HAPPY NEW YEAR!

Aviation Strategy

Issue No: 63 January 2003

Market outlook

Times are tough for the mainstream aviation industry. IATA is now estimating a net loss of $13bn for the global industry in 2002. And the painfully slow recovery from September 11 has been overshadowed by the prospect of war in Iraq.

We have no particular insight into the potential Iraqi war, just a hope, shared by most people in the West, that it will not happen.

If it does happen, there will be a short-term surge in the spot price of crude oil and kerosine. However, as there is a global excess of supply over demand in the oil industry and a lack of solidarity within OPEC, the overall outlook is for a softening in fuel prices in 2003.

The bigger concern for the aviation sector is that confidence in air travel will again be undermined and the incipient recovery in the transatlantic market will be choked off. As well as the Middle Eastern carriers like Gulf Air, Emirates and Saudia, the Euro-majors are exposed to developments in the region. BA and KLM earn about 5-6% of their revenues on routes to/from the Middle East while for Lufthansa, Air France and Alitalia the proportion is 2-3%.

In terms of the global market balance, the supply side adjustments in terms of parking, downsizing, order deferrals and cancellations. The number of parked aircraft peaked at about 2,200 at mid-year and has remained at that level while aircraft available for sale or lease has declined slightly from its early 2002 peak of around 1,400.

Load factors are at record levels: 75.7% for the AEA carriers in the first nine months of last year, 70.7% for US domestic traffic and 76.7% for US international traffic. Yet yields have resolutely refused to rebound - for example, the average US domestic fare in November 2002 was 20% lower than that in November 2000 while the average international fare was 10% lower. KLM's recent profit warning was announced at the same time as it was reporting the highest load factors for eight years.

What this means is that the mainline scheduled industry will not be rescued by unit revenue growth. Indeed, it is likely that business fares will continue to be reduced on both sides of the Atlantic as airlines attempt to recapture business travellers disillusioned by their treatment during the boom times of the late 90s.

Other ideas like airlines within airlines are being tried, on the basis that mistakes from previous failed attempts at this concept will not be repeated, and some mergers or takeovers are being considered, but without much enthusiasm. This unfortunately leaves most of the mainstream carriers with only one direction - further cost-cutting. (A few airlines - Air France and some of the leading Asian carriers, perhaps - may still be able to control their unit costs through capacity expansion).

The challenge for airline management will be to communicate the reasons for unit labour cost improvements effectively to the unions, something that failed spectacularly at United (see pages 3-7).

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Continental barriers to LCC expansion

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There are two basic interpretations of this capacity share analysis of intra-European schedules carried out by Gert Zonneveld of WestLB Panmure.

First, low-cost carrier (LCC) penetration in the UK and Ireland (about one third of total capacity) will inevitably be replicated in continental European markets as the LCCs develop their continental bases. Second, an alternative view is that there are fundamental differences that mean that the LCCs will not achieve the same success as they have in the UK and Ireland. (LCCs are defined as Ryanair, easyJet, Buzz and bmibaby.)

At London, Luton, Stansted and Gatwick airports are workable alternatives at London for business travellers as well as leisure/VFR passengers. EasyJet, operating from all three to major domestic points like Glasgow, Edinburgh and Belfast has in effect forced BA and bmi to downsize or abandon their domestic trunk routes to/from London Heathrow.

This strategy should work in France if easyJet is allowed to expand at Paris Orly, currently occupied by Air Lib, which is in administrative bankruptcy. Air Lib's future depends on French government and EC acceptance of its restructuring plan (The French decision is due in mid-January). From Air France's perspective, the failure of Air Lib would open Orly to easyJet and potentially worrying competition for its shuttle operations to that airport (though it would benefit on African routes where Air Lib competes). Andrew Lobbenberg of JP Morgan points out that Air France has recently been arguing that easyJet might be a less disruptive competitor than Air Lib.

Germany poses a different sort of problems for the LCCs There are almost no alternative airports close to major population centres. EasyJet will be taking on Lufthansa directly at Munich if or when it decides to complete its purchase of DBA, and it will need a rapid frequency and route build-up to establish a credible alternative to Lufthansa hub operation.

Other issues include the competitive train service, a residual reluctance about online credit card bookings and unavoidable social costs.

% CAPACITY SHARES OF LCCs BY COUNTRY (4Q2002)

	Domestic	Intra-Europe	Total
UK	32.0	33.3	33.1
Ireland	0	32.4	31.4
Italy	0	15.7	12.3
Belgium	0	9.5	9.5
Switzerland	0	9.6	9.4
France	2.0	10.7	8.2
Netherlands	0	7.6	7.6
Spain	0	8.8	6.9
Sweden	0	7.6	5.5
Norway	0	6.0	3.2
Germany	0	2.7	2.8
Denmark	0	2.8	2.7

% CAPACITY SHARES OF LCCs BY COUNTRY PAIR (4Q2002)

Belgium	**Ireland**	69.6
Ireland	**UK**	47.2
Spain	**UK**	44.9
Italy	**UK**	44.6
France	**UK**	39.1
Austria	**UK**	34.1
France	**Ireland**	31.9
Sweden	**UK**	28.6
Switzerland	**UK**	27.5
Netherlands	**UK**	24.5
Portugal	**UK**	23.9
Norway	**UK**	19.7
Germany	**Ireland**	18.4
Belgium	**Italy**	18.1
Netherlands	**Switzerland**	17.3
Belgium	**UK**	16.7
Germany	**UK**	15.7
Denmark	**UK**	14.8
Germany	**Norway**	14.3
France	**Switzerland**	13.9
Germany	**Italy**	7.6
Belgium	**France**	6.3

Source: European Airlines - tracking market shares of low fare and network carriers gert.zonneveld@westlbpanmure.com

United Airlines: the extent of the reorganisational challenge

United Airlines operates the world's strongest airline network. It is the cornerstone of the largest global alliance, has unassailable domestic hubs at Chicago O'Hare and Denver and powerful, protected positions at Tokyo-Narita and London-Heathrow. It has a modern, efficient fleet, and extremely experienced, capable staff. However, there is a serious chance that United could be forced into liquidation during 2003, and there is open debate about the type of changes needed if United is to successfully reorganise.

To survive, United must rapidly meet three challenges.

- **Stabilise DIP financing and cash flow** United's current debtor-in-possession financing will terminate unless it limits its aggregate cash burn from 7 December to 15 February to $960m. This would require reducing its current daily burn rate, reported to be $17-22m in December, to a level between $6-8m per day in late January and early February. After meeting these short-term covenants, United must make further improvements in order to achieve cash-positive operations
- **The initial turnaround** United must implement a 2003-4 business plan that gets reasonably close to P&L breakeven on a post-reorganisation basis, demonstrating a clear foundation for an eventual profit recovery
- **Establish a recapitalisation plan** This must be based on a long-term plan for sustainable profits over a full-business cycle that fully recognises the major competitive changes affecting all traditional Big Hub network carriers, protects the interests of all of the investors and creditors contributing to the reorganisation, and avoids the dysfunctional governance that contributed to United's financial collapse.

United's ability to meet these challenges will be limited by the very weak market environment and its dependence on major sacrifice by staff and creditors, who may not share a common understanding of the gravity (or the causes) of the current crisis. United has very little time for education, discussion or the development of creative alternatives. The US Chapter 11 bankruptcy process is not designed to facilitate radical restructuring, and it is not designed to move quickly unless all stakeholders are largely in agreement. External shocks including war in Iraq or a further US economic downturn could quickly render these issues moot.

Also, one must question whether United's current management could rapidly execute the biggest turnaround in aviation history. Most of current management were directly involved in the many decisions that created the current crisis, and have been reluctant to make major changes. Recent business plans did not demonstrate a clear grasp of the magnitude of the challenge, and were openly criticised by Wall Street and the ATSB.

Cash-flow covenants

To meet the phase one DIP loan covenant, United would need to reduce cash burn below current rates by $200-350m prior to 15 February. It is extremely unlikely that any schedule cuts could conserve cash in this time period, as many operating costs cannot be avoided on a few weeks notice. If these covenants are to be met, the entire cash savings would need to cut from immediate reductions in ongoing wages, leases and rents. If 80% of this burden fell on labour, it would require full implementation of wage cuts of 30-40% for every company

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employee by 15 January. Unions would need to approve such cuts without any clear evidence of a long-term profit or reorganisation plan, and without any real opportunity to communicate the issues to their members or to propose alternative solutions.

