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The SARS effect

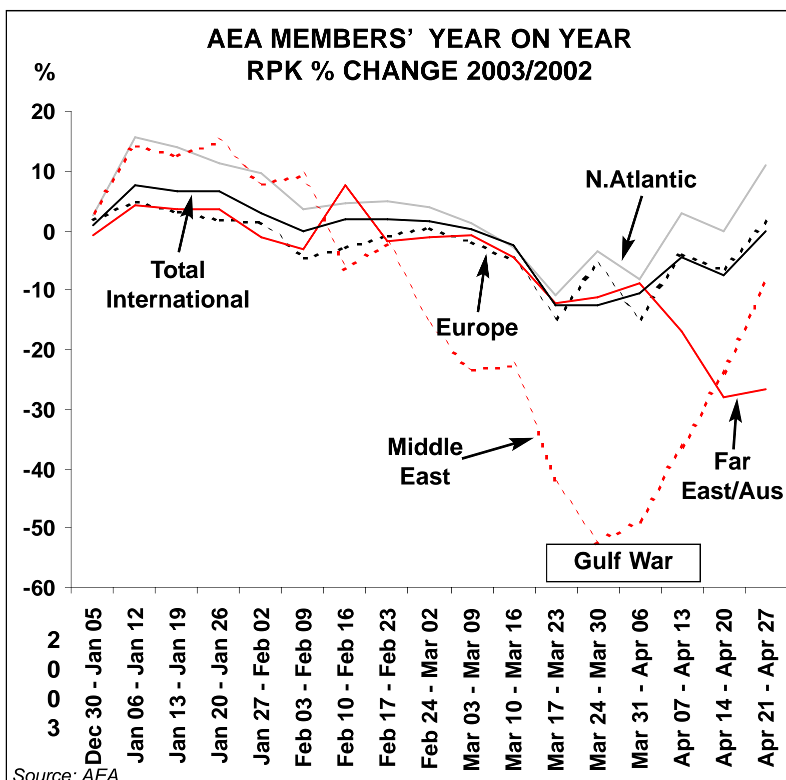
First, the good news. Traffic rebounded after the end of the, relatively short, Iraq war.

AEA monitoring shows growth rates of 11% on the North Atlantic in late April - tentative evidence for our contention (*Aviation Strategy*, April 2003) that the fundamental links between economic activity and air travel have not been demolished by September 11.

Now, the bad news, SARS is proving to be a biological (or psychological) weapon of mass destruction for the airline industry. Asian airlines are regularly reporting annual falls in traffic of 30-50%, while European and US carriers' traffic is down 20-30% on Far East and transpacific routes.

Probably the most dramatic illustration of the SARS effect is the traffic reported by the Japanese airlines for Golden Week, the traditional holiday at the end of April/beginning of May when it seems every single Japanese travels somewhere. JAL and ANA each faced a halving in international passengers, with their load factors plummeting to 41%.

Rumours have circulated that Cathay Pacific, losing HK$23m (US$3m) a day, was going to ground its entire fleet. These have subsequently been refuted by Cathay, but the projected losses for



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PUBLISHER

Aviation Economics
James House, LG,
22/24 Corsham Street
London N1 6DR
Tel: +44 (0) 20 7490 5215
Fax: +44 (0) 20 7490 5218
e-mail: info@aviationeconomics.com

the year look disturbing: according to Deutsche Bank, Cathay may make a net loss of between HK$4.7bn and HK$8.5bn this year compared to a pre-SARS prediction of a profit of HK$2.2bn. The one mitigating factor is the ability of some of the Asian majors to react flexibly to the crisis, quickly cutting routes and laying off employees. Singapore Airlines, for instance, was able to require 6,000 of its employees to take unpaid leave.

This means that the date of recovery for the global business has been postponed once more. Just last month we were predicting 3% increase in RPKs this year. Now we are reducing that to zero, after factoring in three months of full SARS impact on Asian domestic and international routes, Europe-Far East/Australasia and US Pacific operations.

The global surplus will then rise to just over 16% of supply, which is bad news for the lessors, good news for start-ups and expansionist LCCs and another serious blow to the manufacturers.

Asia/Pacific airlines dominate the orderbooks for widebodies, which are most affected by the SARs recession. They are to take well over half the widebodies scheduled for delivery between now and the end of 2004. The manufacturers until recently were comforting themselves with the thought that the Asian majors unlike their US counterparts were certain to accept the new aircraft on time - now substantial deferrals or cancellations, as signalled by Cathay and Korean, are inevitable.

SCHEDULED WIDEBODY DELIVERIES

	747	767	777	A300-600	A330	A340	2003-2004 Deliveries	Total backlog
ANA		8	15				23	29
JAL	5		16				21	26
Lufthansa					10	10	20	35
China Airlines	12				6	1	19	26
ILFC	2		8		7	2	19	83
UPS				19			19	64
Air France	2		9		3		14	31
KLM	3		10		1		14	19
Qantas	3				11		14	26
Singapore Airlines			6			7	13	31
EVA			2		10		12	17
Swiss						12	12	12
Asiana	2		6		3		11	14
Northwest					11		11	32
American		6	2				8	17
GECAS		1	4		3		8	16
Cathay Pacific			3		3	1	7	7
Air Hong Kong				6			6	6
Vietnam Airlines			6				6	6
Virgin Atlantic	1					5	6	13
Air Canada						5	5	5
China Eastern						5	5	5
Singapore Airlines Cargo	5						5	5
Others	2	2	11	0	12	3	30	78
Total	**37**	**17**	**98**	**25**	**80**	**51**	**308**	**603**

Source: ACAS

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Editor:
Keith McMullan
kgm@aviationeconomics.com

Subscription enquiries:
Julian Longin
jil@aviationeconomics.com

Tel: +44 (0)20 7490 5215

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(England)

Registered Office: James House, LG 22/24 Corsham St
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Asia's emerging low cost carriers

Three years ago, the suggestion that Low Cost Carriers (LCCs) would become a meaningful force in Asia's aviation market was given little credence. The perceived wisdom was that Asia was so different from Europe and the US that the LCC model would struggle. Since then, LCCs have made surprisingly fast gains in several of Asia's domestic markets. Some of those LCCs are now looking to expand onto international routes within Asia.

This raises three broad questions:
- If Asia is so different, how did LCCs succeed?
- Can LCCs transform their domestic market success to become meaningful players on Asia's intra-regional routes?
- If they can, what will it mean for incumbents such as Cathay Pacific, Qantas and Singapore Airlines?

How have LCCs succeeded if Asia is so different?

There were no notable LCCs in Asia until the entrance of Virgin Blue in late 2000. (Carriers such as Air New Zealand's low cost subsidiary, Freedom Air, existed three years ago, but were not meaningful players in the broader market; also Freedom Air's role was probably mostly about dissuading new entrants on the trans-Tasman routes.) It was thought that LCCs would be greatly hindered in their development by factors such as longer stage lengths, the need for international aviation rights, flexibility of the incumbent airlines and the lack of secondary airports. These characteristics have certainly played a role in shaping the development of LCCs, but they have not stopped them.

By focusing primarily on domestic markets, LCCs have avoided the problems associated with longer stage lengths and avoided the need for international aviation rights. Some LCCs are now looking to use their domestic market success as a foundation for regional expansion, while others have largely skipped the domestic market stage and launched directly onto regional routes.

LCCs - meaningful players on Asia's regional routes?

The leading LCCs in Asia are currently Virgin Blue, Air Asia and Australian Airlines. How these, and other LCCs develop, will be influenced by constraints that are peculiar to Asia, and which mean that the style and pace of development of LCCs will vary from one part of Asia to another.

In the short term, the main focus of the battle between LCCs and the incumbent carriers looks to be in Australasia region. Virgin Blue is already talking of expansion into the Pacific islands, trans-Tasman and New Zealand domestic markets. Meanwhile, Qantas and Air New Zealand are seeking regulatory approval for their proposed strategic alliance.

