Aviation Strategy

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Impasse for Euro-mergers

The KLM/BA deal did not go through, which is very unfortunate for KLM whose share price subsequently collapsed. But it was the outcome we pointed to in the conclusion to our recent KLM *Briefing* (July 2000).

It is clear that BA for the moment is not willing to contemplate giving up Bermuda 2 for an open skies agreement with the US. And this attitude in effect precludes any merger between BA and a European carrier that operates intercontinental services. The US authorities will not agree to any merged airline that tries to operate one part of its services under a liberal agreement and other bits under a restricted agreement.

For BA the ending of the talks with KLM probably has come as a relief. It can now concentrate on tackling its core problem - the deep unprofitability of its intra-European services. Under Rod Eddington, one can expect BA to adopt a very pragmatic approach, eschewing grand strategies. This means culling intrinsically loss-making routes, rationalising the unwieldy franchise network and deciding what to do with go. BA has created a lower-cost carrier that is competing with its parent and cannibalising traffic; the only solution now might be to sell it off and realise a capital gain.

KLM has yet again failed to consummate a merger, and now it looks as if it has run out of possibilities.

KLM's extensive hub operation is vital to feed its joint transatlantic services with Northwest, but the low yields that this system produces are not commensurate with its cost structure. The only way that KLM can see to get its unit costs down through economies of scale as the result of a merger or a virtual merger.

There is one airline in Europe with a large passenger base which is also desperately looking for a partner. Unfortunately that airline is Alitalia, callously discarded by KLM a few months ago. Recent financial results at Alitalia (a net loss of $180m in the first half of 2000) tend to confirm KLM's decision, but just possibly the Dutch are having a few regrets about that abrupt move.

Is then resurgent Air France is possible purchaser? The problem is that Schiphol and CDG are just too close. Even if the two carriers managed to obtain regulatory approval for a merger, the sheer strength of CDG would undermine the Schiphol operation.

To draw a parallel, Austrian has devalued its main asset - the Vienna hub - by entering the Lufthansa-dominated Star alliance, which has more powerful gateways to eastern Europe at Munich and Frankfurt.

Air France's attention in Europe seems to be focused on building links with the large Mediterranean carriers - Iberia, whose IPO is still officially slated for later this year, and Alitalia, whose dispute with the EC over Malpensa looks as if it may be coming to a resolution.

SAir is not a likely candidate for investing in Alitalia. Apart from regulatory issues (it already has control of the Italian charter sector), SAir has more than enough problems with its current Qualiflyer partners (see pages 10-13) without buying some more from Alitalia.

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Reasons to be bullish about Boeing

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Not all that long ago Boeing chairman Phil Condit was warning his senior managers that with the share price languishing in the low 30s, the company was a takeover target. Its net asset value was lower than its market capitalisation. No longer. Boeing's stock is up around $60, higher than its previous peak just before completion of the merger with McDonnell Douglas.

The merger seems to have gone quite well, with Boeing's management able to discern new opportunities from the combination. The bringing together of the defence aerospace business of McDonnell Douglas, coupled with the space business of North American Rockwell plus the arrival of Hughes satellite business produces a group that can offer a wide range of products and services. The whole may be greater than the sum of the parts.

But this is not really what is driving the stock up in the short term. Boeing's factories are full and order intake is healthy. Boeing has managed to avoid the problems that afflicted it in 1998 when production lines became overloaded. The company eventually had to pay out nearly $3bn in extra payments to cover delays and expensive reworking of aircraft finished without some parts which the supply chain could not provide. Everything is much calmer this time, even though production rates on all main models are being ramped up.

747 production is going up to 2.5 aircraft a month, after long periods when it was barely one. Boeing has received nine orders so far this year and hopes for another 20 before the end of the year. Production of the 777 is going up from four to five a month, as a result of 36 orders so far this year. Boeing is raising the production rate of 737s to 28 a month from 24 - almost as fast as Airbus is constructing A320s.

Overall, by mid-September Boeing had landed 386 firms orders so far this year compared with 262 for Airbus. Thus, the order intake was looking more favourable than it was last year when Airbus claimed some 55% of the market.