Getting back to breakeven

Vaughn Cordle, a senior United pilot who has been publishing expert analysis of United and industry financial issues for several years, estimates that United needs slightly over $3bn in immediate cost cuts just to stabilise its financial situation and to serve as a foundation for an eventual full recovery. These estimates are double the nominal cost savings proposed in United's rejected ATSB loan application, and three times greater if foregone pay hikes are included.

A summary of one of Cordle's scenarios illustrates the magnitude of the short-term cost cutting challenge, (see table below).

Other scenarios involve greater immediate capacity cuts, in recognition of the serious industry overcapacity and the poor contribution levels of much current flying, but these also incur greater transition costs. Obviously larger wage cuts and productivity improvements would allow more flying to be profitably maintained. But in all cases, first year labour cuts of the order of $2.0-2.5 bn appear critical.

The 2% RASM improvement assumption may be optimistic (United's RASM fell 4% last year) unless United's move accelerates the final shakeout of excess Big Hub capacity. It would be absurd to suggest new near-term revenue opportunities (such as a rebirth of Shuttle by United) under current market conditions, or until the profitability of United's core network has clearly recovered.

Cordle estimates that over half of the year one labour savings could come from a simple roll back of wage increases granted since 1999, when the original concessions granted to fund the 1994 ESOP expired. United's labour costs increased by $1.4bn between 2000-02, with average employee pay increasing 25%. As much as one-third of the savings can come from major workrule reform (crew scheduling constraints, vacation overrides, outsourcing limitations, etc). Labour savings from capacity cuts and productivity improvements would obviously shift an even greater burden of the pain onto staff that would be laid off, and who would have little prospect of benefiting from an eventual recovery.

SHORT TERM COST CUTTING MEASURES

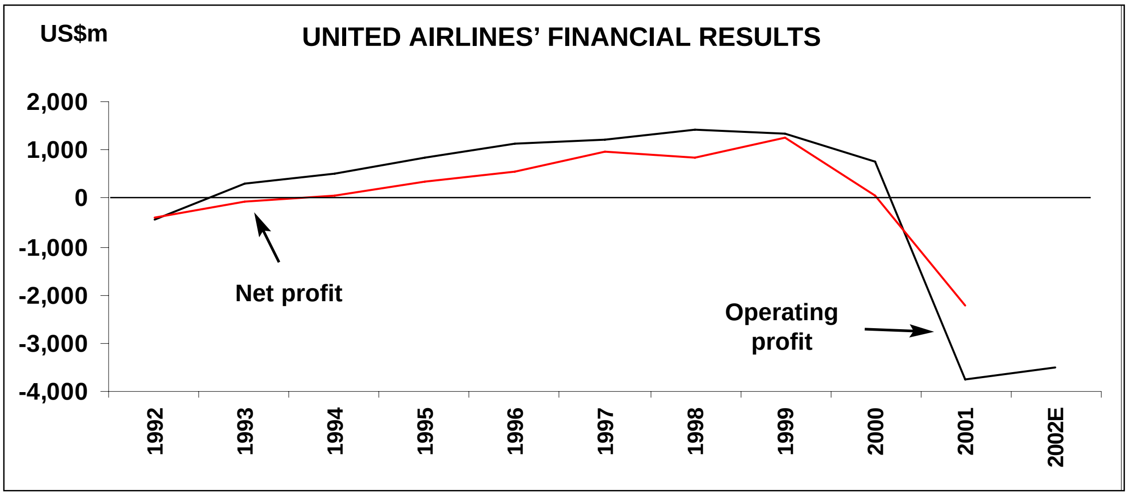
US$m	2002	2003	Change	
Op Revenue	14,248	13,622	(626)	6% ASM cut, 2% RASM gain on smaller base
Labour Expense	6,940	4,858	(2,082)	26% labour cost/ASM cut
Rent/ Depreciation	1,804	1,237	(567)	23% reduction
Other non-labour	7,943	7,647	(296)	
Total Op Expense	16,687	13,742	(2,945)	12% CASM reduction
Operating Profit	(2,439)	(120)	2,329	
Operating Margin	(17%)	(1%)		

Source: Vaughn Cordle

Restoring sustainable profits

United's (and other industry) projections argue that once labour costs are brought back "into line", and the economy works its way out of the current downcycle, demand growth will return. Restoring the pricing and capacity growth of the mid-90s in these projections also restores the profit margins of the mid-90s, offering the prospect of returns for investors, and eventual wage snap-backs. United's ATSB loan application was based on 9% annual revenue increases between 2003-05.

These planning approaches assume that nothing happened in recent years to change the fundamental competitive position of United (or the other Big Hub carriers) and ignores the expansion of Southwest and other non-network, low-cost carriers, the collapse of industry pricing structures and the widespread alienation of previously loyal business customers. United's ATSB revenue projections result in a RASM recovery nearly three times greater than the industry experience in the mid-90s, before Southwest became a major influence on nationwide price levels.



The hypothesis here is the Big Hub carriers as a group must shrink by another 10-15% from current levels, and may eventually need to shrink further if Southwest-type non-network carriers can continue high rates of profitable growth, eroding the maximum Big Hub market share even further. United and the other Big Hub carriers must return to a pre-bubble pricing/revenue environment with lower business fares, and a much smaller gap between business and leisure fares (either its own, or those of the low cost carriers). Lower business fares must be maintained in order to restore business customers' lost faith that the traditional airlines offer value for money, and to block the further loss of share to the low cost non-network sector.

These larger industry capacity and pricing issues were discussed at length in an earlier article ("Is the traditional Big Hub model still viable?", *Aviation Strategy*, July/August 2002). United's core network - Chicago, Denver, Narita, the Star Alliance - is very strong, and if United can quickly achieve the magnitude of cost reductions suggested above, it could force other carriers with weaker networks into bigger cutbacks while preserving more employment for its own people. Most competitors are hoping that a United collapse and liquidation will solve the overcapacity and yield problems, while allowing them to avoid the painful decisions United now faces.

One cannot assume any medium-term future increases in real business fares, other than short-term cyclical fluctuations. RASM will improve with general economic recovery and as significantly reduced capacity and simpler prices allow the elimination of the lowest discount levels that not even Southwest can offer profitably. But even if the US economy returns to robust mid-90s economic growth, the potential for steady capacity growth and fare increases is nowhere on the horizon. The old conventional wisdom tightly linking GDP and revenue growth is obsolete. Under optimistic views of economic and industry recovery, RASMs might plateau at roughly 1995-96 levels.

To achieve sustainable profitability, United must implement the $3bn year one cost reduction, and then find $300-500m in annual cost/productivity savings over the following three to five years ($1-1.5bn in all) to reduce CASM to a level where the airline can cover the cost of capital across a full business cycle, build up positive equity and begin to restore its balance sheet. These second phase savings would most likely come from increased technology applications, outsourcing and ongoing product simplification, and opportunities would increase with year one workrule reform. They would require process re-engineering and investment and could not be realistically included in any year one turn-around projections.

Recapitalisation and new governance

To successfully reorganise, United must establish a new foundation for how investors, employees, current creditors and other stakeholders will be compensated over the course of future business cycles. This could take many different forms including complete employee control and complete creditor control.

The 94 ESOP was designed along the lines of many current plans and proposals, with emphasis on the year one cuts that are a critical first step, but no serious thought about a plan for longer-term profitability, and with willful indifference to the governance process that determines how the risks and rewards of the different investors are balanced. It is clear that any United survival plan will require unprecedented sacrifices from current staff and creditors. At this point it is totally unclear who might benefit if United successfully reorganises. Despite urgent deadlines, parties may be unwilling to make the necessary investments in (or concessions to) future operations without confidence that the future governance structure will protect them.

A long, steady path to bankruptcy

United has been in steady decline for decades. At the dawn of deregulation, United was 33% larger than the number two carrier, American, 80% larger than Delta and three times the size of Northwest. With its size and network strength, United was ideally positioned to become even stronger and more profitable once given full commercial freedom. Its industry leadership position was eclipsed by the early 80s and its profit margins and relative market value declined throughout the 80s and 90s. Prior to September 11, 2001, United's market capitalisation was only 60% of American's and only 30% of Southwest's.