In the medium term (3-5 years), Southeast Asia (Singapore Airlines' backyard) appears more exposed than Northeast Asia (Cathay Pacific's backyard). Virgin Blue is talking of Southeast Asian expansion possibly being 18 months away, Malaysia-based Air Asia is already considering some regional routes and several other small car-

ASIAN LCC DEVELOPMENTS

- Virgin Blue has won 30% of the Australian domestic market (along the way contributing to the demise of Ansett Australia and forcing Qantas to change its domestic operations)
- Virgin Blue has announced plans to fly to Pacific Islands such as Fiji, with South East Asian destinations also being planned
- Air Asia has become an important player in the Malaysian domestic market, and is considering regional routes
- Air New Zealand has adopted a low cost strategy for its entire domestic operation and is reviewing its international operations
- Air Paradise in Bali has begun operating flights between Bali and Australia (and would have begun sooner but for the Bali bombing)
- Other airline start-ups or revamps have emerged, e.g. Cambodia based Mekong Airlines
- Qantas has established its own low-cost, international subsidiary, Australian Airlines

riers (e.g. Bali-based Air Paradise) have emerged domestically and regionally.

In the longer term, mainland China could well emerge as the base for one or more low cost carriers, operating both domestically and regionally.

LCC development in Asia

For LCCs, the key differences we see between Asia's regional markets and Europe and the US, are the need for aviation rights; longer stage lengths; lack of secondary airports and the flexibility of existing major carriers.

The bulk of the traffic and revenues in Asia are international, therefore competing for these revenues requires international landing rights. Adding strength to this regulatory barrier is the fact that many Asian governments - in Malaysia, Singapore, Indonesia and mainland China, for example - are also shareholders in the incumbent airlines.

However, some governments are more willing than others to let LCCs develop. For example, the Singaporean government holds stakes in Singapore Airlines and Changi airport, but the aviation agreements between Australia and Singapore still mean that Virgin Blue can access Changi airport and has beyond rights at Singapore.

In Malaysia, Air Asia has been able to develop its domestic business, despite competing with government-controlled MAS. As well as bringing affordable travel to Malaysia's population, Air Asia also plays a useful role by acting as a catalyst for the restructuring of MAS and a benchmark against which the success of the restructuring can be measured. Air Asia will probably be allowed to fly some regional routes, so long as this does not cause too much financial harm to MAS.

Longer stage lengths dilute some of the cost advantages that an LCC can gain over incumbent operators: fuel becomes a larger part of the total cost base as stage lengths increase, and this is a cost that all airlines suffer equally. Faster turn around times become less important and very long stage lengths require different aircraft types, thus negating the fleet homogeneity that LCCs typically seek.

Yet Virgin Blue (like Southwest and JetBlue) operates flights of 5.5 hours to 6.5 hours in length (in the process pushing up overall fleet utilisation). Assuming the use of 737s or A320s for regional routes by Asia's LCCs, much of Southeast Asia is accessible from parts of Australia, while routes within Southeast Asia and many routes between Southeast and Northeast Asia and North Asia/China are also possible.

This suggests that much of Singapore Airlines's backyard is potentially threatened by LCCs, whereas Cathay Pacific retains some degree of protection due to geographic distance. It is worth noting that Australian Airlines (100% owned by Qantas), with its fleet of 767s, already flies on some longer routes between Australia and North Asia. However, the threat posed by Australian Airlines is somewhat mitigated by its parentage. Qantas and/or its labour unions will be concerned to ensure that Australian Airlines does minimal harm to yields and labour rates for Qantas core operations.

Secondary airports are not a necessary ingredient for the success of an LCC. Virgin Blue, Air Asia and easyJet all operate using mainstream airports. That said, the emergence of secondary airports could speed further gains by LCCs in Asia by helping to lower costs and offering better terminal access. In New Zealand, an existing airport investor, Infratil New Zealand, and a local government have signed a MoU regarding the potential redevelopment of an airport close to the city of Auckland. In Malaysia, plans have been announced to significantly expand the cargo facilities at Senai Airport, which sits just on the Malaysian side of the border with Singapore, less than one hour's drive from Changi airport. While cargo is of little interest to LCCs, the expansion of a secondary airport, close to Changi does raise some interesting possibilities.

The development of LCCs in Europe and US has been helped by the inability of incumbent airlines to adapt to new customer demands or to take advantage of new technologies. A key part of this inflexibility has been strong labour unions and previously government ownership also played a significant role.

In Asia things are a little different. Singapore Airlines and Cathay Pacific, have a far greater ability to adjust their business models than their European and US counterparts. This was highlighted post-September 11, with both Singapore Airlines and Cathay Pacific being able to use lay-offs, long service leave and staff bonus schemes to adjust their cost bases.

Therefore, LCCs will find that competing head to head with some Asian carriers may be rather dif-

ficult. The LCCs will need to look at different market segments (for instance, Air Asia claims many of its passengers are first time flyers), new routes (Australian Airlines is focusing on routes that Qantas does not fly), or existing routes that make sense for an LCC on a stand alone basis, but that for the incumbent only make sense in terms of network integrity.

LCC COMPETITIVE THREAT

Routes	Within 737 or A320 range?	Airlines most exposed	LCCs operating *or planned* *
Australian domestic	Yes	Qantas	Virgin Blue
Australia - New Zealand	Yes	Qantas, Air New Zealand	*Virgin Blue*
Australia - Pacific Islands	Mostly	Qantas, Air New Zealand	*Virgin Blue*
Australia - S.E. Asia	Mostly	Qantas, Singapore Airlines	*Virgin Blue,* Air Paradise
S.E. Asia regional and domestic	Mostly	Singapore Airlines	Air Asia, Air Paradise
Australia - North Asia/China	No	Cathay Pacific	-

* Excludes Australian (100% owned by Qantas), Freedom Air (100% owned by Air New Zealand) and Silk Air (100% owned by Singapore Airlines).

The impact on Asia's network carriers?

The impact of LCCs in Asia's regional markets, will not be as rapid or dramatic as Virgin Blue's success in Australia. Nor will a single LCC be the sole source of new competition. Rather, multiple airlines, based in different countries, working under different sets of aviation agreements will nibble at different parts of the incumbents' networks.

If one assumes that LCCs will first target those routes which can be serviced using the 737 or A320 - then Singapore Airlines and Air New Zealand are the airlines most under threat, whereas Cathay retains some degree of protection.

In the near term, Air New Zealand is most at threat. Its key LCC threat is Virgin Blue. Geographically, the bulk of Air New Zealand's main markets are within range of Virgin Blue and the LCC already has plans to attack these markets. Regulatory barriers are not an issue for Virgin Blue because Australia and New Zealand are essentially a single aviation market. That said, for the proposed strategic alliance between Qantas and Air New Zealand, a cost of gaining regulatory approval might be the forced disposal of Air New Zealand's Freedom Air. The acquisition of Freedom Air could accelerate Virgin Blue's market share gains on trans-Tasman routes by up to 12 months.

In the medium term, Singapore Airlines is most at threat with multiple LCCs operating from different countries and nibbling away at different parts of its network. Air Asia, Virgin Blue and Air Paradise already operate within or plan to operate within Singapore Airlines' backyard. Geographically, much of its regional network is within range of a 737 or A320, and many of the tourist destinations within that network are favoured by LCCs. Regulatory barriers to the Singaporean market are also very low for Australian or New Zealand based airlines. For Qantas, LCC competition became a reality with the emergence of Virgin Blue in late 2000. This saw yields fall sharply in the Australian domestic market, helping bring about the collapse of Ansett Australia and forcing Qantas to review its cost base and product offering.

The competitive pressures on Qantas are ongoing. It has announced more flexible domestic fares; reducing restrictions such as minimum stay requirements and increasing the ability to make itinerary changes. Regionally, Qantas now faces the threat posed by Virgin Blue's plans for the Pacific Islands along with its ambitions for trans-Tasman and South East Asian routes. On a much smaller scale, Bali-based Air Paradise has commenced flights to/from Bali from Perth and Melbourne. The impact on Qantas from Air Paradise is small at this stage, but it does illustrate the potential for a range of small LCCs to attack different parts of an airline's network.

