JetBlue has the oppor-

tunity of making full use of advanced technology. For instance, all pilots use laptop computers in the cockpit to calculate the weight and balance of the aircraft prior to departure. They also access manuals in an electronic format during the flight. The reservation system allows JetBlue managers to monitor their loads, yields and sales on a daily basis, allowing rapid responses to market changes.

AVERAGE ONE-WAY FARE PAID ($) FROM LA GUARDIA, NEWARK & JFK TO:

	Overall market		JetBlue
3 months ended 31/12:	**1999**	**2000**	**2001**
Buffalo	127	84	63
Rochester	122	88	62
Burlington	147	78	59
Ft. Lauderdale	115	112	109
Tampa	123	113	96
Orlando	103	105	96

Source: *Department of Transportation "Survey of Origin & Destination Passengers".*

JFK base and network expansion

New York's JFK airport provides access to a market of approximately 21m potential customers in the New York metropolitan area and approximately 6m potential customers within 15 miles of the airport.

While LaGuardia and Newark are congested throughout the day (in normal times), JFK generally is only congested the late afternoon to the early evening when international traffic and the domestic traffic that feeds it are heaviest. This period, from 3:00 p.m. to 7:59 p.m., is regulated by the FAA's High Density Rule. JetBlue has 75 daily slot exemptions at JFK that allow it to fly during this congested period, but schedules almost two-thirds of its flights at other times.

The Port Authority of New York and New Jersey is in the process of a $10bn JFK redevelopment project, which includes new terminals, improved roadways and construction of the AirTrain, a direct, light-rail link between JFK and the New York subway system. AirTrain, which will allow passengers to travel from JFK to Manhattan in 45 minutes, is expected to be fully operational in 2003.

With a geographically diversified flight schedule from JFK, JetBlue can adjust its schedule to accommodate seasonal fluctuations in demand in certain markets. For example, it offers increased service on New York-Florida routes in the winter when demand is higher. JetBlue is now one of the top two carriers (in terms of daily flights) in the New York City to Ft. Lauderdale route, which, perhaps surprisingly, is the busiest route in the US.

JetBlue's west coast operation, based at Long Beach Municipal Airport, is located in the Los Angeles metropolitan area, the second largest in the US with 16m inhabitants, of which over 6m live within 20 miles of Long Beach. Average airfares from the Los Angeles area are generally high, other than fares to markets served by Southwest. Also, Long Beach has historically been underutilised for scheduled flights. JetBlue has 27 out of a total of 41 daily non-commuter departure slots, leaving only 14 slots for other airlines, and, of these, only nine are held by passenger airlines.

Risks

JetBlue's prospects certainly look very promising, but there are challenges ahead. It might just begin to regret the cost of the extra frills and the cost of its JFK base if it ever gets into close competition with Southwest. More immediately, it has generated a competitive reaction from two of the Majors.

American is entering a fare war with JetBlue on New York routes and is also attempting to obtain Long Beach slots to launch services to New York and Chicago from there. United will compete directly with JetBlue's Long Beach-Washington Dulles service when it launches a new A320 twice-daily service between Oakland and Dulles in May. United also plans to offer tickets at prices comparable to JetBlue's.

Air Asia: “The first low fare airline in Asia”

Apart from Virgin Blue in Australia, Asia has yet to produce a genuine low-cost carrier. This is about to change in Malaysia, where Air Asia has been transformed by its CEO, Tony Fernandes, and now uses the tag-line quoted in the title above.

Air Asia was originally set up in November 1996 by conglomerate DRB-Hicom. It was purchased in December 2001 by Tune Air, a consortium of five investors, headed by Fernandes, for a nominal sum of one Ringgit and the assumption of 50% of the company's net liabilities. Fernandes, an accountant and a former vice president of Warner Music, wanted to start an airline from scratch, but was informed by the Malaysian authorities that he would instead be required to acquire one of Malaysia's existing carriers.