The big cloud on the horizon remains the A3XX. This year Airbus had announced 22 firm orders (provided it proceeded with an industrial launch of the aircraft, by early September). The big prize being sought by Airbus, however, was Singapore Airlines.

SIA triumph for Airbus and the Seattle spin

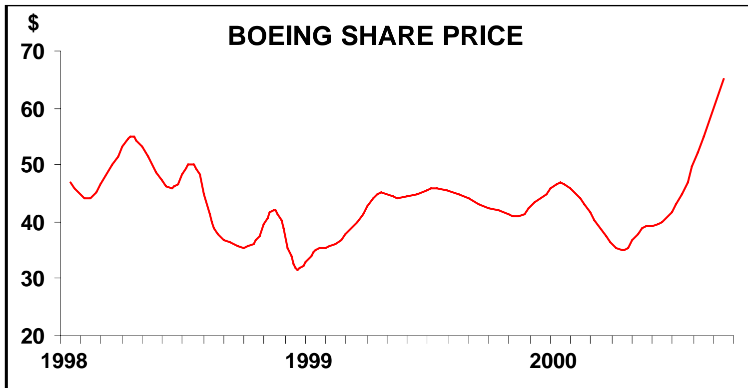
SIA (plus Virgin Atlantic) first expressed interest in acquiring A3XXs back in March, then both airlines went rather quiet. Behind the scenes Boeing waged a mighty campaign to keep SIA with the 747 by offering cut-price deals on the re-vamped 747X to stave off an Airbus order.

Then SIA on September 29 announced an order for up to 25 A3XXs, without also ordering some 747Xs, as widely expected. This will ensure that the A3XX is launched with a healthier order book than any other big airliner in recent history, according to John Leahy, marketing director of Airbus.

EADS, which depends on Airbus for half its sales and profits, will receive a major boost. But it is not necessarily terrible news for Boeing in the short term, and should have minimal impact on Boeing's share price.

Seattle will spin the announcement by saying that it was not prepared to sell 747Xs at a loss just to block the arrival of the A3XX. For intercontinental airlines this is a dream scenario: they have the new A3XX which could be an exciting business-grower for early customers; meanwhile they have a re-vamped, improved 747X (which is bound to be launched before long) available at less cost. They now have the means to prevent either Boeing and Airbus from exploiting a monopoly position.

Beyond such issues, Boeing has other



reasons to be bullish. Not only is the civil aircraft market proving more resilient than had been foreseen, but also the industry is settling into a more stable pricing pattern (A3XX and 747X aside) that might be expected of a duopoly.

Also, the US defence aerospace market is showing signs of recovering - appropriations are set to rise for the first time in eight years. Boeing will probably win most of the mega-contracts for the joint strike aircraft, even if the Pentagon has dropped its former "winner-take-all" deal, in favour of a share-out of work from the lead contractor to the runner-up. So the expectation is that Boeing will walk away with the big deal, but pass on much of the work of Lockheed Martin, as well as to its consortium partners in the bid.

The move into services

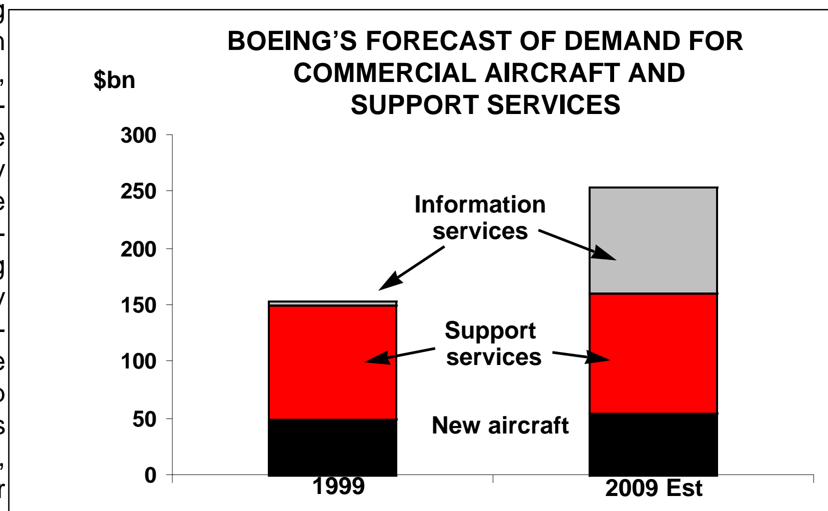
Moreover, Boeing is hoping to grow its earnings by moving steadily into the aviation services business, where it thinks its post-merger strengths are invincible. The strategy is to take the knowledge of airliners and civil aircraft from the Boeing Commercial arm, marry it to the satellite expertise of Hughes satellite business, and come up with services such as Connexion by Boeing, which aims to deliver satellite TV and wideband communication to airliners. EADS is moving into the same market, but Boeing is convinced that it is well ahead.