United's management culture has long been bureaucratic and complacent, confident that the airline's size created market power that would always generate profits. Through successive regimes, senior United management also remained highly centralised and hierarchical. This tended to reinforce the internal tendency to focus more on perceived "power" than on the need to provide the greatest customer value and achieve the highest productivity. It also tended to discourage initiative, innovation, risk-taking, challenges to accepted practices, and open two-way communication.

Financial challenges usually resulted in major transactions - the 1987 Allegis creation and rapid break-up, the 1989 British Airways takeover plan, the 1994 ESOP, the 2000 $4.3bn US Airways merger bid - that would protect incumbent management, while creating enormous long-term risk.

As United management was slow to adapt its thinking to its more volatile, competitive environment, it also failed to communicate the new market realities to its staff. Instead of realigning costs with either competitive, market levels, or the long-term revenue potential, both unions and management continued to assume that United's historical market position was their birthright, and focused narrowly on battling over their respective shares. Both internal union dynamics and internal management culture reinforced a highly short-term focused adversarial system, resulting in a long series of highly destructive confrontations including a major 1985 strike, union participation in various takeover bids (including the 1994 ESOP), and the 2000 pilot slowdown, which cost the company nearly $1bn in lost revenue.

Both sides viewed the ESOP through the narrow prism of short-term contract negotiation. Neither side had any intention of using employee ownership to better align the interests of employees, outside shareholders and other stakeholders. Prior management viewed the ESOP as the means of achieving short-term (five-year) wage concessions to boost the P&L during the industry downturn of the early 90s. Unions viewed the ESOP as the price to be paid to secure long-term advantage in the collective bargaining process. New management actually surrendered its (rarely-used) right to communicate directly and freely with rank-and-file staff and made no further attempts to explain the growing challenges to United's competitive position and profits, as the current industry crisis unfolded.

One of the major reasons United collapsed ahead of other seriously troubled Big Hub airlines is that the new employee-owners massively overpaid for the company, and then failed to make any improvements in governance or labour relations. The ESOP directly placed a $3bn financial penalty on the company ($2 bn cash out plus $1bn after tax book costs due to negative dilution). The employees' $5bn investment was worth less than $1bn prior to September 11, 2001, and of course is now worthless. The Board members and senior managers who engineered and implemented the ESOP remain firmly in control of United despite the complete failure to serve the fiduciary interests of the shareholders.

Who can save United?

The logical components of a United turnaround are extremely daunting but they are also quite straightforward. But companies cannot be saved by logic or spreadsheets, human beings must lead the process.

The United turnaround approach outlined here will require extraordinary initiative, the ability to powerfully convince dozens of stakeholders to accept enormous pain, new business plans based on a completely new thinking about United's competition and customers, and an immediate 180 degree reversal of the labour-management practices of the last three decades. The biggest challenge to United's survival may not whether it can implement $3bn in cost savings in the next several months, but whether it can totally overcome the problematic history of its management culture and industrial relations in that time.

The SAir precedent

The only real precedent for United's current situation is the collapse of Swissair's parent, the SAir Group. Both companies had serious but easily (and widely) understood problems. The core airline networks were fundamentally sound but faced cash crisis driven by external financial burdens (failed conglomerate investments, overpaying for the ESOP). The Board members who were directly responsible for the serious problems wanted desperately to hang on to that control and refused to acknowledge or address the obvious problems. Facing a crisis, the Board brought in an industry outsider, who kept the old management team intact and aggressively pursued taxpayer bailouts.

There is no rational business reason why United cannot be reorganised successfully, but there was also no rational explanation for the liquidation of Swissair. In Zurich, the people who had been part of the past decisions and the old culture were unable to change their behaviour, even as the cash ran out and one of the greatest names in aviation history was shut down.

Air Malta:
Hub or hubris?

The likely accession of Malta to the EU and the present Maltese government's programme of privatisation confront one of Europe's smallest state-owned airlines with a dilemma: what route to choose?

Malta's incumbent centre-left Nationalist Party has promised a referendum on EU membership early next year. Opinion polls show a split but also a large number of "don't knows". A yes vote is expected to result in an early general election with the government confident of victory; a no vote would see the election delayed until the last minute - late this year or early 2004.

At the same time Malta is in the middle of a privatisation programme: a 40% stake in Malta International Airport (MIA) was sold in May to a consortium, Malta Mediterranean Link (MML). This comprises Vienna International Airport with 54%, SNC Lavalin (a quoted Canadian construction and facilities management firm) with 36%, and a Maltese firm with 10%. SNC Lavalin, which previously worked on the development of Vancouver International Airport, values its MML share at Can$24m. A former Austrian Airlines and Vienna International Airport executive, Peter Bolech, was appointed the new MIA chief executive.

The sale to MML proved controversial as another bidder, Alterra Partners, half -owned by Singapore's Changi Airport, threatened to sue the Maltese government for breaking a promise to award it the 65-year airport concession. The government had insisted the successful bidder could not also be involved with other Mediterranean airports, which it regarded as competitors. MML and Alterra were both bidding for the contract for Cyprus' Larnaca and Paphos airports, but only MML was prepared to accede to the government's wishes.

The Maltese government has yet to make any announcement specific to Air Malta. The airline itself says it is in a queue of state assets for sale, but not at the front of the queue. With a further 20% of the airport recently sold to institutional investors, the continued state-ownership of Air Malta, former operator of the airport and its main user, creates a slightly anomalous situation.

The airport and airline are seen as crucial elements in Malta's tourism industry, which accounts for around 25-30% of GDP. The same restrictions, which applied to the sale of the airport, when Cyprus was seen as major competitor in tourism, are likely to be used in the airline privatisation under which it is expected a "strategic investor" will be offered 40%.

Air Malta is still working out its modus vivendi with the airport since, while they subscribe to the same goal of boosting tourism, the airport wants to bring in more airlines to compete with Air Malta. Passenger handling and ground handling are also due to be liberalised, exposing Air Malta to further competition.

The Maltese government is officially keen to project the country as a "Mediterranean hub" in a number of areas. The airport, currently handling 3m passengers a year, is seen as a hub for passengers and cargo, while the airport and Air Malta will be part of a "cruise hub", linking flights with cruise ships using Malta as their base for Mediterranean links (at the moment they only call at Malta for six-hour stopovers). The airport is a member of a consortium developing a new cruise terminal and waterfront in Valletta's Grand Harbour, while the airline, already an owner of hotels, travel agents and tour operators, is planning to invest in cruise ships. SNC Lavalin is credited with helping Vancouver develop as a fly-cruise hub for North America, while Vienna International Airport brought its own "eastern Europe hub" credentials to the Maltese airport deal.

While such grandiose schemes are being nurtured, Air Malta, in the run-up to privatisation and EU membership, has recently made the following decisions.

• In January this year it formed a joint venture maintenance company with Lufthansa Technik (Lufthansa 51%) to which Air Malta engineering staff were transferred

• In May the airline, currently operating a mix of 737-300s and A320s, decided to move to an all-Airbus fleet over the next six years. To achieve this, it entered into a sale-and-leaseback deal with International Lease Finance. ILFC bought and leased back Air Malta's existing fleet of two A320-200s and three 737-300s and arranged the lease of 12 new CFM56-engined Airbus aircraft - seven 141-seater A319s and five 168-seater A320s with an option to upgrade one to a 200-plus seat A321

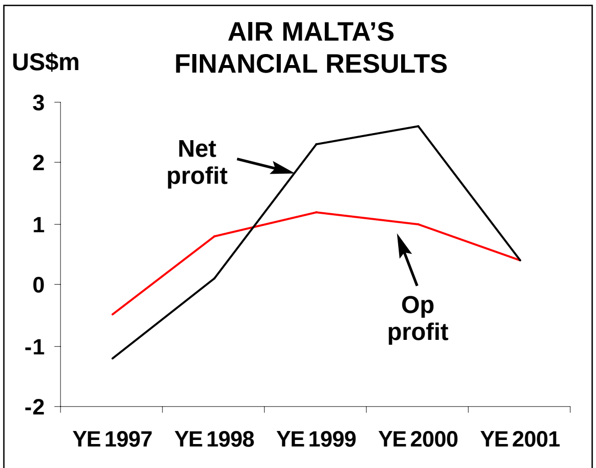
• In October it, or rather the government, appointed a former Swissair executive, Ernst Funk, as chief executive, the first non-Maltese to hold a senior position, indeed the first time a CEO as opposed to chairman position had been created at the airline.