The new low-cost strategy has led to an increase in frequencies and a 60% cut in headline fares on its five domestic services from Kuala Lumpur. Air Asia's highest fares are 20% below those offered by MAS, and these fares account for only 10% of its total seat sales.

A hybrid strategy

Fernandes describes Air Asia as a hybrid. He conducted extensive market research before setting the strategy of the airline, flying with low-cost carriers in Europe and the US. The compromise he has sought for the Malaysian domestic market is to look to take the operational efficiencies of Ryanair, the employee relations of Southwest, the easyJet Internet strategy, and the branding virtues of Virgin Blue and Virgin Express.

The airline operates out of Kuala Lumpur's old Subang airport, a 30-minute drive from the centre of Kuala Lumpur. The new airport at Sepang is over an hour’s drive away from the business centre of Kuala Lumpur, and Air Asia has applied to the Malaysian government to remain at Subang. A decision is expected before the summer.

In terms of operations, Air Asia checks its passengers in manually and performs its own ground handling. On what Fernandes sees as an improvement on the Ryanair model, the pilots at the airline do their own load sheets. The three148-seat 737-300s are able to achieve average turnaround times of 22 minutes.

Air Asia employs a typical low-cost airline flat management structure, and employee feedback is encouraged through informal get-togethers. Some 5% of the company's equity has been set-aside for the employees.

The carrier is installing the OpenRes reservation system, which will enable it to adopt the Internet as a sales tool. At present 80% of tickets are sold through travel agents and 20% through the airline's call centre. The short-term aim is to achieve a 50/50 split between commission bearing travel agency sales and direct sales via the Internet and the call centre. The airline will use airasia.com as its brand.

Fernandes sees the brand adding value in the way Virgin has been able to use its brand to sell a wider range of goods than just airline tickets. The sale of caps, watches and T-shirts are all on the future agenda. The Internet site will in time allow bookings to be also taken for hotels and car hire.

The airline carries passengers from three main groupings, the VFR market (Malaysia has a large migratory workforce), small/medium enterprises, and the leisure market, both local and foreign. The economic background is somewhat encouraging: fourth quarter 2001 GDP fell by 0.5%, which compares to a 7.0% fall in neighbouring Singapore. GDP growth for 2001 as a whole was 0.4%, and economists expect that 2002 will see an improving positive growth.

Air Asia is seeking to raise Ringgit 60m (US$16m) in new equity to fund further expansion, with foreign and local investors

being offered 25-30% of the company's equity. Before the corporate restructuring, Air Asia was losing an average of US$ 1.5m per month. The re-styled airline in the past three months has been able to achieve impressive results, with pre-tax profit margins above 10%.

Cost philosophy

Tony Fernandes enlisted the support of Conor McCarthy, the former Chief Operating Officer of Ryanair, to conduct the makeover. The airline follows strict adherence to other low-cost airline philosophies, thus no cargo is carried, there is no free food or drinks, no FFP and no aircraft lounges. The low-cost philosophy has been achieved without pay cuts; indeed Fernandes says that salaries have risen since he took over.

Cost savings have instead been achieved through productivity gains, changes in working practices and improved business practice. MAS charged Air Asia Ringgit 3,000 per turnaround, Air Asia are now conducting their own turnarounds for Ringgit 450. In total, Fernandes estimates that Air Asia's costs have fallen by 40-50% since he took over control.

Air Asia has announced that it will be adding three 737-300s on operating lease this year, taking its fleet to six, and has options on six more 737-300s in 2003.

The network strategy has a priority towards frequency rather than adding new destinations. Fernandes believes that there are potentially 18 airports within Malaysia that could support low-cost services. International services are not on the agenda for now, but Malaysia has an "open skies" agreement with Thailand, and a similar agreement may in future be made with Indonesia.

One possibility for Air Asia is to serve the lucrative and dense Kuala Lumpur-Singapore market by flying to Senai Johor Airport, which lies across the strait from Singapore on the Malaysian mainland.