Beyond that, there is the more humble business of servicing aircraft. Just as Lufthansa sees itself increasingly as an aviation services company which owns an airline, Boeing sees itself as a provider of aviation services as well as aircraft.

It is, for instance, quite comfortable competing with its customers in providing aircraft servicing and back-up. Phil Condit's view is that the margins are too good to ignore and that Boeing can provide a competitive product because it knows the market intimately (its aircraft comprise two thirds of the market).

Add to basic aircraft servicing and support new products such as GPS satellite-based air traffic control and one gets a picture of where the new service-oriented Boeing is headed. It is likely to join consortia bidding for air traffic control privatisations as they occur in Europe, beginning with Britain.

As the battle with Airbus settles down into a more stable, and duller phase (Airbus can no longer be shot down) so Boeing is moving on to a new way of generating profits growth to replace the top-end monopoly it knew it had to lose one day.



Fuel: crisis, what crisis?

Spot jet fuel prices passed the $1/gallon mark in September, the highest level since the Gulf war and twice the level of a year ago. What sort of crisis are airlines really facing?

Unfortunately, there is little sign that the upward price trend will reverse this year. Even though crude prices will probably soften, as some OPEC countries increase output and the US release more of its strategic reserves, demand for all of the middle distillates - which comprise heating oil and diesel as well as jet kerosene - is strong and stocks are comparatively low.

This implies that jet fuel prices will stay at current levels or edge up during the winter.

For the longer term, however, we maintain our view that prices will not stay on a high plateau but will descend to, say, mid 99 levels. This view is based simply on observing how the oil market has evolved over the past 30 years - prices have spiked when OPEC has managed to cut or hold output in the face of rising demand and when industrialised countries have panicked about their stock levels. But the peaks have always been followed by long periods of price decline in actual and real terms.

One of the major differences between this oil price surge and that of the early 90s is that today almost all the leading economies are vibrant whereas then there was a severe recession, which resulted in a slump in air traffic. With continuing strong traffic demand, airlines have been able to lay off most of the fuel impact onto passengers, though that has not stopped their vociferous complaints about their added costs. For example, in the US domestic market unit revenues (per ASM) increased by 7.9% on an annual basis, continuing a pricing trend that has been evident for most of 2000.

Hedging activity has also increased. Again using the US market as an example, Majors such as American, Delta, Southwest and United have 50-100% of their requirement for the rest of the year hedged at the equivalent of less than $30/barrel of crude (currently $38). It should be noted, however, that reports of airline fuel hedging tend to suggest that the cost saving will be greater than it actually turns out to be because they disregard the expense associated with any hedging operation. Lufthansa, for example, hedged 90%of this year's fuel requirement but its first-half fuel costs still rose by 65%.

It is interesting to look at the jet fuel market from the perspective of the oil compa-