Cathay Pacific is less threatened in the medium term. Two factors give Cathay Pacific a degree of protection. Firstly, distance from Australia means that Hong Kong is out of range for a pure 737 operator. Secondly, Cathay enjoys a higher degree of regulatory protection than Singapore, e.g. Cathay's highly profitable short haul routes - Hong Kong-Taiwan and Hong Kong-Japan - are not threatened by existing open skies agreements. In the long term, Cathay does face the threat that a new competitor could emerge, the most likely source being from mainland China. However, that threat will take several years at least to develop.

By Kevin O'Connor in Hong Kong
email: kevino@post.com

BA's response to the LCCs

BA has taken the leading role in responding to the LCC threat, hardly surprising as it is the Euro-major most exposed to their expansion (the table below illustrates the dominance of LCCs in the delivery schedules over the next 18 months).

BA's strategy to counteract the LCC threat includes: rescheduling the network, including de-hubbing Gatwick; closing marginal or loss-making routes; basing fewer aircraft away from Heathrow; outsourcing; and lowering distribution costs by selling a greater percentage of tickets directly.

BA has changed its inventory management techniques in the short-haul market and copied the model used by the LCCs. (see *Aviation Strategy,* April 2003). Booking classes that close are never re-opened. Passengers are encouraged to book early, improving the airline's cash flow.

At present BA is still refining its offer to passengers. BA currently has three types of fare in the UK domestic market, which it describes as fully-flexible, semi-flexible and non-flexible. In Europe it continues to maintain a two-night stay rule if passengers want to access the cheapest fares. Peter Lewis, General Manager Short-Haul Pricing for BA, admitted at a recent Brussels Aviation Club meeting that BA's website was "still way behind that of easyJet and Ryanair, but becoming more user friendly".

Lewis described the semi-flexible fares as not working in their own right and observed that further simplification was required. One-way fares were not available at present on the website, but will be introduced. Also, change fees will be introduced.

SCHEDULED NARROWBODY DELIVERIES

	717	737	757	A318	A319	A320	A321	2003-04 Deliveries	Total backlog
Easyjet		11			56			67	131
Southwest		61						61	114
ILFC		10		3	17	10	16	56	298
CIT		10		4	6	25	5	50	59
GECAS		13		10	4	4	15	46	116
Northwest			7		22	8		37	37
JetBlue						36		36	112
Ryanair		32						32	120
Continental		24	3					27	67
Boullioun		5			5	11	3	24	33
Midwest	24							24	24
WestJet		22						22	23
Air France				15	1	3		19	19
Debis					7	7	5	19	30
Delta		17						17	61
SALE					2	13	1	16	23
Aeroflot					5	10		15	18
Malev		15						15	15
Air China		6			8			14	14
British Airways					2	8	4	14	21
Air New Zealand						13		13	15
ATA		11	2					13	13
China Southern		8			4			12	17
Alaska Airlines		11						11	11
China Eastern						11		11	18
Iberia					0	6	5	11	26
Virgin Blue		11						11	11
Others	2	58	5	6	43	67	36	217	398
Total	**26**	**325**	**17**	**38**	**182**	**232**	**90**	**910**	**1,844**

Source: ACAS

BA has worked hard through extensive advertising campaigns to persuade customers that it too provides low fares. But the increased visibility on the websites pose a danger. The cheapest economy return fares available on BA.com to Brussels and Frankfurt respectively are £34 and £44 return. These are clearly not fares that BA's cost structure can support. Where BA would make money is on the business class fares, which are respectively £440 and £532 return. Are such differentials sustainable?

US Majors: “third major shakeout since deregulation”

The US airline industry is undergoing what one major airline CEO recently described as the "third major shakeout since deregulation" (the previous ones were in 1982-83 and 1992-93). This time around, restructuring is in reaction to fundamental changes in the marketplace (the rise of LCCs, Internet bookings, etc) that are very likely to lead to a permanent reduction in revenue yields for the large network carriers.

All of the major airlines have been forced into serious cost-cutting mode since September 11. But only in the past month or so have we actually seen concrete results on the restructuring front - the type of events or actions that will lead to a more material and permanent reduction in cost levels.

First, US Airways emerged from Chapter 11 on March 31 with lower costs, a strengthened balance sheet and new capital. The airline achieved $1.9bn in aggregate annual cost savings, including $1bn from labour and $500m in reduced aircraft debt and lease expenses. Its domestic stage-length-adjusted unit cost is projected to fall to 10.5 cents per ASM from 12.2 cents in the first half of 2002. It also eliminated $2.8bn of its $8.4bn pre-Chapter 11 aircraft debt and lease obligations. Next, on April 25 American secured final approvals from its unions on wage and benefit concessions that will lead to $1.8bn of annual labour cost savings over five years. The deals were clinched literally on the courthouse steps as AMR's board had authorised a Chapter 11 filing in the event that the flight attendants (the last of three unions) did not approve their revised contract that day. Third, right at the end of April the last of United's unions finally ratified the longer-term concessionary contracts negotiated in Chapter 11 that will enable the airline to cut its labour costs by $2.56bn annually over the next six years.

These developments have significant industry implications. First of all, contrary to earlier speculation (and hopes in many quarters), the industry restructuring process will now not benefit from early Chapter 7 liquidations. This implies that the cost and capacity reductions by the solvent carriers may now have to be sharper.

Second, American has now set the standard for labour cost reductions outside of bankruptcy - a matter of keen interest particularly to airlines like Delta, Northwest and Continental.

Third, American's cost cuts have illustrated something that the Chapter 11 carriers' actions already suggested, namely that the lion's share of the cost savings will come from labour. It seems that the biggest chunk of the lease and other aircraft ownership cost reductions at UAL and US Airways (though painful for the lessors and debt holders concerned) came from aircraft that were rejected as part of the downsizing process - something that would not interest the solvent carriers.

But will United's and American's cost cuts be enough to set them on a financially sound longer-term footing? What kind of a potential competitive threat do they pose for Delta, Northwest and Continental? And how are the solvent network carriers planning to respond?

United

The earliest that United could emerge from Chapter 11 is mid-2004, though the restructuring process is likely to take longer. There are many important things still to be sorted out, including the business plan.

Nevertheless, securing the labour concessions was a milestone in the restructuring effort. The new contracts, which took effect on May 1 as earlier temporary pay cuts imposed by the bankruptcy court expired, will help United make the most of the gradual economic recovery and the peak summer season.

In addition to pay reductions, which range between 9% (flight attendants) and 30% (pilots) for the first year, the new contracts provide for what the airline has described as "significant" work-rule changes, as well as reduced pensions and benefits. Significantly, the deals permit a low-cost airline subsidiary and substantial expansion of regional jet flying.

The unions released statements to the effect

that they recognised the need to take immediate action to ensure United's survival. Getting consensus agreements should help avoid labour strife, though the unions did not have much choice. Had they not ratified the contracts, United would have simply asked the bankruptcy judge to impose possibly even harsher terms. Getting the concessions was a precondition to continued support from the DIP-lenders.

Otherwise, United is attempting to secure about $500m of annual debt and lease reductions while in Chapter 11 - proportionally less than US Airways achieved.

American

American got the labour cost savings it believes it needs, but that was after weeks of hovering close to Chapter 11 and a corporate drama that showed its leadership in very unflattering light. After already ratifying their concessions between late March and mid-April, the unions were angered by the company's failure to disclose retention bonuses and pension protections granted to senior executives in 2002 when the voting took place. The issue was resolved after Don Carty resigned as chairman and CEO and the labour deals were sweetened. The concessions will now run over five years (rather than six) and employees will get better potential bonuses and incentive payments.

Under the new contracts, which became effective on May 1, American's workers took immediate 16-23% pay cuts and agreed to benefit reductions and work rule changes that will be phased in over time. More than 7,000 jobs are likely to be eliminated as a direct result of the new contracts. In return, employees will get stock options. Of the $1.8bn in savings, wage cuts and benefit reductions account for $1bn and work rule changes $800m. In total, pilots are contributing $600m, flight attendants $340m, TWU-represented workers $620m, and non-union employees and management $180m.