Results and competition issues

The airline claims to have made a loss in only two years since it was established in 1974 and to have never received government subsidies. In 2001, the Air Malta group made a pre-tax loss of LM3.7m (US$8.9m) on turnover of LM124m (in 2000 a LM6.2m pre-tax profit on the same turnover). Air Malta ostensibly refrained from making any staff cutbacks despite September 11.

It had an operating profit of LM3m (US$6.5m) but made losses of LM4.3m on subsidiaries and associates, notably 49%-owned Italian domestic airline, Bergamo-based Azzurrair, which made an LM6.8m operating loss (Air Malta's share of losses and provisions was stated at LM4.7m). The Italian regional operator, with a fleet of eight Avro RJ85s and RJ70s, has a franchise agreement with Alitalia. Air Malta is trying to sell its stake in Azurrair.

Air Malta's services are dominated by the UK. It flies to three London airports (Heathrow, Gatwick and Stansted), plus Birmingham, Manchester, Newcastle and Glasgow. It carried 536,000 passengers on the UK-Malta routes last year. Other EU countries - mainly Italy, Germany and France -provide the bulk of the rest of the airline's business. With 1.6m passengers in total last year, Air Malta claims to carry 50-60% of all tourist traffic (60-70% if counting only scheduled services). Forays by the airline outside its traditional area in the past have not proved successful, most notably its attempt to fly the Atlantic in 2000 with a wet-leased 757.



Note: Airline's results only

Air Malta has not faced the same degree of competition from the charters as other Mediterranean flag-carriers, because Malta is not a mass tourism destination (there are few sandy beaches). It is, however, a perfect short-break destination, and so the market will be targeted by the LCC subsidiaries of the charters and maybe the LCCs themselves.

Malta's ambitions to become a hub (alternatively "a gateway" for the EU to Libya and other north African countries) may have been fired by the success it has had with a sea container transhipment terminal, in effect a Mediterranean hub, which is also being privatised (CMA-CGM, a French shipping line and the terminal's biggest user, is set to acquire control.) A shipping hub maybe, but in aviation its aim sounds a little hubristic.

Russian airlines: Noise and tax frustrations

Russian passengers numbered 25.1m in 2001, a growth of 14.8% compared to 2000, and the first eleven months of 2002 showed a growth of 5.5%. The implementation of ICAO Chapter 3 noise rules by the EC in April closed European airspace to many Russian aircraft (an exemption was granted to allow holiday charters to operate into Greece; a second exemption was granted until the end of 2002 for Pulkovo Airlines to fly to Germany). The top five passenger carriers accounted for over 51% of all Russian passengers in 2001.

With few Russian Chapter 3 aircraft available, 44% import duties and VAT charged on imported aircraft, many operations to Western Europe had to be closed, thus damaging the revenues, employment and financial capability for fleet replacement.

There are ways around the problem. Aeroflot has approval for 27 tax-free aircraft, and it negotiated governmental permission to roll this over for the same number of new aircraft. But it needs more aircraft of an international standard and so entered a code share agreement with a new Irish carrier, SkyNet, to operate its Moscow-Amsterdam and Moscow-Brussels services six times weekly with 737 Classics.

Sibir took a substantial holding in an Armenian carrier, Armavia, and arranged to lease two A320s for services from Yerevan. This allows Sibir crews to build up familiarity with the A320, and should the tax situation change, to be ready to bring them into its main fleet.

Kras Air reached agreement with Germania to take eight MD83s as part of the capitalisation of a joint leasing Russian company. Russian law allows assets brought in as company capital to be tax-free, but few western investors have used this provision as yet.

Today, there are only a small number of Russian new-generation aircraft - only 11 Tu-204/214s and 9 IL-96-300s in service with Russian airlines. The Russian manufacturing industry is in disarray, slow to produce and deliver, and has scant support for its products. Apart from this, few Russian banks will finance aircraft purchases, and the leasing industry is only beginning to come to life. In August, leaders of the Russian airlines met the Minister of Transport and aviation industry officials, delivering a message that was very critical of the support, production capability, and lack of flexibility of the industry.

All this means that Russia's airlines are having difficulty in getting Chapter 3 aircraft. There are very few Tu-154Ms, one of just two Soviet-era jetliners capable of being modified to meet Chapter 3 requirements, available to be purchased from carriers in other countries. This type is the backbone of the CIS airline industry. The Yak 42 is also Chapter 3 compliant (sometimes after minor modifications), but with less capacity and shorter range.

Feeder services are just beginning to come on agenda as Russia's major carriers begin to pay attention to their customers' needs. In western Russia, there is at least a basic rail system to bring passengers from small towns and cities to the major gateways, and the requirement for regional aircraft is expected to grow. The Soviet-era regional aircraft were built in the 1960s and early 70s, and they need to be replaced. Aeroflot has signed letters of intent, but these will only come into effect when regional types are certificated and in production. The Antonov An-74TK-300 is the main prospect.

East of the Ural Mountains, feeder services are often an essential factor in the survival of remote communities. Most of the operators providing these services are in poor financial health, and the concept of providing feed to major carriers is only beginning to be understood. Often, flights to relatively nearby cities are scheduled just once

MAIN RUSSIAN/CIS AIRLINE FLEETS

	Aeroflot	Sibir	Pulkovo	KrasAir	UT Air	Trans-aero	Domod-edovo	East Line	Volga Dnepr	Aerosvit	TOTAL
IL-96-300	6						3				**9**
IL-86	5	10	8	4				2			**29**
IL-76	3			10				14	2		**29**
IL-62				5			15	1			**21**
TU-154	24	28	25	20	9			3			**109**
TU-134	16		10	2	6			1			**35**
TU-204		2		2							**4**
YAK 40				3	22			3	4		**32**
AN-2			5		52						**57**
AN-24				3	10						**13**
AN-26				4	1						**5**
A310	11										**11**
737-200						1				1	**2**
737-300						2				1	**3**
737-400	10									1	**11**
737-500										3	**3**
737-700						2					**2**
767-200						2					**2**
767-300	4									1	**5**
777-200	2										**2**
DC-10F	2										**2**
Total	**83**	**40**	**48**	**53**	**100**	**7**	**18**	**24**	**6**	**7**	**386**

Note: Aeroflot has 14 IL-86s, 10 IL-76s and 12 IL-62s out of service

or twice a week.

In September, Russia's Minister of Transport asked the country's design bureaus to come up with proposals to supply 200 regional aircraft in the 50 to 90-seat range. Four proposals were submitted - Antonov was excluded, as it is based outside Russia. The proposals are now under evaluation, although the government has not outlined much in financial terms regarding payment for the new aircraft.

Aeroflot - Russian Airlines

Russia's national airline carried 5.8m passengers in 2001, some 14.3% up on 2000, and its highest annual total ever. These figures will not be achieved in 2002, with some 4.2m passengers and 13.5m RPKs in the first 10 months of the year. The reduction is partly attributed to the airline's inability to replace the large, wide-bodied Il-86 on European and holiday routes.

Total commercial revenues from passenger and cargo services up to October 2002 are put at $859m. Although it still officially has 14 Il-86s in its fleet list, in fact only five remain in operation, and the others are either parked or operated by VASO, an airline established by the aircraft's production factory. Some of these services are flown in partnership with the national airline as "Aeroflot Express", but only to destinations where Chapter 2 operations are still permitted.

The airline secured governmental permission to roll over its tax exemptions to a new fleet of more modern western aircraft, despite vociferous complaints from the manufacturers. It has now signed for a new fleet of 18 A319/320s, with the first expected in the third quarter of 2003. For its longer-range requirements, it initially chose the A330-200, but a phone call from George W. Bush to his Russian counterpart soon sorted that out, but in a way not anticipated by the US manufacturer - it chose to retain its four 767-300ERs and to add a further five used aircraft. This is expected to be an interim solution for three to five years. The two 777s have proved to be too large for the airline's requirements, and the total of 27 western passenger aircraft currently in the fleet (11 A310s, 10 737 Classics, 4 767s and 2 777s) will be replaced by a similar number of mainly smaller aircraft. Aeroflot currently carries about 110 passengers per flight on most of its services to Western Europe, and the larger aircraft therefore do not make sense. Currently, Aeroflot has 18 A319/320s and five 767-300ERs on order.

The airline's plan to develop its own terminal for itself and its SkyTeam partners at Moscow's Sheremetyevo Airport ran into considerable opposition from the airport, and resulted in a government decision allowing airport development in partnership with Aeroflot but retaining existing airport staff.