Whether the carrier will succeed will depend partly on the Malaysian government, and how it decides to allow competition to develop between MAS (see *Aviation Strategy*, March 2002) and Air Asia. Fernandes will need to prove himself an astute politician as well as a businessman.

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 %
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
1999	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
2000	208.2	132.8	63.8	229.9	179.4	78.1	137.8	108.0	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2001	212.9	133.4	62.7	217.6	161.3	74.1	131.7	100.9	76.6	492.2	372.6	75.7	743.3	530.5	71.4
Feb 02	13.4	8.2	60.7	12.3	9.0	73.4	9.5	7.9	83.0	32.7	25.5	77.9	54.3	38.9	71.5
Ann. chng	-15.4%	-9.7%	3.9	-23.4%	-13.5%	8.4	-11.8%	-7.0%	4.2	-13.4%	-7.2%	5.2	-13.6%	-8.1%	4.3
Jan-Feb 02	28.2	16.2	57.2	26.1	18.9	72.6	20.2	16.3	81.0	69.4	53.2	76.7	102.6	72.7	70.9
Ann. chng	-15.2%	-10.6%	2.9	-23.8%	-15.4%	7.2	-11.2%	-7.5%	3.3	-13.4%	-8.7%	4.0	-14.2%	-9.4%	3.8

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 %
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	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
Feb02	72.1	48.4	67.3	10.3	7.0	68.4	7.9	5.8	82.2	**6.8**	4.7	68.9	**30.1**	19.9	67.7
Ann. chng	-11.9%	-10.3%	1.2	-20.8%	-15.5%	4.3	-25.0%	-14.1%	10.3	-1.4%	-1.5%	-0.1	-17.6%	-11.7%	4.8

Note: US Majors = American, Alaska, Am. West, Continental, Delta, NWA, Southwest, United, US Airways. **Source:** Airlines, ATA.

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 %
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	79.4	4.9	7.4	6.8	8.0	6.0	7.8
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
1999	1,911	1,297	67.9	2,600	1,858	71.5	4,512	3,157	70.0	5.4	5.0	5.7	7.4	5.6	6.4
2000	2,005	1,392	69.4	2,745	1,969	71.8	4,750	3,361	70.8	4.9	7.2	5.6	6.0	5.3	6.5
***2001**							4,713	3,205	68.0					-1.1	-6.0
***2002**							4,737	3,270	69.0					0.5	2.0
***2003**							5,066	3,596	70.9					6.9	10.0
***2004**							5,320	3,830	72.0					5.0	6.5

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, Oct 2001.

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
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	134	121	117	119	114	198	162	174	172	153	250	164	166	153	139
***2001**	138	124	121	122	116	216	173	191	188	162	272	176	179	165	148

Note: * = Forecast; Real = inflation adjusted. **Source:** OECD Economic Outlook, July 2001.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)					Exchange rates (against US$)			LIBOR
	US	UK	Germany	France	Japan	UK	Euro**	Japan	6 month Euro-$
1994	113	109	117	110	107	**1993** 0.666	0.854	111.2	3.36%
1995	117	112	119	112	107	**1994** 0.653	0.843	102.2	5.06%
1996	120	114	121	113	107	**1995** 0.634	0.765	94.1	6.12%
1997	122	117	123	114	108	**1996** 0.641	0.788	108.8	4.48%
1998	123	120	124	115	109	**1997** 0.611	0.884	121.1	5.85%
1999	125	122	126	116	108	**1998** 0.603	0.896	130.8	5.51%***
2000	128	124	127	117	107	**1999** 0.621	0.991	103.3	5.92%***
***2001**	131	127	128	119	107	**2000** 0.603	1.086	118.1	5.36%***
						2001 0.693	1.122	117.6	3.35%***
						March 2002 0.695	0.884	131.5	3.55%***

Note: * = Forecast. **Source:** OECD Economic Outlook, July 2001. **Euro rate quoted from January 1999 onwards. 1990-1998 historical rates quoted in ECU. *** = $ LIBOR BBA London interbank fixing six month rate.