UBS Warburg analyst Sam Buttrick observed in mid-April that, from labour's point of view, United's and US Airways' new contracts were clearly worse than American's. While the deals are similar in terms of block hour pay, American's are "superior for labour in every other important respect, including work rules, benefits, pensions and profit sharing". (American earlier believed that it would have needed to find $500m of additional annual labour cost savings on top of the $1.8bn to satisfy DIP lenders, had it ended up in Chapter 11.) The labour cost cuts are part of a total of $4bn of annual cost reductions targeted by American. The company has identified $2bn-plus savings from scheduling improvements (the hub de-peaking project), fleet simplification and suchlike.

American is asking suppliers, lessors and private creditors to contribute the balance of up to $200m annual concessions, which is substantially less than US Airways' and United's debt and lease cost reductions in Chapter 11. American deferred payments on debt due in early April but paid the amounts within grace periods, and it is not expected to try to renegotiate any public debt.

The consensus among analysts is that the $4bn planned savings will significantly improve American's cost structure and longer-term survival prospects. AMR reported a disastrous $1bn net loss for the first quarter, almost double the year-earlier loss before an accounting charge. Operating loss for the latest period was $869m, following losses of $2.5bn and $3.3bn in 2001 and 2002 respectively.

S&P's Philip Baggaley calculated that the cost savings would have reduced AMR's 2002 pre-tax expenses by 15% (taking into account the fact that last year's results already included $900m of the $4bn savings). However, even after the cuts are fully implemented, American's unit costs will still be higher than Continental's. In addition to the immediate wage cost reductions, $400-500m of government aid expected in the current quarter and improved cash flow in the summer will help the airline pull through. At the end of April, Blaylock analyst Ray Neidl rated the probability of a Chapter 11 filing by American this year at just 20%, while Merrill Lynch's Mike Linenberg put it at 50%.

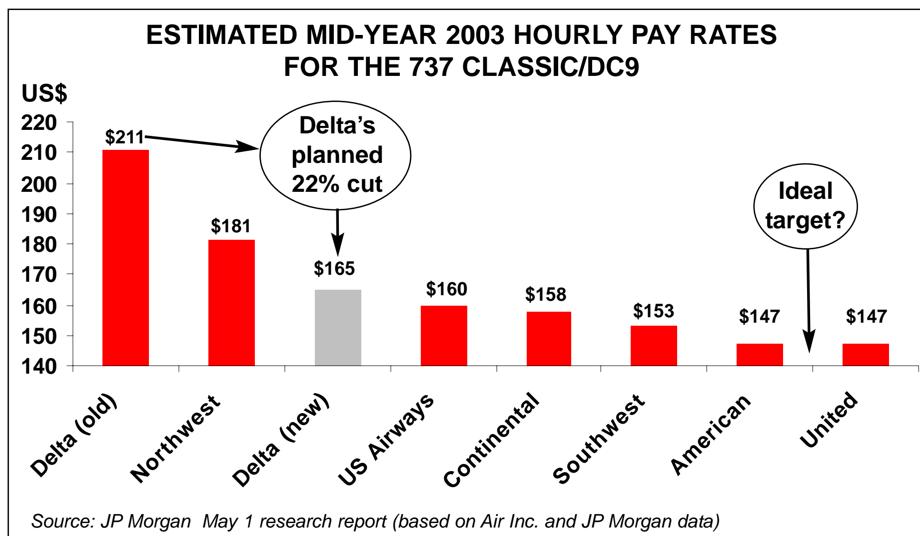
However, liquidity remains constrained and there are potential covenant issues arising at the end of June that, in the worst-case scenario, would require AMR to pay off its fully drawn $834m bank credit facility. In the longer term, there will also be the challenge of dealing with a $22bn burden of debt and leases.

Delta

Of the other large network carriers, Delta is

probably under the greatest pressure to take action on the labour front, because its pilot costs are now totally out of line with competitors'. The current contract was negotiated just before the industry crisis in May 2001 and after United's previous industry-leading deal, with the result that Delta's pilot pay was previously slightly ahead of United's and now it is 30% higher than United's.

Delta responded immediately to the latest developments by presenting proposals to its pilot union to cut hourly wages by 23% and cancel scheduled pay increases this year and in 2004. The company wanted the pay cuts and various changes in work rules and benefits to take effect immediately (May 1). It is also asking for flexibility to open the entire pilot contract for negotiation in the autumn of 2004 or earlier, depending on its financial condition (the contract becomes amendable in May 2005).



Source: JP Morgan May 1 research report (based on Air Inc. and JP Morgan data)

Of course, Delta has been in dialogue with the pilots (its only unionised group) since early February, when it first requested changes to the contract. The pilots rejected the initial request but have since then been co-operative. The union expects to complete its analysis of Delta's financial information by May 5, and its response to the latest proposals will depend on those findings.

It will be interesting to see how the pilots respond because, unlike American, Delta is nowhere near Chapter 11. CEO Leo Mullin said at the first-quarter earnings call that he was counting on "everyone at Delta appreciating the fact that we are not having this kind of conversation on the edge of bankruptcy". He also made the point that if the issues are not resolved "it will just take us longer to get there".

However, in a May 1 research note, JP Morgan analyst Jamie Baker suggested that a favourable reaction from the pilots was likely for the simple reason that "it could have and should have been a lot worse". Baker is unimpressed because, by his calculations, the resulting pay rates would still be 12.5% higher than UAL's and 22% above AMR's year-one rates. In other words, after also taking into account Northwest's proposed pay reductions, the cuts at Delta would leave its pilots the highest-paid in the industry. (Baker did note that it was not yet clear if the new deals included significant work-rule improvements.)

Although Delta posted a heavy $466m net loss for the first quarter, representing a higher loss margin than those at Continental and Northwest, its balance sheet is among the strongest in the industry. Cash reserves were an adequate $2.5bn at the end of March - and relatively unchanged from year-end as Delta managed to complete a $350m privately placed EETC in January.

Delta's cost cutting has so far focused on a broad-based plan to save $1.5-2bn or reduce non-fuel unit costs by 15% by the end of 2005. Low-cost subsidiary Song, which was launched in April and is achieving 22% lower unit costs over mainline 757s, is a key part of the plan. The measures also include continued fleet standardisation and reducing the size of the Dallas hub.

Northwest

Northwest has accomplished impressive cost cuts over the past two years, reflecting the management's belief that revenues will not recover to historical levels. After the latest cost adjustments by competitors, the airline is determined to secure labour concessions and renegotiate leases and vendor contracts this year.

Northwest is seeking $950m of annual labour cost savings over six years from July 1. Under proposals presented to all seven unions in recent months, the pilots would take a 17.5% pay reduction, mechanics 16.7% and flight attendants

9.8%, and there would be benefit reductions across the board. Salaried employees will take 5-15% cuts in pay and benefits.

In contrast to Delta's strategy, Northwest has used the threat of Chapter 11 to persuade its unions to take the matter seriously, even though its financial position is as strong as Delta's - a strategy that may not help labour relations, which have historically been difficult. However, rather confusingly, top Northwest executives have stressed that the company can afford to give the negotiating process time, given its adequate liquidity position. It had an ample $2.34bn in cash at the end of March, including $2.15bn unrestricted cash.

While the initial response from the flight attendants has not been encouraging, Northwest's pilots have adopted a pragmatic stance. ALPA recently announced its formal aims for the negotiations, namely to ensure Northwest's long-term viability, sustained future growth, job creation for employees and ability to obtain long-term financing. The pilots have commissioned independent studies of Northwest's finances and are working closely with the other employee groups.

Given its relative lack of negotiating leverage, the end result at Northwest will probably be a compromise. Like their counterparts at other airlines, the unions are likely to ask for stock options, meaningful profit sharing and job security. The company has tried to keep the concessions separate from contract issues, but it may not be possible with the pilots because their contract becomes amendable this September and talks were due to begin in July anyway.

The debacle at American over executive bonuses and pension protection has prompted unions at other airlines to take a close look at such issues before agreeing to concessions. After an unusually stormy annual meeting, Northwest's CEO Richard Anderson assured employees in a recorded message that the airline's top executives had not received special perks. In any case, three union representatives sit on Northwest's board, taking part in discussions about executive compensation and pensions.

Continental

Of the large network carriers, Continental is probably the least threatened by competitors' cost reductions because it already has the lowest unit costs (9.22 cents per ASM in 2002). Although it has closed the gap in terms of pay rates in recent years, it has retained a significant labour productivity advantage over the other large majors.