The airline's service standards have continued to improve, and management is determined to bring standards to high international levels.

Chief Executive: Valeri M. Okulov

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Sibir

With the absorption of the Vnukovo Airlines staff, services and, most importantly, its market, Sibir increased its passenger numbers from 0.8m in 2000 to about 1.8m in 2001. In 2002, total boardings will exceed 2.7m.

The airline bought a major interest in Armavia, an Armenian carrier - it sees strong potential in the Armenian market - and to develop operational experience with the A320. It has now gained JAR145 (European aircraft maintenance approval) for basic line maintenance with the A320 following an audit by the French authority, and plans to build this to at least "C" check standard.

In mid 2002, the airline decided to change its Moscow operation from Vnukovo Airport to Domodedovo, a newly rebuilt facility to the east of the city. It did this because Vnukovo was not prepared to improve transit facilities for interlining passengers. Baggage, for example, could not be checked in at Novosibirsk for a transfer through Vnukovo for an onward flight to Germany. It had to be collected by the passenger, who then needed to begin the two-hour check in process required for international flights. Domodedovo, run by a private company, was prepared to offer a more flexible approach.

The airline has now moved much of its management staff from Novosibirsk to Moscow. It is now firmly in second place in traffic, and its service is usually well up to international standards.

CEO: Vladislav F. Filiov

Tel/ Fax: (3832) 227572, (3832) 599064

Address: 633115 Novosibirsk, Tolmachevo Airport

Pulkovo Aviation Enterprise

The St. Petersburg-based airline carried 1.8m passengers in 2001, up 16% on 2000, but the combined Sibir/Vnukovo entity caused Pulkovo to fall to third position in the Russia league tables.

The 2002 loss of an IL-86 in an accident in Moscow has seen traffic fall considerably in the year, and its holiday traffic has suffered due to the lack of capacity to replace the IL-86s, although it bought four Tu-154Ms from those withdrawn from Chinese airlines in mid-2001.

It is now understood to be looking at foreign aircraft possibilities to supplement its fleet, but the question of taxes has to be addressed. It continues to run both the airline and St. Petersburg's Pulkovo airport.

Chief Executive: Boris G. Demchenko

Tel/ Fax: (812) 122 9422, (812) 104 3302

Address: 196210 St. Petersburg, Pilot St., 18/4

Kras Air

Kras Air made up for the fall in 2000 traffic by carrying a total of 1.02m passengers in 2001, a growth of 41%. By November 2002, it had carried even more, 1.18m passengers, and had also grown cargo volumes by over 11%.

It has recently agreed to lease two 767-200s from Boeing Capital, although it is not clear how the import taxes will be covered. The first of these is due for delivery in March 2003. It has also reached agreement with Germania to set up a joint Russian leasing company with an initial eight MD-83s. Boeing has agreed to get the MD-83 certificated for Russia. Kras Air's policy of developing Krasnoyarsk-Yemelianovo airport into a central Siberian hub has been a deciding factor in building its passenger traffic.

CEO: Boris M. Abramovich
Tel/ Fax: (3912) 236366, (3912) 244895
Address: 663020 Krasnoyarsk, Yemelianovo Airport

UT Air

TAT (Tyumenaviatrans) changed its name to UT Air on October 1, 2002. It achieved remarkable growth in 2001, with passenger numbers up 55% to 1.01m, plus a further a further 0.2m carried on helicopter services, including its United Nations operations in Africa and Asia.

It achieved operating revenues of $144m, up from $85m in 2000. Costs came to $132m, against $62m in 2000, but the airline's management points out that these included substantial extra maintenance on out-of-service helicopters to allow for expanded operations and revenues in future years. CEO Andrei Martyrosov describes these costs as "investments for the future".

Chief Executive: Andrei Martyrosov
Tel/ Fax: (3462) 280057, (3462) 280116
Address: 624600 Tyumen Region, Surgut Airport

Transaero

After a number of difficult years, Transaero has set about rebuilding its routes and fleet for expansion. In 2001, it carried some 0.39m passengers. For the first nine months of 2002, it carried 0.29m, most of these on international routes.

In August, it took delivery of the first of two 767-200s, which are now being used on flights to Russia's Far East and to several European destinations. It has also added two 737 Classics, all aimed to develop traffic and to ensure Stage 3 compliance in Europe.

Chief Executive: Olga Pleshakova
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Address: 113054 Moscow, Paveletskaya Square 2/1 (second floor)

Domodedovo Airlines

With Domodedovo's management now re-established, the airline saw a 43% percentage passenger growth in 2001, and is working to develop connections and new routes.

Chief executive: Alexander Rus
Tel/ Fax: (095) 323 8991, (095) 952 8651
Address: 142945 Moscow Region, Domodedovo Airport

East Line Airlines

The East Line Group was set up in 1995. The parent company secured a 75-year lease on Domodedovo Airport, and the profits earned by the airline carrying mainly cargo to the Far East, especially China, allowed the group to totally rebuild the airport and bring it up to high international standards. As a result of the rebuilding, transfers are coming from Moscow's other airports. Swiss, Air Malta and Croatian are the first international airlines to transfer at the airport. East Line has been taking new operators slowly, as operations allow.

East Line's resources have come almost exclusively from its cargo operations, but it has now begun to develop passenger services - figures started at about 70,000 in 1999, and in the first ten months of 2002, it carried over 230,000 passengers and over 25,000 tonnes of cargo. It has recently added an executive Tu-134 to begin serving business charters.

Chief Executive: Alexei Raevski
Tel/ Fax: (095) 795 3427
Address: Domodedovo Airport, Moscow Region 142945

Volga Dnepr Airlines

Breaking off relations with its UK marketing partner, HeavyLift, Volga Dnepr's cargo tonnages fell, but the company says that 2002 results have justified its decision and a remarkable resurgence has occurred. It expects that the steps it has taken, including the establishment of UK and US subsidiary companies, to restore traffic and increase profitability.

In 2001, it carried just 22,000 tonnes, some 145.7 million tonne kilometres, while its regional airline, operating a few Yak 40s at the request of its regional government to ensure connections to Moscow, carried just 21,682 passengers.

Work on the certification of its An-124-100 is continuing with the UK's Civil Aviation Authority. If successful, it plans to develop its UK subsidiary to set up a UK airline. In 2002, it became the first Russian airline to secure funding from a western bank (the International Finance Corporation, a subsidiary of the World Bank) for the purchase of a new Russian-built aircraft - its tenth An-124-100, due for delivery in 2003.

Chief Executive: Alexei I. Isaikin

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Address: 432062 Ulyanovsk, Karbyshev Street, 14

Ukraine

The Ukraine government has brought in a new policy to stimulate domestic air travel - airfares should be at the same level as those of rail services. This increased the numbers of people travelling by air. However, the government's suggestion that airports and fuel companies should reduce their charges to facilitate this does not seem to have been matched. Therefore, Ukrainian airlines have taken the obvious step of raising international fares to compensate for the loss of revenue.

The government also encouraged the national railways to set up an aircraft leasing company with the intent of funding locally built aircraft for Ukraine's airlines. This has resulted in three An-140s delivered to regional companies so far, and 2003 will see an additional 8 An-140 turboprops and several An-074TK-300 jets being added.

It will also offer these services to Russian carriers, and that a recent agreement between the two countries will allow Ukrainian aircraft to be imported into Russia without incurring taxes. So far, two Russian airlines have agreed to order the An-149.

Aerosvit

Carrying 0.32m passengers in 2001, and the same number in the first nine months of 2002, Aerosvit is clearly the number one airline in the Ukraine. In October, it took delivery of its first 767-300ER, and began to serve the Kiev-Bangkok route four days later. In April 2003, it plans to open services to New York and Toronto, two cities with sizeable Ukrainian populations. The government is continuing to work on plans to amalgamate the country's leading airlines, and some developments are expected in 2003. Aerosvit also plans to take at least three An -140s for domestic services.