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	TOTAL
1989	216	38	254	42	2	44	298
1990	380	77	457	74	14	88	545
1991	457	129	586	114	27	141	727
1992	433	138	571	75	15	90	661
1993	370	195	565	103	37	140	705
1994	267	182	449	61	23	84	533
1995	238	157	395	49	29	78	473
1996	124	101	225	32	22	54	279
1997	162	104	266	54	13	67	333
1998	187	125	312	67	55	122	434
1999	243	134	377	101	53	154	531
2000	302	172	474	160	42	202	676
2001-Jan	288	150	438	172	43	215	651
2001-Feb	298	155	453	152	46	198	651
2001-Mar	345	144	489	164	47	211	700
2001-Apr	326	130	456	184	61	245	701
2001-May	371	140	511	210	61	271	782
2001-Jun	353	150	513	222	67	289	802
2001-Jul	352	145	497	179	64	243	740
2001-Aug	373	157	530	218	80	298	828
2001-Sep	388	173	561	251	95	346	907
2001-Oct	378	180	558	263	97	360	918

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

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Airbus	Mar 23	Frontier	2 A319s		4Q 2002	CFM56-5
	Mar 23	Singapore ALE	1 A320		2Q 2004	
ATR	Feb 27	Solenta Aviation	2 ATR 42-300s			
	Mar 15	Air Tahiti	1 ATR 72-500			
BAE Systems	-					
Boeing	Mar 26	Kenya Airways	3 777-200ERs		2004	
	Mar 26	Air Tran	7 717s			
Bombardier	-	Malev	2 CRJ200ERs		2Q-3Q 2002	
Embraer	-					
Fairchild	-					