At the company's first-quarter earnings conference call, CEO Gordon Bethune said that he had not seen any productivity rates close to Continental's. He also pointed out that Continental enjoys a unit revenue premium because of its high-quality product and reliability.

Still, Continental must be concerned to see where the new benchmarks will be. Before the AMR and UAL deals were ratified, pilot contract talks at the Houston had been in a 90-day recess "waiting until the smoke clears". Also, in recognition of current industry conditions, a new four-year contract with the mechanics includes a provision to re-open talks regarding wages, pensions and health insurance in January 2004.

In the meantime, Continental has continued to attack costs in other areas. Cost cuts and revenue enhancements implemented since mid-2002 are expected to improve this year's pre-tax results by almost $400m. In late March the airline announced a target of $500m additional cost cuts by 2004, of which $100m could be achieved this year. Those savings will mainly come from lower distribution, ticketing and airport costs. The company is also renegotiating contracts with key suppliers and cutting its workforce by another 1,200 positions by year-end.

Over the past 18 months, Continental has consistently reported narrower quarterly losses than the other large network carriers - the latest result was a net loss of $221m in the first quarter, up from a loss of $166m a year earlier. However, because of its relatively weak cash position and lack of credit facilities and unencumbered assets, it could be in a more vulnerable position than, say, Delta or Northwest if industry conditions take a turn for the worse.

At this point Continental is still determined to stick to its fleet renewal plan and resume taking new Boeing aircraft in October, with the help of manufacturer backstop financing if necessary. This is in contrast with other large network carriers, many of which have deferred all new aircraft deliveries until 2005.

By Heini Nuutinen in New York
email: HNuutinen@compuserve.com

Austrian: Europe's ideal niche airline?

Austrian Airlines Group (AAG) - comprising Austrian Airlines, Tyrolean Airways and Lauda Air - recorded impressive financial results in 2002 as its turnaround plan began to pay dividends. Has AAG cemented its place in Europe's aviation industry as a niche carrier, or are there still potential challenges to its long-term viability?

Austrian Airlines is a relatively young European carrier, founded in 1957. It faced major problems in the early 1990s and racked up a substantial loss in 1993. Yet under the management of joint presidents Herbert Bammer and Mario Rehulka, AAG gradually improved its performance through the 1990s based on three core strategies: cost-cutting, investing in potential domestic competitors and developing Vienna as an east-west hub (for more on AAG in the 1990s, see *Aviation Strategy*, August 1999).

At the end of the 1990s, the key challenge the group faced was deciding which global alliance to join following the collapse of its Atlantic Excellence alliance with Delta, Swissair and Sabena and the Qualiflyer alliance with Swissair and Sabena. AAG offered potential alliance suitors its Vienna hub - a major gateway between east and west Europe - but in truth AAG needed the insurance of being part of a global alliance far more than any alliance needed AAG.

At the time there was plenty of speculation as to which grouping AAG would join, but in the end - and somewhat surprisingly, given that oneworld was seen by many as being the most likely link-up - AAG joined Star in March 2000. The benefit of joining such a global alliance has been immediate. Revenue from ticket sales by Star partners rose by 22% in 2002 to €280m, and AAG is aiming for around €470m in interline revenue by 2006.

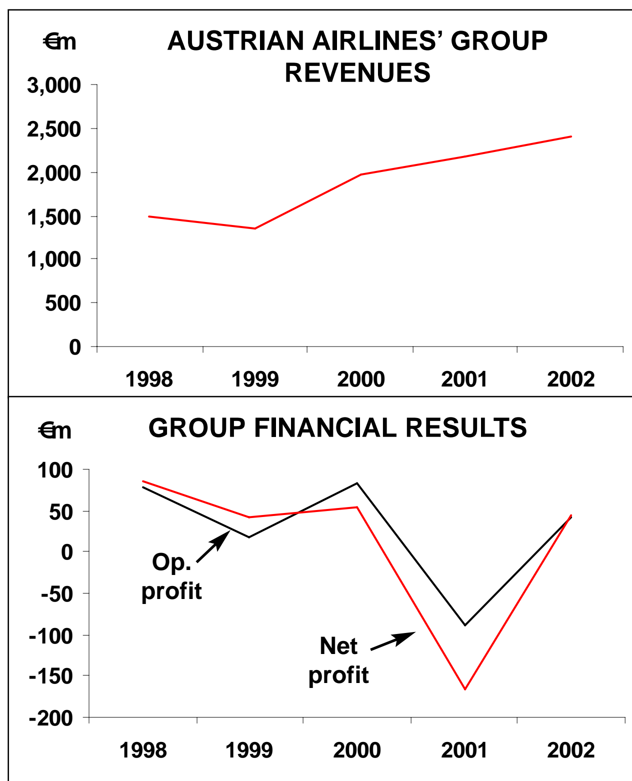
September 11 …

Yet as soon as the future appeared relatively secure for AAG, along came September 11. As bad as this was for AAG, however, the group had already started running into weakening demand - from the second quarter of 2001 in fact. And with just 10.7% of AAG's scheduled revenue coming from the North America segment in 2001 (falling to 8% in 2002), in actual fact AAG was far less exposed to the effects of September 11 than many of its European rivals.

What September 11 did do was to reveal the underlying strategic vulnerability at AAG - vulnerability that existed despite all the good work done by Bammer and Rehulka in the 1990s. According to the company, September 11 "served to reveal the fundamental weakness of AAG: too high a cost base, yields too low in relation to these costs and a capacity utilisation below the industry average". A horrendous set of fourth quarter results led to an operating loss of €89m and a net loss of €165m in 2001 (see chart, page 12).

The substantial worsening of AAG's position in 2001 led to the unexpected early departure of Bammer and Rehulka (they had previously planned to leave in June 2003), replaced in October 2001 by former SAS vice president Vagn Sorensen in the position of AAG CEO. Sorensen came to AAG with a slightly blemished past - he left SAS after the European Commission imposed a large fine following the airline's involvement in an anti-competitive pact with Maersk Air. Yet Sorensen's appointment was an ideal opportunity to tackle problems afresh, and after a rapid assessment of AAG's situation he set about implementing major changes at the end of 2001. Among the measures introduced were:

- A reduction in staff. AAG had 8,270 employees at August 2001, but by the end of 2002 this had been reduced by 1,000, largely achieved through voluntary redundancy



and early retirement.

• A one-year agreement with unions to cut employee costs, including the suspension of a previously agreed salary increase, the implementation of a voluntary salary reduction and a cut in working hours. This reduced salary costs by a one-off €20m in 2002.

• A refocusing of group subsidiaries. Austrian Airlines now concentrates on scheduled operations, Lauda Air on charter services, and Tyrolean Airways (which now incorporates Rheintalflug, and which may be renamed Austrian Express) on regional routes.

• A reduction in aircraft capacity. AAG sold four aircraft in 2002, leased out six and took another six out of service.

• An overhaul of the route network. Now, long-haul destinations in Asia and North America are either substantial point-to-point destinations, niche destinations with little competition, or Star partners hubs (e.g. Washington or Tokyo). Short- and medium-haul routes are either profitable major routes to/from Austria or part of AAG's east and central European network. AAG is aiming to become "market leader" on 12 of the 15 busiest routes to/from Austria, and is currently number one on seven of them.

• The setting of specific financial and operational goals on which AAG can measure improvement, such as an increase in the equity ratio from 13% to 30% by 2006 and a 10% reduction in unit costs by 2006 (unit costs have already fallen by 2.9% in 2002).

The restructuring appears to be working. AAG posted an EBIT of €41.4m and net profit of €43.2m in 2002, way above its own target of break-even on EBIT in 2002. AAG's scheduled RPKs actually fell by 4.7% in 2002 (due to cutbacks after September 11), but this was swamped by a 48% increase in charter's RPKs so that overall RPKs increased by 6.3%. Scheduled capacity on long-haul has been eased back in favour of higher-yielding short- and medium-haul routes, and that has fed through to the bottom line.