Chief Executive: Gregory A. Gurtovoi

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By Paul Duffy

FREIGHTER VALUES (US$ millions)

	New	5 years old	10 years old	20 years old
A300F4-200				12.92
A300B4-600RF	67.47	52.62		
727-200F Adv				2.39
737-300QC		21.46	17.32	
747-200M				12.12
747-400M		97.83	68.67	
747-400F	148.48	112.02		
747-400ERF	157.02			
757-200PF		39.94	30.01	
767-300F		54.50		
DC-10-30C/F				16.13
MD-11C		55.15	44.05	
MD-11F		63.66	52.24	

Source: AVAC Note: As assessed at end Oct 2002, mid-range values for all types

FREIGHTER LEASE RATES (US$ 000s per month)

	New	5 years old	10 years old	20 years old
A300F4-200				154
A300B4-600RF	433	385		
727-200F Adv				51
737-300QC		172	153	
747-200M				166
747-400M		785	623	
747-400F	1,198	936		
747-400ERF	1,316			
757-200PF		286	251	
767-300F		426		
DC-10-30C/F				194
MD-11C		519	454	
MD-11F		616	543	

Source: AVAC Note: As assessed at end Oct 2002, mid-range values for all types

	Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Alaska											
Year 2000	**2,177**	**2,198**	**-20.6**	**-70**	**-0.9%**	**-3.2%**	**27,834**	**19,277**	**69.3%**	**13,512**	**9,940**
Jul-Sep 01	583.4	570.6	12.8	25.3	2.2%	4.3%	7,536	5,351	71.0%	3,741	10,826
Oct-Dec 01	462.2	558.6	-96.4	-36.4	-20.9%	-7.9%	6,622	4389	66.4%	3,025	10,500
Year 2001	**2,141**	**2,263**	**-121.8**	**-39.5**	**-5.7%**	**-1.8%**	**28,837**	**19,712**	**68.4%**	**13,668**	**10,742**
Jan-Mar 02	497	548	-51.4	-34.4	-10.3%	-6.9%	7,189	4,791	66.6%	3,193	
Apr-Jun 02	477	480	-2.2	-2.5	-0.5%	-0.5%	7,932	5,427	68.4%	3,616	10,222
Jul-Sep 02	620	597	24	11	3.9%	1.8%	8,380	5,911	70.5%	3,978	10,465
American											
Year 2000	**19,703**	**18,322**	**1,381**	**813**	**7.0%**	**4.1%**	**258,951**	**187,507**	**72.4%**	**86,239**	**99,610**
Jul-Sep 01	4,816	5,374	-558	-414	-11.6%	-8.6%	62,676	45,315	72.3%	20,123	127,200
Oct-Dec 01	3,804	4,952	-1,148	-798	-30.2%	-21.0%	54,907	35,580	64.8%		109,300
Year 2001	**18,963**	**20,823**	**-1,860**	**-1,762**	**-9.8%**	**-9.3%**	**161,030**	**176,143**	**69.4%**	**61,287**	**102,093**
Jan-Mar 02	4,136	4,865	-729	-575	-17.6%	-13.9%	64,515	44,766			
Apr-Jun 02	4,479	5,080	-601	-495	-13.4%	-11.1%	70,724	53,125	71.4%		100,100
Jul-Sep 02	4,494	5,815	-1,321	-924	-29.4%	-20.6%	73,899	53,236	72.0%		99,700
America West											
Year 2000	**2,344**	**2,357**	**-12,637**	**7,679**	**-539.1%**	**327.6%**	**43,580**	**30,741**	**70.5%**	**19,950**	**13,869**
Jul-Sep 01	491	590	-99	-32	-20.2%	-6.5%	10,774	7,973	74.0%	5,034	13,633
Oct-Dec 01	400	538	-138	-61	-34.5%	-15.3%	9,477	6,492	68.5%	4,144	
Year 2001	**2,066**	**2,380**	**-316**	**-148**	**-15.3%**	**-7.2%**	**42,709**	**30,696**	**71.9%**	**19,576**	**13,827**
Jan-Mar 02	460	583	-123	-358	-26.7%	-77.8%	9,780	6,859	70.1%	4,303	
Apr-Jun 02	533	534	-1	-15	-0.2%	-2.8%	11,024	8,351	75.8%	5,080	
Jul-Sep 02	510	552	-42	-32	-8.2%	-6.3%	11,504	8,619	74.9%		
Continental											
Year 2000	**9,899**	**9,170**	**729**	**342**	**7.4%**	**3.5%**	**134,718**	**100,283**	**74.4%**	**45,139**	**45,072**
Jul-Sep 01	2,223	2,136	87	3	3.9%	0.1%	35,395	26,086	73.7%	11,254	
Oct-Dec 01	1,738	1,895	-157	-149	-9.0%	-8.6%	29,321	20,554	70.1%	9,508	
Year 2001	**8,969**	**9,119**	**-150**	**-95**	**-1.7%**	**-1.1%**	**135,962**	**98,393**	**72.4%**	**44,238**	**45,166**
Jan-Mar 02	1,993	2,180	-187	-166	-9.4%	-8.3%	30,498	22,582	74.0%	10,057	
Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%		
Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581	
Delta											
Year 2000	**16,741**	**15,104**	**1,637**	**828**	**9.8%**	**4.9%**	**236,665**	**173,453**	**73.1%**	**105,591**	**79,584**
Jul-Sep 01	3,398	3,649	-251	-259	-7.4%	-7.6%	60,719	43,260	71.3%	26,441	83,500
Oct-Dec 01	2,863	3,457	-594	-734	-20.7%	-25.6%	51,460	32,798	63.7%		
Year 2001	**13,879**	**15,124**	**-1,245**	**-1,216**	**-9.0%**	**-8.8%**	**237,914**	**163,693**	**68.8%**	**104,943**	77,654
Jan-Mar 02	3,103	3,538	-435	-397	-14.0%	-12.8%	54,298	37,384	68.9%	24,618	
Apr-Jun 02	3,474	3,601	-127	-186	-3.7%	-5.4%	60,709	42,355	73.4%	27,427	75,700
Jul-Sep 02	3,420	3,805	-385	-326	-11.3%	-9.5%	59,287	44,037	74.3%	27,713	76,000
Northwest											
Year 2000	**11,240**	**10,671**	**569**	**256**	**5.1%**	**2.3%**	**171,789**	**127,298**	**76.6%**	**56,836**	**53,131**
Jul-Sep 01	2,594	2,749	-155	19	-6.0%	0.7%	41,871	31,753	75.8%		
Oct-Dec 01	1,985	2,426	-441	-216	-22.2%	-10.9%	33,985	23,620	69.5%		
Year 2001	**9,905**	**10,773**	**-868**	**-423**	**-8.8%**	**-4.3%**	**158,284**	**117,682**	**74.3%**	**54,056**	**50,309**
Jan-Mar 02	2,180	2,376	-196	-171	-9.0%	-7.8%	35,022	26,611	76.0%	11,899	
Apr-Jun 02	2,406	2,452	-46	-93	-1.9%	-3.9%	39,848	29,902	78.9%		46,260
Jul-Sep 02	2,564	2,556	8	-46	0.3%	-1.8%	40,321	31,787	78.8%	14,365	45,466
Southwest											
Year 2000	**5,650**	**4,628**	**1,021**	**603**	**18.1%**	**10.7%**	**96,463**	**67,961**	**70.5%**	**72,568**	**28,752**
Jul-Sep 01	1,335	1,242	93	151	7.0%	11.3%	26,217	18,121	69.1%	16,208	30,946
Oct-Dec 01	1,238	1,201	37	64	3.0%	5.2%	26,888	17,343	64.5%	14,996	31,580
Year 2001	**5,555**	**4,924**	**631**	**511**	**11.4%**	**9.2%**	**105,079**	**71,604**	**68.1%**	**64,447**	**31,014**
Jan-Mar 02	1,257	1,207	49	21	3.9%	1.7%	26,586	16,726	62.9%	14,463	
Apr-Jun 02	1,473	1,284	189	102	12.8%	6.9%	29,074	20,314	69.9%	16,772	33,149
Jul-Sep 02	1,391	1,300	91	75	6.5%	5.4%	28,342	19,180	67.7%	16,256	
United											
Year 2000	**19,351**	**18,685**	**666**	**96**	**3.4%**	**0.5%**	**282,276**	**204,188**	**72.3%**	**83,853**	**100,976**
Jul-Sep 01	4,107	4,819	-712	-542	-17.3%	-13.2%	69,233	50,610	73.1%	19,815	95,900
Oct-Dec 01	2,949	3,835	-886	-308	-30.0%	-10.4%	56,421	38,140	67.6%	15,450	79,300
Year 2001	**16,138**	**18,481**	**-2,343**	**-2,145**	**-14.5%**	**-13.3%**	**265,291**	**187,701**	**70.8%**	**75,457**	**96,142**
Jan-Mar 02	3,288	3,999	-711	-510	-21.6%	-15.5%	55,056	39,761	72.2%	15,361	
Apr-Jun 02	3,793	4,278	-485	-341	-12.8%	-9.0%	60,315	44,896	74.4%	17,501	79,800
Jul-Sep 02	3,737	4,383	-646	-889	-17.3%	-23.8%	64,147	48,335	75.4%	18,900	79,900
US Airways											
Year 2000	**9,268**	**9,322**	**-54**	**-269**	**-0.6%**	**-2.9%**	**106,999**	**75,358**	**70.4%**	**59,772**	**45,228**
Jul-Sep 01	1,989	2,739	-750	-766	-37.7%	-38.5%	27,609	19,619	71.1%	14,188	42,723
Oct-Dec 01	1,554	2,101	-547	-906	-35.2%	-58.3%	22,640	14,308	63.2%	11,151	35,232
Year 2001	**8,288**	**9,355**	**-1,067**	**-1,969**	**-12.9%**	**-23.8%**	**107,347**	**73,944**	**68.9%**	**56,114**	**43,846**
Jan-Mar 02	1,709	2,079	-370	-269	-21.7%	-15.7%	22,495	15,419	68.5%	11,825	
Apr-Jun 02	1,903	2,078	-175	-248	-9.2%	-13.0%	23,516	17,658	75.1%	13,000	
Jul-Sep 02	1,752	1,933	-181	-335	-10.3%	-19.1%	24,075	17,276	71.80%	11,994	33,302