AVERAGE FLEET AGES

	Total	Narrow	Wide		Total	Narrow	Wide		Total	Narrow	Wide
Swissair	4.2	3.7	4.9	**Southwest**	8.5	8.5	na	**SIA**	5.4	na	5.4
EasyJet	4.9	4.9	na	**Continental**	9.0	7.9	16.7	**Cathay**	5.9	na	5.9
Lufthansa	8.1	8.1	8.1	**AmWest**	10.2	10.2	na	**MAS**	6.1	6.8	5.5
BA	8.8	10.5	7.1	**United**	10.4	10.9	9.0	**Thai**	6.5	6.0	6.5
Air France	9.1	8.4	10.1	**Air Canada**	10.5	10.6	10.1	**PAL**	6.9	7.5	6.6
KLM	9.2	9.0	9.4	**American**	11.3	11.7	9.9	**China AL**	7.6	1.6	9.1
Alitalia	9.9	9.0	14.1	**TWA**	11.6	11.6	11.5	**ANA**	8.3	5.8	9.0
SAS	10.4	10.5	10.0	**Delta**	12.5	13.0	11.2	**Garuda**	9.3	4.3	13.9
Ryanair	13.1	13.1	na	**US Airways**	13.4	13.7	7.8	**Qantas**	10.1	10.1	10.1
Iberia	13.2	13.2	13.4	**Northwest**	20.0	20.0	20.1	**JAL**	11.7	3.0	12.0
Total	**9.4**	**9.7**	**8.9**	**Total**	**12.1**	**12.2**	**11.8**	**Total**	**8.1**	**7.3**	**8.6**

Source: ACAS Note: Average ages as at August 2000

nies. Consolidation in that industry has led to six suppliers (Exxon-Mobil, Shell, BP-Amoco-Arco, Chevron, Total-Fina-Elf and Texaco) controlling just over 60% of global jet fuel supply, with the first three conglomerates having 42%. However, oil market analysts believe that whatever additional selling power this consolidation has generated has been negated by increased purchasing strength on the part of the main airlines.

They observe that at the spring round of tender negotiation airlines pooled their purchases using alliance structures, and also introduced electronic B2B buying techniques for the first time. The new battle tactics in the commercial war between airline alliances and the oil giants will be further honed at the upcoming autumn tendering negotiations.

The oil crisis of course does not affect all airlines equally. Indeed, in a strong pricing environment it the more fuel-efficient carriers should be able to exploit this advantage. As the table above shows, there is a wide variation in the fuel efficiency between the newer and older jets.

Below is a summary of the average fleet age of the ten key airlines in each main aviation region. Some observations:

• Despite retrenchment during the financial crisis, the oldest of the Asian airline fleets are still below the North American average;

• In Europe Swissair should be very well positioned with its ultra-modern fleet, but still it blames fuel for its current problems (see pages 14-17);

• Ryanair, whose fleet still comprises mostly elderly 737-200s should have been in trouble as a result of fuel price escalation but has apparently hedged all its fuel purchases;

• Southwest, as normal, heads the US ranking while Northwest (see pages 18-22) is very exposed.

INDEX OF FUEL CONSUMPTION PER BLOCK HOUR PER SEAT

Narrowbodies		Widebodies	
737-800	100	767-300	100
A320	103	777-200	100
737-400	105	A340	101
MD-90	106	767-200	107
757-200	106	747-400	118
737-700	107	DC-10	124
737-300	117	MD-11	125
MD-80	126	747-200	126
A319	127		
737-500	128		
737-200	137		
DC-9	142		
727	163		

Note: Based on US airlines' average fuel consumption per block hour and average seating in 1999
Source: ESG/US DoT

Olympic: what can possibly be done?

Credit Suisse First Boston is the latest investment bank to be charged with finding a trade investor for Olympics Airways, and in theory it has to start up the road-shows within the next month or so. How can one go about selling an airline which is not only consistently unprofitable but also apparently totally resistant to reform?

Last year Olympic was reported to have made a net loss of Dr19bn ($50m) on revenues of Dr345bn ($910m), though there is always considerable doubt about the validity of Olympic's financial numbers. In any case the airline is performing extremely poorly and its short recovery after being recapitalised in 1994/95 is now seen as just another false dawn. That recapitalisation involved state aid of Dr544bn (nearly $2bn at the time). So outside observers might be wondering where all this money went.

In fact, Dr 491m ($1.65bn) was allocated to write off debt to Greek state-owned banks and corporations (like the oil refining company and the CAA). Olympic didn't receive direct funding from the state but was allowed to run up overdrafts and unpaid bills, then the Greek government applied penalty interest rates to these amounts - the equivalent of 3% per month or well over 50% per year.

Even if the airline managed to break even. its debt continued to grow exponentially.