Sorensen has kept the restructuring pressure on following Gulf War II, with further cost trimming, closer co-operation within Star and greater fleet harmonisation.

The butterfly fleet

AAG's fleet (see table, opposite) contains such a wide variety of types that some critics call it the Schmetterlingsammlung, or "butterfly collection". AAG has been attempting to rationalise for some time, and Lauda Air's 777s have been the first type on the hit list. Yet Lauda Air's short-haul fleet is based on the 737 while over at Austrian Airlines the short-haul aircraft are mostly A320 family. To replace MD-80s Austrian Airlines has seven A319s on order, although originally these were A320 orders placed back in 1998. The A320s were scheduled for delivery by mid-2003 but the order was postponed due to September 11. In August 2003, AAG announced it was converting the order to smaller 126-seat A319s, which will start arriving in 2004, allowing the group to offer extra frequencies, but with smaller capacity, on selected routes. However, Tyrolean Airways still has a complete hotchpotch of aircraft that have yet to be sorted out, and the situation not helped by the addition of

three ERJ-145s inherited in January 2003 when it absorbed regional carrier Rheintalflug.

In January 2003 an order for a 777 was converted to three 737-800s, but a measure of AAG's cautiousness in terms of capacity is given by its estimate that the total fleet will grow to just 99 aircraft by 2006, compared with 95 today. AAG also intends to increase the flexibility of its capacity through greater use of operating leases.

First quarter 2003 financials are due to be released on May 6, although traffic statistics show that in January-March of 2003 total AAG ASKs were 18.6% up on the same period in 2002 (when capacity had been reduced after September 11) and RPKs 15.6% up, with a 1.7% drop in load factor to 67.2%. In reality, AAG has reduced ongoing capacity by 7% during January-April 2003 in response to Gulf War II, so a more telling measure given the circumstances is passengers carried, which fell 0.1% to 1.7m in the first quarter of 2003.

AAG had predicted net profits of €45m for 2003, but now says it will not meet that target due to events in the Middle East, even despite new 2003 measures such as a hiring freeze and reduction in investments. In early April AAG announced it was targeting another €60m cut in costs through 2003 in order to offset the effects of Gulf War II. Four aircraft were temporarily grounded (15 were grounded after September 11), which AAG claims will account for a third of the target. Other measures include job cuts of around 150, although it is still in talks with unions about this, and there is a danger that AAG may be pushing the unions too far. At the end of 2002 AAG served one year's notice on Austrian Airlines' pilots that it was withdrawing Clause 33 - a guarantee that Austrian Airlines would operate at least 43% of AAG's capacity. In addition AAG wants to substantially cut Austrian Airlines' pilot salaries, which are twice as high as pilots at the other two subsidiaries according to management. Not surprisingly, Austrian Airlines' 500 pilots and 1,350 cabin attendants have not taken kindly to these moves, and in January 2003 they voted to take industrial action if current talks with management fail to resolve the matter.

AUSTRIAN AIRLINES' GROUP FLEET

	Fleet	Orders (Options)
Austrian Airlines		
A319	1	6
A320	8	
A321	6	
A330	4	
A340	4	
737-800		3
MD-80	9	
F70	4	
Total	**36**	**9**
Lauda Air		
737-3/400	2	
737-6/7/800	7	1 (4)
767-300ER	4	
777-200ER	3	
CRJ100LR	3	
Total	**19**	**1 (4)**
Tyrolean Airways		
Dash 8	18	
CRJ200LR	13	3
ERJ-145	3	1 (3)
F70	6	
Total	**40**	**4 (3)**
Group total	**95**	**14 (7)**

A clash with unions in 2003 is not something that management (nor anyone else) wants, but this may be inevitable given that AAG wants to concentrate capacity growth at the lower cost Lauda Air and Tyrolean Airways.

Competitive threats

But union unrest is not the greatest danger facing AAG. That honour goes to the increasing threats to AAG's only - and therefore critical - strategic advantages in Europe: its grip on the Austrian market and its Vienna hub, built up as an east/west Europe gateway.

Ironically, these threats came about thanks to AAG itself. In July 2002 the European Commission ruled that as a condition of its approval of AAG joining Star, competition must be allowed into the Austrian and German markets, which otherwise would be dominated by Star carriers. AAG and Lufthansa complained that the conditions were harsh (but what did they expect given the grip Star would have in the

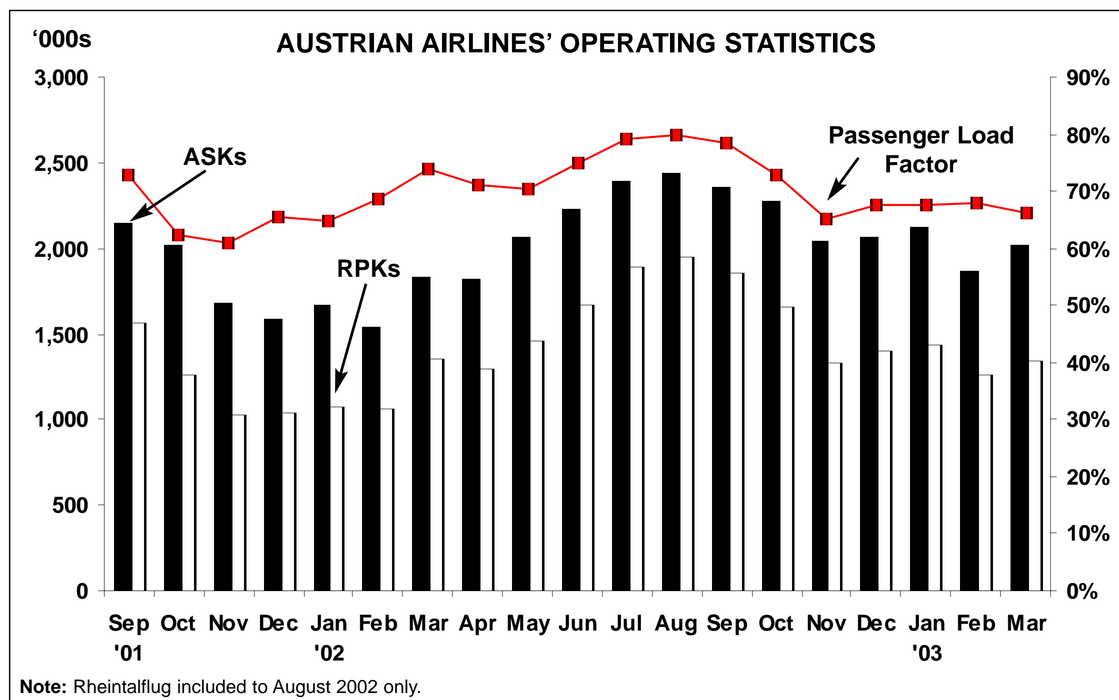
region?)

These conditions included restrictions on price-cutting on routes between Germany and Austria, a "request" to the relevant domestic authorities that eastern European airlines should be granted seventh freedom rights, a two-year ban on increasing frequencies on any route on which a competitor enters, and a requirement that Lufthansa and AAG give up 40% of their slots on routes between the two countries. The results have been encouraging (from a competition point of view, not from AAG's) and new entrants include Adria Airways, Air Alps and Styrian Spirit, the latter a Graz-based start up that has just launched and will operate several routes between Germany and Austria in the summer of 2003 with CRJ200s. Another potential start-up, Fairline, is planning to operate two turboprops out of Graz on "new routes".

Vienna is already served by germanwings, flying from Cologne/Bonn (although, being part-owned by Lufthansa, it cannot be considered a threat), as well as Air Berlin. Ryanair serves Salzburg, Graz and Klagenfurt, while Aero Lloyd also operates to Vienna and is reported to be considering basing an operation there (to be called Aero Lloyd Austria), to serve charter destinations outside the EU. This airline should start operations in time for the summer 2003 season and would serve up to 20 destinations.

AAG management insists that opening up routes to greater competition is a tough price to pay for the Star approval and AAG will retain its leading position in the Austrian market. The alternative scenario - that AAG joined a different global alliance - would have precluded the opening up of new competition in the short-term, but AAG would have been faced by the far greater problem of having to compete with Lufthansa and its Munich hub. Bearing this in mind, the new entrants should be seen by AAG as a minor irritation and a price worth paying for linking up with Lufthansa and Star.