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

	Group revenue US$m	Group costs US$m	Group operating profit US$m	Group net profit US$m	Total ASK m	Total RPK m	Load factor %	Group rev. per total ASK Cents	Group costs per total ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
American*														
Apr-Jun 00	5,011	4,494	517	321	67,000.4	50,538.7	75.4	7.48	6.71					105,900
Jul-Sep 00	5,256	4,684	572	313	66,654.0	50,828.1	76.3	7.89	7.03					107,500
Oct-Dec 00	4,859	4,779	80	47	63,562.5	44,318.5	69.7	7.64	7.52					107,500
Jan-Mar 01	4,760	4,743	17	-43	62,725.7	42,590.7	67.9	7.59	7.56					108,900
Apr-Jun 01	4,838	5,586	-748	-494	66,007.0	47,484.0	71.9	7.33	8.46					128,300
Jul-Sep 01	4,816	5,374	-558	-414	62,675.9	45,314.7	72.3	7.68	8.57					127,200
Oct-Dec 01	3,804	4,952	-1148	-798	54,907.4	35,580.0	64.8	6.93	9.02					109,300
America West														
Apr-Jun 00	618	570	48	33	10,979.8	8,091.7	73.7	5.63	5.19	5,206				12,158
Jul-Sep 00	591	591	0	1	11,079.9	8,088.3	73.0	5.33	5.33	5,178				
Oct-Dec 00	573	654	-81	-47	11,133.1	7,616.8	68.4	5.15	5.87	4,958				
Jan-Mar 01	587	612	-25	-13	11,355.2	7,857.8	69.2	5.17	5.39	5,104				
Apr-Jun 01	587	641	-54	-42	11,097.7	8,367.4	75.5	5.29	5.78	5,294				
Jul-Sep 01	491	590	-99	-32	10,774.3	7,973.0	74.0	4.57	5.48	5,034				
Oct-Dec 01	400	538	-138	-61	9,477.2	6,492.0	68.5	4.22	5.68	4,144				
Continental														
Apr-Jun 00	2,571	2,292	279	149	34,406.9	26,534.0	77.1	7.47	6.66	12,084				
Jul-Sep 00	2,622	2,368	254	135	35,978.0	27881.1	77.5	7.29	6.58	12,155				
Oct-Dec 00	2,429	2,332	97	44	34,454.0	24,685.1	71.6	7.05	6.77	11,456				
Jan-Mar 01	2,451	2,375	76	9	34,533.9	24,322.9	70.4	7.10	6.88	11,220				
Apr-Jun 01	2,556	2,419	137	42	36,712.9	27,443.4	74.8	6.96	6.59	12,256				
Jul-Sep 01	2,223	2,136	87	3	35,394.9	26,086.1	73.7	6.28	6.03	11,254				
Oct-Dec 01	1,738	1,895	-157	-149	29,321.4	20,554.3	70.1	5.93	6.46	9,508				
Delta														
Apr-Jun 00	4,439	3,863	606	460	59,753.4	46,509.8	77.8	7.48	6.46	28,333				73,800
Jul-Sep 00	4,325	3,827	498	127	61,319.9	47,076.5	76.8	7.05	6.24	27,378				
Oct-Dec 00	4,017	3,839	178	18	58,655.8	40,527.0	69.1	6.85	6.54	24,919				
Jan-Mar 01	3,842	3,957	-115	-133	60,714.1	40,690.6	67.0	6.33	6.52	26,932				
Apr-Jun 01	3,776	3,890	-114	-90	61,538.0	44,783.6	72.8	6.14	6.32	28,130				82,500
Jul-Sep 01	3,398	3,649	-251	-259	60,718.9	43,259.6	71.3	5.60	6.01	26,441				83,500
Oct-Dec 01														
Northwest														
Apr-Jun 00	2,927	2,675	252	115	42,049.6	33,523.5	79.7	6.96	6.36					
Jul-Sep 00	3,178	2,824	354	207	44,379.9	35,353.1	79.7	7.16	6.36					
Oct-Dec 00	2,740	2,774	-34	-69	40,417.6	29,850.1	73.9	6.78	6.86					
Jan-Mar 01	2,611	2,847	-236	-171	40,211.6	29,394.7	73.1	6.49	7.08					
Apr-Jun 01	2,715	2,751	-36	-55	42,216.8	32,886.9	77.9	6.43	6.52					
Jul-Sep 01	2,594	2,749	-155	19	41,870.8	31,753.1	75.8	6.20	6.57					
Oct-Dec 01	1,985	2,426	-441	-216	33,985.2	23,619.7	69.5	5.84	7.14					
Southwest														