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

	Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
Air France											
Year 2000/01	**11,148**	**10,746**	**402**	**382**	**3.6%**	**3.4%**	**119,562**	**93,355**	**78.1%**	**42,400**	**52,310**
Jul-Sep 01	2,959	2,895	64		2.2%		31,738	25,481	79.2%		
Oct-Dec 01	2,682	2,785	-103	-121	-3.8%	-4.5%	30,070	20,907	70.6%		
Jan-Mar 02	2,667	2,647	20	1	0.7%	0.0%	29,703	22,925	77.2%		
Year 2001/02	**11,234**	**11,017**	**217**	**141**	**1.9%**	**1.3%**	**123,777**	**94,828**	**76.6%**		
Apr-Jun 02	3,276	3,124	163	157	5.0%	4.8%	31,687	24,435	77.1%		
Jul-Sep 02	3,264	3,122	142	57	4.4%	1.7%	33,806	26,366	78.0%		
Alitalia											
Year 2000	**4,968**	**5,210**	**-242**	**-236**	**-4.9%**	**-4.8%**	**57,483**	**41,433**	**72.1%**	**26,700**	**23,478**
Jan-Jun 01	2,348	2,504	-156	-228	-6.6%	-9.7%	26,437	18,953	71.7%	12,565	24,023
Jul-Dec 01	2,397	2,503	-106	-590	-4.4%	-24.6%	24,944	17,423	69.8%	12,204	
Year 2001	**4,745**	**5,007**	**-262**	**-818**	-5.5%	-17.2%	**51,392**	**36,391**	**70.8%**	**24,737**	**23,667**
Jan-Jun 02	2,462	2,574	-63	-49	-2.6%	-2.0%			69.7%		21,366
BA											
Year 2000/01	**13,700**	**13,139**	**561**	**189**	**4.1%**	**1.4%**	**162,824**	**116,674**	**71.7%**	**44,462**	**62,844**
Jul-Sep 01	3,219	3,116	103	33	3.2%	1.0%	39,629	29,297	73.9%	11,306	59,902
Oct-Dec 01	2,616	2,882	-266	-205	-10.2%	-7.8%	35,449	23,106	65.2%	8,574	55,758
Jan-Mar 02	2,842	2,908	-66	-63	-2.3%	-2.2%	34,998	25,221	72.1%	8,831	
Year 2001/02	**12,138**	**12,298**	**-160**	**-207**	**-1.3%**	**-1.7%**	**151,046**	**106,270**	**70.4%**	**40,004**	
Apr-Jun 02	3,127	2,886	241	61	7.7%	2.0%	35,020	24,679	70.5%	9,665	52,926
Jul-Sep 02	3,323	2,931	392	240	11.8%	7.2%	35,608	27,301	76.7%	10,607	52,116
Iberia											
Apr-Jun 01	1,280	1,207	106	71	8.3%	5.5%	15,003	10,812	72.1%	7,179	
Jul-Sep 01	1,278	1,225	50	134	3.9%	10.5%	15,941	11,951	75.0%	7,780	
Oct-Dec 01	1,086	1,118	-143	-88	-13.2%	-8.1%	14,275	9,698	67.9%	6,265	
Year 2001	**4,240**	**4,236**	**4**	**45**	**0.1%**	**1.1%**	**59,014**	**41,297**	**70.8%**	**24,930**	
Jan-Mar 02	1,070	1,076	-9	-5	-0.8%	-0.5%	13,502	9,429	69.8%	5,916	
Apr-Jun 02	1,245	1,134	98	76	7.9%	6.1%	14,004	10,105	72.2%	6,726	
Jul-Sep 02	1,229	1,103	132	104	10.7%	8.5%	14,535	11,419	78.6%	6,624	
KLM											
Year 2000/01	**6,319**	**6,068**	**251**	**70**	**4.0%**	**1.1%**	**75,222**	**60,047**	**79.8%**	**16,100**	**30,253**
Jul-Sep 01	1,679	1,596	83	24	4.9%	1.4%	19,554	16,049	82.1%		28,911
Oct-Dec 01	1,291	1,358	-67	-82	-5.2%	-6.4%	17,030	12,483	73.3%		27,738
Jan-Mar 02	1,302	1,414	-112	-97	-8.6%	-7.5%	16,473	13,215	79.9%		
Year 20001/02	**5,933**	**6,018**	**-85**	**-141**	**-1.4%**	**-2.4%**	**72,228**	**56,947**	**78.7%**		**33,265**
Apr-Jun 02	1,639	1,599	40	11	2.4%	0.7%	18,041	14,326	79.4%		34,366
Jul-Sep 02	1,844	1,523	140	86	7.6%	4.7%	19,448	16,331	82.7%		34,931
Lufthansa											
Year 2000	**14,014**	**12,648**	**1,366**	**635**	**9.7%**	**4.5%**	**123,801**	**92,160**	**74.4%**	**47,000**	**69,523**
Jul-Sep 01	4,188	4,027	161	96	3.8%	2.3%	32,454	24,546	75.6%	12,692	83,447
Oct-Dec 01	3,437	3,674					28,293	18,854	67.4%	9,873	
Year 2001	**14,966**	**14,948**	**18**	**-530**	**0.1%**	**-3.5%**	**126,400**	**90,389**	**71.5%**	**45,710**	**87,975**
Jan-Mar 02	3,556	3,513	43	-165	1.2%	-4.6%	26,451	19,409	71.0%	9,700	
Apr-Jun 02	4,968	4,601	285	138	5.7%	2.8%	30,769	22,835		11,300	90,308
Jul-Sep 02	4,431	4,254	454	369	10.2%	8.3%	32,409	25,189	71.1%	12,067	90,704
SAS											
Year 2000	**5,185**	**4,853**	**332**	**233**	**6.4%**	**4.5%**	**33,782**	**22,647**	**67.0%**	**23,240**	**22,698**
Jul-Sep 01	1,199	1,220	-21	-20	-1.8%	-1.7%	9,629	6,498	67.5%	6,463	30,896
Oct-Dec 01	1,208	1,316	-108	-108	-8.9%	-8.9%	8,509	5,097	59.9%	5,300	
Year 2001	**4,984**	**5,093**	**-109**	**-103**	**-2.2%**	**-2.1%**	**35,521**	**22,956**	**64.6%**	**23,060**	**22,656**
Jan-Mar 02	1,392	1,534	-142	-133	-10.2%	-9.6%	8,228	5,229	63.1%	5,091	
Apr-Jun 02	1,965	1,608	242	106	12.3%	5.4%	8,773	6,240	71.1%	6,034	
Jul-Sep 02	1,821	1,587	233	56	12.8%	3.1%	8,701	6,281	70.2%	5,586	21,896
Ryanair											
Year 2000/01	**442**	**338**	**104**	**95**	**23.5%**	**21.5%**	**6,657**	**4,656**	**69.9%**	**7,000**	**1,476**
Jul-Sep 01	168	105	63	58	37.5%	34.5%	2,355		84.0%	2,900	
Oct-Dec 01	122	97	25	26	20.5%	21.3%	2,304		79.0%	2,700	
Jan-Mar 02	220	165	55	50	25.0%	22.7%	2,352				
Year 2001/02	**642**	**474**	**168**	**155**	**26.2%**	**24.1%**	**7,011**		**81.0%**	**11,900**	**1,547**
Apr-Jun 02	189	153	47	40	24.9%	21.2%	2,852		83.0%	3,540	
Jul-Sep 02	272	149	123	113	45.2%	41.5%	3,138			4,300	1,676
easyJet											
Oct 00-Mar 01	210	225	-15	-15	-7.1%	-7.1%	3,908		80.6%	3,200	
Apr-Sep 01	314	273	41	41	13.1%	13.1%				3,915	
Year 2000/01	**513**	**455**	**58**	**54**	**11.3%**	**10.5%**	**7,003**	**5,903**	**83.0%**	**7,115**	**1,632**
Oct-Mar 02	285	279	6	1	2.1%	0.4%	4,266		84.2%	4,300	
Apr-Sep 02	579	474	105	76	18.1%	13.1%	6,503			7,050	
Year 2001/02	**864**	**656**	**111**	**77**	**12.8%**	**8.9%**	**10,769**	**9,218**	**84.8%**	**11,350**	**3,100**