A greater threat to AAG comes not from new airline entrants on the odd route or two, but from the potential development of a rival east-west hub, which would eat into the 23% of AAG revenue in 2002 that came from eastern, central (excluding Austria) and southern Europe (the latter is not separated out in AAG's accounts). Vienna is certainly an interesting airport to have as an east-west hub. AAG has a stranglehold there - AAG's own estimates are that its six-waves of flights at the airport have given it a 66% market share, which it aims to increase to



Note: Rheintalflug included to August 2002 only.

70% by 2006. Transfer passengers as a proportion of total passengers served at Vienna has risen from 19.7% in 1996 to 34.9% in 2002. Yet Vienna is certainly not a low-cost facility - particularly when compared against alternatives not so far away in eastern Europe.

Both Bratislava and Budapest, for example, are much lower cost airports. Perhaps in response to speculation that other airlines are already looking at establishing an east-west hub at these locations, Vagn Sorensen has said that: "If we plan to start our own low-cost airline, I want to do this in Bratislava." Building an operation at Bratislava, just 50km away from Vienna, may look attractive to AAG as a defensive move given impending Slovakian membership of the EU, which will inevitably attract interest from other EU airlines, and the fact that Slovakia only has two or three tiny scheduled airlines at present. The latest is SkyEurope Airlines, which launched in February 2002 and is half-owned by Spain's SwiftAir. SkyEurope operates to seven destinations (including Berlin, Munich and Milan) with three Emb-120s.

Currently AAG serves more than 30 central and east European destinations - more than any other European airline - although they are believed to be of mixed profitability. The most profitable routes are estimated to be to Bucharest, Kiev and Sofia, closely followed by Tirana and Belgrade. With LOT scheduled to join Star in October 2003 (it has now ended its alliance with British Airways), the Star grip on eastern Europe seems stronger than ever, but the last development it would want is anyone else encroaching into what is seen as AAG territory.

Time to sort out the balance sheet

So what does the future hold for AAG? Operationally, as long as AAG can meet the threat of new competitors out of Austria and keeps an eye on any hub development at Bratislava, the challenges to such a well-run niche player that is protected by membership of a global alliance should not be great. The greatest danger to AAG is financial: its long-term debt at the end of 2002 stood at €2.4bn - still too large for a company of AAG's size. Net gearing is a disturbing 290%.

AAG's shareholders will certainly be keeping a close eye on the finances. Currently the Republic of Austria (via state holding company OIAG) owns 39.7% of AAG, with a syndicate of Austrian institutional investors owning 10.6%. In July 2002 AAG bought 5% of its shares from Credit Suisse First Boston for its employee share scheme, leaving CSFB with a 5.15% shareholding - the remaining part of the AAG equity it acquired from Swissair in 2001. Air France still has its 1.5% share, with the rest on free float on the Vienna stock exchange.

These shareholders have seen the share price fall from above €30 in 1998 - when it posted its best net result in its history - to just over €6 in late April 2003, and dividends are suspended at the moment. With the turnaround strategy under implementation, investors will be looking for debt to be reduced and then a return on their investment sometime soon.

AIRCRAFT AND ASSET VALUATIONS
Contact Paul Leighton at AVAC (Aircraft Value Analysis Company)
• Website: www.aircraftvalues.net
• Email: pleighton@aircraftvalues.net
• Tel: +44 (0) 20 7477 6563 • Fax: +44 (0) 20 7477 6564

		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 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	10,540
	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
	Oct-Dec 02	430	484	-60	-94	-14.0%	-21.9%	7,657	5,092	66.5%	3,367	
	Year 2002	2,224	2,313	-89	-119	-4.0%	-5.4%	31,156	21,220	68.1%	14,154	10,142
	Jan-Mar 03	519	597	-79	-56	-15.2%	-10.8%			66.7%		
American	Year 2001	18,963	20,823	-1,860	-1,762	-9.8%	-9.3%	161,030	176,143	69.4%	99,235	102,093
	Jan-Mar 02	4,163	4,892	-729	-1,563	-17.5%	-37.5%	64,515	44,766	69.4%	21,995	97,800
	Apr-Jun 02	4,479	5,080	-601	-495	-13.4%	-11.1%	70,724	53,125	71.4%	24,340	100,100
	Jul-Sep 02	4,494	5,815	-1,321	-924	-29.4%	-20.6%	73,899	53,236	72.0%	24,952	99,700
	Oct-Dec 02	4,190	4,869	-679	-529	-16.2%	-12.6%	67,964	47,428	69.8%	22,857	93,500
	Year 2002	17,299	20,629	-3,330	-3,511	-19.2%	-20.3%	277,121	195,927	70.7%	94,143	93,500
	Jan-Mar 03	4,120	4,989	-869	-1,043	-21.1%	-25.3%	64,813	44,800	69.1%	21,021	92,200
America West	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	-274	-26.7%	-59.6%	9,780	6,859	70.1%	4,303	11,506
	Apr-Jun 02	533	534	-1	-15	-0.2%	-2.8%	11,024	8,351	75.8%	5,080	11,973
	Jul-Sep 02	510	552	-42	-32	-8.2%	-6.3%	11,504	8,619	74.9%	5,165	12,320
	Oct-Dec 02	522	560	-38	-32	-7.3%	-6.1%	11,154	8,160	73.2%	4,906	
	Year 2002	2,047	2,246	-199	-430	-9.7%	-21.0%	43,464	33,653	73.6%	19,454	13,000
	Jan-Mar 03	523	569	-46	-62	-8.8%	-11.9%	11,027	7,841	71.1%	4,655	
Continental	Year 2001	8,969	9,119	-150	-95	-1.7%	-1.1%	135,962	98,393	72.4%	44,238	44,273
	Jan-Mar 02	1,993	2,180	-187	-166	-9.4%	-8.3%	30,498	22,582	74.0%	10,057	40,312
	Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%	10,727	41,116
	Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581	40,925
	Oct-Dec 02	2,036	2,094	-56	-109	-2.8%	-5.4%	31,496	22,382	70.6%	9,651	40,500
	Year 2002	8,402	8,714	-312	-451	-3.7%	-5.4%	128,940	95,510	73.3%	41,014	40,713
	Jan-Mar 03	2,042	2,266	-224	-221	-11.0%	-10.8%	30,699	21,362	68.9%	9,245	
Delta	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	74,300
	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
	Oct-Dec 02	3,308	3,670	-362	-363	-10.9%	-11.0%	56,776	40,419	71.2%	27,290	75,100
	Year 2002	13,305	14,614	-1,309	-1,272	-9.8%	-9.6%	228,068	172,735	71.9%	107,048	75,100
	Jan-Mar 03	3,155	3,690	-535	-466	-17.0%	-14.8%	53,435	36,827	68.9%	24,910	72,200
Northwest	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	45,005
	Apr-Jun 02	2,406	2,452	-46	-93	-1.9%	-3.9%	39,848	29,902	78.9%	13,627	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
	Oct-Dec 02	2,339	2,951	-612	-488	-26.2%	-20.9%	37,115	27,611	74.4%	12,779	44,323
	Year 2002	9,489	10,335	-846	-798	-8.9%	-8.4%	150,355	115,913	77.1%	52,669	44,323
	Jan-Mar 03	2,250	2,576	-326	-396	-14.5%	-17.6%	36,251	26,653	73.5%	12,284	42,781
Southwest	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	32,244
	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	33,609
	Oct-Dec 02	1,401	1,313	88	42	6.3%	3.0%	28,296	17,835	63.0%	15,554	33,705
	Year 2002	5,522	5,104	417	241	7.6%	4.4%	110,859	73,049	65.9%	63,046	33,705
	Jan-Mar 03	1,351	1,305	46	24	3.4%	1.8%	28,000	17,534	62.6%	15,077	33,140
United	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
	Oct-Dec 02	3,468	4,462	-994	-1,473	-28.7%	-42.5%	59,988	43,158	71.9%	16,823	77,000
	Year 2002	14,286	17,123	-2,837	-3,212	-19.9%	-22.5%	238,569	176,152	73.5%	68,585	78,700
	Jan-Mar 03	3,184	3,997	-813	-1,343	-25.5%	-42.2%	55,751	39,980	71.7%	15,688	70,600
US Airways	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	33,859
	Apr-Jun 02	1,903	2,078	-175	-248	-9.2%	-13.0%	23,516	17,658	75.1%	13,000	33,902
	Jul-Sep 02	1,752	1,933	-181	-335	-10.3%	-19.1%	24,075	17,276	71.8%	11,994	33,302
	Oct-Dec 02	1,614	2,217	-603	-794	-37.4%	-49.2%	20,631	14,096	68.3%	10,354	30,585
	Year 2002	6,977	8,294	-1,317	-1,646	-18.9%	-23.6%	90,700	64,433	71.0%	47,155	30,585
	Jan-Mar 03	1,534	1,741	-207	1,635	-13.5%	106.6%	19,579	13,249	67.7%	9,427	27,397