Apr-Jun 00	1,461	1,146	315	191	23,724.3	17,624.9	74.3	6.16	4.83	16,501				
Jul-Sep 00	1,479	1,179	300	184	24,638.0	17,650.8	71.6	6.00	4.79	16,501				
Oct-Dec 00	1,467	1,216	251	155	25,267.5	17,443.2	69.0	5.81	4.81	16,287				
Jan-Mar 01	1,429	1,218	210	121	25,512.2	17,169.7	67.3	5.60	4.77	15,716				29,563
Apr-Jun 01	1,554	1,263	291	176	26,430.0	18,970.4	71.8	5.88	4.78	17,527				30,369
Jul-Sep 01	1,335	1,242	93	151	26,216.8	18,120.7	69.1	5.09	4.74	16,208				30,946
Oct-Dec 01	1,238	1,201	37	64	26,887.7	17,342.6	64.5	4.60	4.47	14,996				31,580
TWA														
Apr-Jun 00	973	984	-11	-35	15,928.0	12,316.3	77.3	6.00	4.79	7,211				
Jul-Sep 00														
Oct-Dec 00														
Jan-Mar 01														
Apr-Jun 01														
Jul-Sep 01														
Oct-Dec 01														
United														
Apr-Jun 00	5,109	4,504	605	408	70,913.5	53,624.8	75.6	7.20	6.35	22,412				98,300
Jul-Sep 00	4,905	4,946	-41	-116	72,495.7	54,049.9	74.6	6.77	6.82	21,458				99,700
Oct-Dec 00	4,792	4,955	-163	-71	70,550.1	49,897.9	70.7	6.79	7.02	20,509				99,100
Jan-Mar 01	4,424	4,815	-391	-313	67,741.4	46,267.7	68.3	6.53	7.11	18,860				98,600
Apr-Jun 01	4,658	5,011	-353	-292	71,928.2	52,651.5	73.2	6.48	6.97	21,331				98,000
Jul-Sep 01	4,107	4,819	-712	-542	69,232.9	50,609.3	73.1	5.93	6.96	19,815				95,900
Oct-Dec 01	2,949	3,835	-886	-308	56,420.7	38,140.4	67.6	5.23	6.80	15,450				79,300
US Airways														
Apr-Jun 00	2,433	2,265	168	80	26,171.9	19,557.4	74.7	9.30	8.65	15,554				42,653
Jul-Sep 00	2,381	2,376	5	-30	28,452.4	20,726.2	72.8	8.37	8.35	15,809				44,026
Oct-Dec 00	2,347	2,428	-81	-98	28,275.4	19,590.0	69.3	8.30	8.59	15,605				43,467
Jan-Mar 01	2,241	2,469	-228	-171	27,752.4	18,372.1	66.2	8.07	8.90	14,193				44,077
Apr-Jun 01	2,493	2,473	20	-24	29,394.8	21,693.4	73.8	8.48	8.41	16,582				44,673
Jul-Sep 01	1,989	2,739	-750	-766	27,609.2	19,618.9	71.1	7.20	9.92	14,188				42,723
Oct-Dec 01	1,554	2,101	-547	-906	22,639.6	14,308.2	63.2	6.86	9.28	11,151				35,232
ANA														
Apr-Jun 00	SIX MONTH FIGURES													
Jul-Sep 00	5,288	4,793	495	359	47,586.3	31,753.1	66.7	11.11	10.07	24,958				
Oct-Dec 00	SIX MONTH FIGURES													
Jan-Mar 01	5,376	5,186	190	-486	46,278.4	29,168.4	63.0	11.61	11.21	24,471				
Apr-Jun 01	SIX MONTH FIGURES													
Jul-Sep 01	5,168	4,811	357	136	45,756.4	30,790.3	67.3	11.29	10.51	25,876				
Oct-Dec 01														
Cathay Pacific														
Apr-Jun 00	2,070	1,765	305	285	29,839.0	22,588.1	75.7	6.94	5.92		5,483.0			
Jul-Sep 00	SIX MONTH FIGURES													
Oct-Dec 00	2,356	1,983	373	382	32,070.0	24,586.6	76.7	7.35	6.13		6,147.0			
Jan-Mar 01	SIX MONTH FIGURES													
Apr-Jun 01	2,031	1,898	133	170	32,419.0	23,309.3	71.9	6.26	5.85		5,936.0			
Jul-Sep 01														
Oct-Dec 01														
JAL														
Apr-Jun 00														
Jul-Sep 00														
Oct-Dec 00	TWELVE MONTH FIGURES													
Jan-Mar 01	14,198	13,542	656	342										
Apr-Jun 01														
Jul-Sep 01														
Oct-Dec 01														