The other Dr53bn ($175m) was new equity to be paid in three tranches if the carrier met its turn-around plan targets. Permission for the third tranche has been refused by the EC following an implausible plan and forecast submitted by Olympic during BA Speedwing's brief and ineffectual period in control.

Consequently, the airline risks running out of cash in the winter (traffic to/from Greece is highly seasonal). Already state-owned suppliers are being asked for extended credit. In Athens, there is little hope of an airline solution, following BA's refusal to take 20% in the carrier, but there is a vague expectation that one of the many successful Greek entrepreneurs, who understand the complex politics of Olympic, will step forward.

Leading contenders include: shipowner Spyros Latsis; Thomas Liakounakos, owner of the most successful of the new Greek independent airlines, Axon; Pericles Panagopoulos, president and major shareholder of quoted ferry holding company, Attica Enterprises; and industrialist, Constantinos Aggelopoulos, who has family interests in the organisation of the 2004 Athens Olympic Games.

The fundamental problem with Olympic is not airline economics but Greco-Balkan politics. Ever since Aristotle Onassis sold his airline to the Greek state in 1974, Olympic has been at the mercy of politicians; it has had to fulfill many roles but none of them have had a commercial aim.

The average tenure of chief executives over the past 25 years has been less than 12 months, and the reasons for their departure or indeed appointment are usually obscure. Similarly, the Shareholders Board (the only shareholder is the Ministry of Finance) constantly changes its membership, and it has proven incapable of attracting and retaining successful businessmen to this vital role.

Managers, some of whom well qualified and talented, are generally unwilling to make any decision on their own, realising that they will receive no credit if things go right and will be scapegoated if things go wrong. On the other hand, senior managers who fall out of favour are rarely sacked, but are "fridged", allocated to a non-existent jobs on full pay.

The unions, particularly the pilots' union, represent the permanent force in the Olympic power structure, in effect controlling many of the airline's functions. At the same they will resort to strike action whenever their position is threatened. They have also traditionally represented a voter power base for PASOK, the Pan-Hellenic Socialist Movement, the party currently in power (though it must be added that PASOK is now a very different animal from anti-capitalism, anti-EU, pro-cronyism party of the 80s and early 90s - it has made effective moves to modernise the Greek economy).

Changing the Olympic ethos is basically a matter of political will plus charisma on the part of one of the potential Greek entrepreneurs who might bravely take up the challenge. After all, Onassis is still a hero at Olympic. It is not something that can be successfully tackled by investment banks or airline consultants.

OLYMPIC'S FLEET PLANS

727-200	4		
737-200	11		Chapter 2
737-300	1		
737-400	13		
737-700		11	On order via GECAS; status uncertain
737-800		8	
747-200	1		
A300-600	3		
A340-300	4		
Total	37	19	

Note: Olympic Aviation operates two 717-200s plus 17 turboprops

A reconstructed Olympic 2000

But, abstracting for a moment from the politics, what could Olympic - or a new Athens-based airline called, for example, Olympic 2000 - offer an investor? What we are looking at here is not selling Olympic as an ongoing entity, but the potential for reconstructing Olympic 2000 from elements of the old carrier.

Spata, the brand-new airport outside

Athens is the most obvious asset. With two runways and capacity for 16m passengers a year the airport, which has been constructed by the German company Hochtief (which owns about 45%, the other 55% is owned by the government), will open on schedule in March 2001 (sadly the same cannot be said for the road links between Spata and Athens). Olympic will be the incumbent at a brand new, totally uncongested airport with the potential for hub operations.

Ground handling has been Olympic's most profitable activity, but its monopoly is now being broken with a new handling consortium, Goldair, competing strongly at Athens. Selling off this asset or entering in a joint venture with one of the independent handlers would appear logical. The same applies to the airline's relatively successful catering subsidiary.

Olympic's domestic monopoly in a market of about 2m passengers a year was officially ended by the EC in 1997. With the growth of the new entrants such as Aegean, Cronus and Axon, its overall market share has been significantly eroded. Still, Olympic retains a dominant position on key trunk routes like Athens-Salonika. Consolidating these routes while entering into code-sharing/franchising agreements with the independents would seem to be a way forward.