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**	**64,717**
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%**		**70,156**
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%		71,290
Oct-Dec 02	3,396	3,392	4	2	0.1%	0.1%	32,581	24,558	75.4%		
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
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
Year 2002	**5,279**	**4,934**	**-89**	**101**	**-1.7%**	**1.9%**	**42,224**	**29,917**	**70.8%**	**22,041**	
BA											
Year 2000/01	**13,700**	**13,139**	**561**	**189**	**4.1%**	**1.4%**	**162,824**	**116,674**	**71.7%**	**44,462**	**62,844**
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	53,410
Year 2001/02	**12,138**	**12,298**	**-160**	**-207**	**-1.3%**	**-1.7%**	**151,046**	**106,270**	**70.4%**	**40,004**	**57,227**
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
Oct-Dec 02	3,025	2,939	86	21	2.8%	0.7%	34,815	24,693	70.9%	9,200	51,171
Iberia											
Oct-Dec 01	1,086	1,118	-143	-88	-13.2%	-8.1%	14,275	9,698	67.9%	6,265	26,800
Year 2001	**4,240**	**4,236**	**4**	**45**	**0.1%**	**1.1%**	**59,014**	**41,297**	**70.8%**	**24,930**	**27,567**
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	
Oct-Dec 02	1,236	1,219	18	-17	1.5%	-1.4%	13,593	9,695	71.3%	5,689	25,544
Year 2002	**5,123**	**4,852**	**272**	**174**	**5.3%**	**3.4%**	**55,633**	**40,647**	**73.0%**	**24,956**	**25,963**
KLM											
Year 2000/01	**6,319**	**6,068**	**251**	**70**	**4.0%**	**1.1%**	**75,222**	**60,047**	**79.8%**	**16,100**	**30,253**
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%**	**15,949**	**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
Oct-Dec 02	1,693	1,760	-68	-71	-4.0%	-4.2%	19,063	14,722	77.2%		34,850
Lufthansa											
Year 2000	**14,014**	**12,648**	**1,366**	**635**	**9.7%**	**4.5%**	**123,801**	**92,160**	**74.4%**	**47,000**	**69,523**
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	84,802
Apr-Jun 02	4,968	4,601	285	138	5.7%	2.8%	30,769	22,835	70.8%	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**
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
Oct-Dec 02	1,984	1,826	158	-34	8.0%	-1.7%	8,334	5,463	65.6%	5,155	
Ryanair											
Year 2000/01	**442**	**338**	**104**	**95**	**23.5%**	**21.5%**	**6,657**	**4,656**	**69.9%**	**7,000**	**1,476**
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%**	**10,295**	**7,251**	**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
Oct-Dec 02	201	149	53	47	26.4%	23.4%			86.0%	3,930	1,761
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**
Oct-Mar 03	602	676	-74	-76	-12.3%	-12.6%	9,594	7,938	82.2%	9,347	

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**	
	Apr-Sep 02	5,322	5,194	127	-69	**2.4%**	**-1.3%**	44,429	29,627	66.7%	25,341	
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	
	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
	Year 2002	**4,243**	**3,634**	**609**	**513**	**14.4%**	**12.1%**	**63,050**		**77.8%**		**14,600**
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%**	**55,802**	**38,452**		**21638**	
	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**
	Year 2001/02	**2,228**	**2,518**	**-204**	**-220**	**-9.2%**	**-9.9%**	**52,595**	**34,709**	**66.0%**	**15,734**	**21,438**
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**
	Jul-Dec 02	3,492	3,181	305	210	8.7%	6.0%	51,009	40,779	79.9%	15292	34,770
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.

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
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	366	144	510	273	102	375	885
2003 - Feb	361	149	510	301	104	405	915

AIRCRAFT SOLD OR LEASED

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	Total
1998	482	243	725	795	127	922	1,647
1999	582	230	812	989	170	1,159	1,971
2000	475	205	680	895	223	1,118	1,798
2001	286	142	428	1,055	198	1,253	1,681
2002	439	213	652	1,205	246	1,451	2,103
2003 - Feb	28	8	36	85	8	93	129

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.*

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 %
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
2002	197.2	129.3	65.6	181.0	144.4	79.8	129.1	104.4	80.9	447.8	355.1	79.3	679.2	507.7	74.7
March-03	17.2	10.4	60.5	15.1	11.5	75.9	11.1	8.5	76.3	38.4	29.5	76.8	58.2	41.3	71.1
Ann. chng	3.4%	-5.0%	-5.3	7.8%	-3.2%	-8.6	2.7%	-7.3%	-8.2	4.6%	-3.3%	-6.2	3.6%	-5.0%	-6.4
Jan-March 03	49.4	28.1	56.9	43.1	31.7	73.5	32.2	25.3	78.5	110.8	85.2	76.9	168.3	118.4	70.3
Ann. Chng	4.0%	-0.4%	-2.5	8.8%	3.8%	-3.6	3.8%	-0.8%	-3.7	4.9%	2.1%	-2.1	4.6%	1.1%	-2.5

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 %
1995	900.4	591.4	65.7	130.4	98.5	0.8	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
2002	990.0	701.6	70.9	159.0	125.7	67.2	103.0	83.0	80.5	84.1	56.8	67.5	346.1	265.5	76.7
Mar - 03	82.7	60.5	73.1	11.8	8.6	72.4	8.7	6.3	71.5	7.4	5.2	70.4	28.0	20.1	71.6
Ann. chng	-0.4%	-3.0%	-1.9	-1.4%	-16.1%	-12.6	9.6%	-10.7%	-16.3	1.4%	-0.2%	-1.1	2.6%	-10.7%	-10.6
Jan-Mar 03	235.6	163.1	69.2	34.3	23.9	69.5	25.6	19.3	75.3	21.4	15.0	70.2	81.3	58.2	71.5
Ann. chng	0.2%	0.9%	0.5	1.3%	-5.3%	-4.8	10.6%	-1.0%	-8.9	1.8%	1.4%	-0.3	4.2%	-2.2%	-4.7

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

JET ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Boeing	05 Mar	Austria Airlines	3 737-800s			
	31 Mar	Boeing Bus. Jet	2 737-700BBJs			
Airbus	11 Mar	Quatar Airways	1 A330		2005	CF6-80
	02 Apr	Iberia	5 A340-600s		2004-06	plus 7 options (converted MoU)
	24 Apr	JetBlue	65 A320s		2004-11	plus 50 options, IAE V2500
	25 Apr	CASG (for 5 Chinese A/L)	4 A330s, 16 A319s, 10 A320s		2004	CASG - China Aviation Supplies Imp. & Exp. Group Corporation
Bombardier	23 Apr	Flybe	17 Q400s		2Q 03	plus 20 options

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

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 %
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					-2.4	-0.6
2002P							4,587	3,243	70.7					-1.9	0.4
***2003**							4,865	3,502	72.0					6.1	8.0
***2004**							5,145	3,730	72.5					5.8	6.5
***2005**							5,415	3,954	73.0					5.3	6.0
***2006**							5,702	4,191	73.5					5.3	6.0

Note: *=Forecast; P=Preliminary; ICAO traffic includes charters. *Source: Airline Monitor,January 2003*

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Tim Coombs or Keith McMullan

Aviation Economics

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