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

	Group revenue US$m	Group costs US$m	Group operating profit US$m	Group net profit US$m	Total ASK m	Total RPK m	Load factor %	Group rev. per total ASK Cents	Group costs per total ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
Korean Air														
Apr-Jun 00														
Jul-Sep 00	TWELVE MONTH FIGURES													
Oct-Dec 00	4,916	4,896	20	-409	55,824.0	40,606.0	72.7	8.81	8.77	22,070		10,407		16,000
Jan-Mar 01														
Apr-Jun 01														
Jul-Sep 01	TWELVE MONTH FIGURES													
Oct-Dec 01	4,309	4,468	-159	-448										
Malaysian														
Apr-Jun 00														
Jul-Sep 00														
Oct-Dec 00	TWELVE MONTH FIGURES													
Jan-Mar 01	2,357	2,178	179	-351	52,329.0	39,142.4	74.8	4.50	4.16		8,055.0	5,379.0	66.8	21,518
Apr-Jun 01														
Jul-Sep 01														
Oct-Dec 01														
Singapore														
Apr-Jun 00	SIX MONTH FIGURES													
Jul-Sep 00	2,864	2,438	426	668	46,477.5	36,136.6	77.8	61.6	5.25	7,584	8,950.0	6,524.6	72.9	
Oct-Dec 00	SIX MONTH FIGURES													
Jan-Mar 01	2,635	2,317	318	209	46,170.5	34,981.8	75.8	5.71	5.02	7,416	9,084.0	6,460.4	71.1	
Apr-Jun 01	SIX MONTH FIGURES													
Jul-Sep 01	2,592	2,329	263	90	48,057.7	36,091.4	75.1	5.39	4.85					
Oct-Dec 01														
Thai Airways														
Apr-Jun 00	TWELVE MONTH FIGURES													
Jul-Sep 00	3,111	2,732	379	121	55,517.0	41,347.0	74.5	5.60	4.92	17,700	7,752.0	5,469.0	70.6	
Oct-Dec 00														
Jan-Mar 01														
Apr-Jun 01	TWELVE MONTH FIGURES													
Jul-Sep 01	2,936	2,658	278	44	60,459.0	45,167.0	74.7	4.86	4.40	18,600	8,490.0	5,818.0	68.5	
Oct-Dec 01														
Air France														
Apr-Jun 00	SIX MONTH FIGURES													
Jul-Sep 00	5,506	5,132	374	385	60,088.0	48,464.0	80.7	9.16	8.54					
Oct-Dec 00	SIX MONTH FIGURES													
Jan-Mar 01	4,981	4,988	-7	-25	59,100.5	44,622.2	75.5	8.42	8.43					
Apr-Jun 01	SIX MONTH FIGURES													
Jul-Sep 01	5,798	5,511	287	250	64,474.4	50,984.1	79.1	8.99						
Oct-Dec 01														
Alitalia														
Apr-Jun 00	2,225	2,254	-29	-15	24,747.8	16,898.8	68.3	8.99	9.11	11,693	3,464.8	2,404.5	69.4	
Jul-Sep 00	SIX MONTH FIGURES													
Oct-Dec 00	2,553	2,753	-200	-209	32,735.2	24,534.2	74.9	7.80	8.41					
Jan-Mar 01	SIX MONTH FIGURES													
Apr-Jun 01	2,348	2,504	-156	-228	26,436.6	18,952.9	71.7	8.88	9.47	12,565	2,617.2	1,876.3	71.7	24,023
Jul-Sep 01														
Oct-Dec 01														
BA														
Apr-Jun 00	3,488	3,342	146	-85	44,826.0	32,295.0	72.0	7.78	7.46	11,633	6,475.0	4,407.0	68.1	61,411
Jul-Sep 00	3,673	3,293	380	197	45,333.0	35,093.0	77.4	8.10	7.26	12,615	6,608.0	4,741.0	71.7	62,793
Oct-Dec 00	3,328	3,212	116	84	42,347.0	29,008.0	68.5	7.86	7.58	10,493	6,230.0	4,128.0	66.3	62,831
Jan-Mar 01	3,048	3,136	-88	-111	40,018.0	26,800.0	67.0	7.62	7.84	9,721	5,883.0	3,711.0	63.1	62,425