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

	Group revenue US$m	Group costs US$m	Group op. profit US$m	Group net profit US$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group employees
ANA											
Apr-Sep 00	5,228	4,793	495	359	9.5%	6.9%	47,586	31,753	66.7%	24,958	
Oct 00-Mar 01	5,376	5,186	190	-486	3.5%	-9.0%	46,278	29,168	63.0%	24,471	
Year 2000/01	**10,914**	**10,629**	**285**	**-137**	**2.6%**	**-1.3%**	**85,994**	**58,710**	**68.3%**	**43,700**	**14,303**
Apr-Sep 01	5,168	4,811	357	136	6.9%	2.6%	45,756	30,790	67.3%	25,876	
Oct 01-Mar 02											
Year 2001/02	**9,714**	**9,529**	**185**	**-76**	**1.9%**	**-0.8%**	**87,908**	**57,904**	**64.7%**	**49,306**	
Cathay Pacific											
Year 2000	**4,431**	**3,752**	**679**	**642**	**15.3%**	**14.5%**	**61,909**	**47,153**	**76.2%**	**11,860**	**14,293**
Jan-Jun 01	2,031	1,898	133	170	6.5%	8.4%	32,419	23,309	71.9%	5,936	
Jul-Dec 01	**1,871**	**1,897**	**-26**	**-86**	-1.4%	-4.6%	30,371	21,497	70.8%	5,378	
Year 2001	**3,902**	**3,795**	**107**	**84**	**2.7%**	**2.2%**	**62,790**	**44,792**	**71.3%**	**11,270**	**15,391**
Jan-Jun 02	1,989	1,753	235	181	11.8%	9.1%	29,537		78.1%		14,300
JAL											
Year 1999/00	**14,442**	**14,039**	**403**	**177**	**2.8%**	**1.2%**	**119,971**	**88,479**	**70.2%**	**37,200**	**18,974**
Year 2000/01	**13,740**	**13,106**	**634**	**331**	**4.6%**	**2.4%**	**129,435**	**95,264**	**73.6%**	**38,700**	**17,514**
Year 2001/02	**9,607**	**9,741**	**-135**	**-286**	**-1.4%**	**-3.0%**				**37,183**	
Korean Air											
Year 2000	**4,916**	**4,896**	**20**	**-409**	**0.4%**	**-8.3%**	**55,824**	**40,606**	**72.7%**	**22,070**	**16,000**
Year 2001	**4,309**	**4,468**	**-159**	**-448**	**-3.7%**	**-10.4%**					
Jan - Mar 02	1,113	1,060	54	23	4.9%	2.1%	13,409	9,799	73.1%	5,399	
Malaysian											
Year 1999/00	**2,148**	**2,120**	**28**	**-68**	**1.3%**	**-3.2%**	**48,158**	**34,930**	**71.3%**	**15,370**	**21,687**
Year 2000/01	**2,357**	**2,178**	**179**	**-351**	**7.6%**	**-14.9%**	**52,329**	**39,142**	**74.8%**	**16,590**	**21,518**
Qantas											
Year 1999/00	**5,710**	**5,162**	**548**	**324**	**9.6%**	**5.7%**	**85,033**	**64,149**	**75.4%**	**20,490**	**29,217**
Jul-Dec 00	2,745	2,492	224	142	8.2%	5.2%	46,060	35,451	77.0%	11,175	31,382
Year 2000/01	**5,473**	**5,099**	**374**	**223**	**6.8%**	**4.1%**	**92,943**	**70,540**	**75.9%**	**22,150**	**31,632**
Jul-Dec 01	3,050	2,904	125	84	4.1%	2.8%	48,484	37,262	76.9%	13,335	32,361
Year 2001/02	**6,133**	**5,785**	**348**	**232**	**5.7%**	**3.8%**	**95,944**	**75,134**	**78.3%**	**27,128**	**33,044**
Singapore											
Year 2000/01	**5,729**	**4,954**	**775**	**892**	**13.5%**	**15.6%**	**92,648**	**71,118**	**76.8%**	**15,000**	**14,254**
Apr-Sep 01	2,592	2,329	263	90	10.1%	3.5%	48,058	36,091	75.1%		
Oct 01-Mar 02	2,807	2,508	299		10.7%		46,501	33,904			
Year 2001/02	**5,399**	**4,837**	**562**	**395**	**10.4%**	**7.3%**	**94,559**	**69,995**	**74.0%**	**14,765**	
Apr 02-Sep 02	2,278	2,134	144	289	6.3%	12.7%	49,196	37,799	76.8%	7,775	14,252

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

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Airbus	Dec 24	China Airlines	12 A330-300s		2Q 04-07	plus 6 options
	Jan 08	Air Hong Kong	6 A300-600Fs		2004	plus 4 options

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

MoUs and LoIs

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74	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	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
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
Oct-02	17.6	11.8	66.9	16.2	13.0	80.4	11.2	9.2	82.7	38.6	31.0	80.3	59.1	44.8	75.8
Ann. chng	-5.7%	8.8%	8.9	0.5%	29.4%	18.0	0.3%	20.5%	13.9	-1.6%	17.1%	12.9	-2.7%	15.4%	11.9
Jan-Oct 02	165.5	111.2	67.2	151.8	122.5	80.7	107.3	87.6	81.6	373.3	298.6	79.9	567.3	429.3	75.7
Ann. chng	-11.6%	-6.3%	3.8	-17.7%	-11.4%	5.8	-6.6%	-2.0%	3.8	-11.1%	-7.1%	3.4	-11.4%	-7.0%	3.6

Source: AEA

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62	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	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	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
Nov - 02	78.5	52.5	67.0	12.2	8.9	72.9	8.6	6.5	75.0	7.0	4.5	64.5	27.9	19.9	71.4
Ann. chng	4.5%	2.5%	-1.3	6.9%	19.9%	7.9	7.5%	27.6%	11.8	16.5%	18.8%	1.2	9.4%	22.0%	7.4
Jan-Nov 02	906.4	640.4	70.7	146.6	116.0	79.1	94.1	76.0	80.7	77.6	52.2	67.3	318.4	244.2	76.7
Ann. chng	-5.1%	-3.8%	1.0	-9.1%	-4.2%	4.1	-15.8%	-7.1%	7.6	2.3%	0.9%	-0.9	-8.8%	-4.1%	3.8

Note: US Majors = Aloha, Alaska, American, Am. West, American Transair, Continental, Cont. Micronesia, Delta, Hawaiian JetBlue, MidWest Express, Northwest,Southwest, United and US Airways **Source**: ATA

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	3,390	70.8	4.9	7.2	5.6	6.0	5.3	6.5
***2001**							4,698	3,262	69.4					-1.1	-3.9
***2002**							4,607	3,294	71.1					-1.9	0.4
***2003**							4,903	3,584	73.1					6.4	9.4
***2004**							5,154	3,819	74.1					5.1	6.6

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, June 2002

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
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	368	188	556	291	101	392	948
2002 - Oct	381	145	526	278	110	388	914

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.*

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