Apr-Jun 01	3,277	3,206	71	37	40,980.0	28,646.0	69.9	8.00	7.82	11,293	6,124.0	3,915.0	63.9	58,989
Jul-Sep 01	3,219	3,116	103	33	39,629.0	29,297.0	73.9	8.12	7.86	11,306	5,969.0	3,868.0	64.8	59,902
Oct-Dec 01	2,616	2,882	-266	-205	35,449.0	23,106.0	65.2	7.38	8.13	8,574	5,436.0	3,341.0	61.5	55,758
Iberia														
Apr-Jun 00														
Jul-Sep 00	TWELVE MONTH FIGURES													
Oct-Dec 00	4,136	4,075	61	188	54,120.0	40,049.0	74.0	7.64	7.53	24,500		4,382		26,814
Jan-Mar 01														
Apr-Jun 01														
Jul-Sep 01														
Oct-Dec 01														
KLM														
Apr-Jun 00	1,600	1,509	91	39	18,730.0	15,149.0	80.9	8.54	8.06		3,276.0	2,549.0	77.8	27,267
Jul-Sep 00	1,615	1,445	170	100	19,386.0	16,378.0	84.5	8.33	7.45		3,359.0	2,703.0	80.5	26,447
Oct-Dec 00	1,617	1,574	43	4	19,050.0	14,715.0	77.2	8.49	8.26		3,316.0	2,618.0	78.9	26,349
Jan-Mar 01	1,360	1,422	-62	-77	18,056.0	13,805.0	76.4	7.53	7.88		3,230.0	2,471.0	76.5	26,538
Apr-Jun 01	1,507	1,487	20	17	19,231.0	15,200.0	79.0	7.84	7.73		3,322.0	2,526.0	76.0	27,211
Jul-Sep 01	1,679	1,596	83	24	19,554.0	16,049.0	82.1	8.59	8.16		3,328.0	2,559.0	76.9	28,911
Oct-Dec 01	1,291	1,358	-67	-82	17,030.0	12,483.0	73.3	7.58	7.97		3,063.0	2,323.0	75.8	27,738
Lufthansa* **														
Apr-Jun 00	3,346	3,123	223	400	31,865.0	24,405.0	76.6	10.50	9.80	12,249	5,988.0	4,338.0	72.4	68,000
Jul-Sep 00	3,375	2,993	382	182	32,654.0	25,878.0	79.2	10.33	9.17	12,849	6,156.0	4,536.0	73.7	
Oct-Dec 00	3,750	3,148	602	10	30,682.0	22,096.0	72.0	12.22	10.26	11,547	5,997.0	4,293.0	71.6	69,523
Jan-Mar 01	3,222	3,202	20	-80	30,223.0	21,232.0	70.3	10.66	10.59	10,903	5,781.0	3,953.0	68.4	72,279
Apr-Jun 01	4,119	4,045	74	41	30,658.0	22,930.0	74.8	13.44	13.19	12,236	6,371.0	4,239.0	66.5	85,771
Jul-Sep 01	4,188	4,027	161	96	32,454.0	24,546.0	75.6	12.90	12.41	12,692	6,271.0	4,282.0	68.3	83,447
Oct-Dec 01														
SAS														
Apr-Jun 00	1,289	1,176	113	112*	8,492.0	6,004.0	70.7	15.18	13.85	6,236				28,295
Jul-Sep 00	1,122	1,070	52	33*	8,496.0	6,155.0	72.4	13.21	12.59	5,943				28,485
Oct-Dec 00	1,310	1,131	179	174*	8,541.0	5,492.0	64.3	15.34	13.24	5,747				27,767
Jan-Mar 01	1,183	1,175	8	2*	8,558.0	5,286.0	61.8	13.82	13.73	5,482				29,985
Apr-Jun 01	1,345	1,329	16	18*	9,144.0	6,227.0	68.1	14.71	14.53	6,279				30,499
Jul-Sep 01	1,199	1,220	-21	-20*	9,629.0	6,498.0	67.5	12.45	12.67	6,463				30,896
Oct-Dec 01	1,208	1,316	-108	-108*	8,509.0	5,097.0	59.9	14.20	15.47	5,300				
Swissair**														
Apr-Jun 00	1,916	2,006	-90	2	25,476.0	18,241.0	71.6	7.52	7.87	9,162	3,972.8	2,719.6	68.5	
Jul-Sep 00	SIX MONTH FIGURES													
Oct-Dec 00	2,179	2,069	110	-1,650	23,540.0	17,677.0	75.1	9.27	8.79	5,890	4,296.2	3,007.4	70.0	
Jan-Mar 01														
Apr-Jun 01														
Jul-Sep 01														
Oct-Dec 01														

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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