The European network needs a complete revamp including culling intrinsically unprofitable routes and rationalising the distribution system which is still based on high-commission ethnic travel agents and very expensive airline shops. A major loss making area is Germany, partly because flights from Athens are scheduled through the northern city of Salonika, diluting yields and adding costs. Salonika could be developed as a hub in its own right preferably using Olympic's low-cost subsidiary Macedonian Airlines.

Olympic fails miserably to capture the small business component in the international market which is leisure and VFR dominated. Yet in terms of hard spec the business cabin on A300-600 flights to London, Frankfurt and Paris is the best intra-European product of all. Improve the soft spec and try to come to a deal on FFP miles with non-competing airlines, and Olympic just might find a profitable niche.

In terms of developing a proper hub operation, there is genuine potential in connecting the Eastern Mediterranean (Lebanon, Syria, Israel and Egypt) with Western Europe and beyond. The problem is the excessively low yields of this sixth freedom traffic, which might be mitigated by entering into joint ventures with the national carriers of these countries (and with SAA on the Johannesburg route).

The long-haul dilemma

The long-hauls to Australia and the USA are by far Olympic's biggest financial headache, producing losses that dwarf those of the rest of the network. Characterised by high seasonality, high costs in terms of flight crew and distribution (some of the commissions Olympic incurs are extraordinary), and low yields because of the VFR and leisure nature of the traffic, these routes are not financially viable under the current Olympic set-up. The change from elderly 747-200s to A340s hasn't made much difference to the economics because the potential operational cost savings are balanced by much higher capital costs and lower revenues per flight.

Yet to suggest closing or selling the long-haul operation causes political apoplexy as a Greek link to the diaspora is regarded as essential. A radical solution for Olympic would be for this operation to be sold off at a minimal price to the long-haul pilots who would then have the challenge of running these routes on a commercial basis.

It must be said that union enthusiasm for any form of equity participation in Olympic has so far been non-existent. But it is rumoured that the long-haul pilots have very nicely over-funded pension schemes, which were originally set up by Onassis, and these schemes would pay out considerable lump sums if Olympic were to be wound up, so providing a potential source of operating capital for a new venture.

So there could be a future for a restructured Olympic 2000 but it means dismantling the old Olympic first, which means courageous political decision-taking. The alternative - the first official bankruptcy of a European flag-carrier.

European ground handling: new competitive dynamics

The ground handling business in Europe is changing rapidly, changes triggered by the 1996 EC Directive aimed at liberalising ground handling opportunities at EU airports. What has resulted is a rapid international growth of ground handling brands such as Swissport and Globeground, plus independent Servisair. A spate of corporate activity was capped in July by the purchase of Ogden Aviation by the Menzies Aviation Group (MAG) transforming this relatively minor player into a global operator.

The EC Directive imposed a progressive opening up of the ground handling market. Since January 1999 airports with a throughput of over 3m passengers a years of 75,000 tonnes of freight have had to permit third-party handling. However, the Directive did allow airports to apply for two-year extensions, before the legislation was fully applied, with the result that some important airports, such as Frankfurt Airport, which was the classic target of the legislation in the first place, have been able to delay opening up their markets. From January 2001, the Directive will apply to any airport located in the EU with passenger volumes of over 2m or freight volumes of over 50,000 tonnes.

In the good old days, the ground handling business was very simple: the flag-carriers provided handling services to foreign counterparts almost as a favour, in order that that resources would not have to be reproduced and duplicated.

Over time, the handling function developed as a business opportunity for the incumbent airlines and a source of monopoly profits for some, notably Olympic, Iberia and Aer Lingus. This situation led to some vociferous complaints to the EC and eventually to the Ground Handling Directive.

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The explicit aim of the Directive was to increase the number of competing ground handlers. In fact, the evolution of the market is being characterised by a drive for market share and global reach on the part of the ground handlers. Size or rather network is all-important. What is at stake is a large international business based on a whole raft of support services to airlines from executive lounge provision to aircraft cleaning, passenger services to ramp services.

The independent sector has struggled to achieve this global status simply because these specialist companies do not have the type of a ready-made international network that a major international airline possesses. Two of the key leading groups - Swissport and Globeground - are airline-owned subsidiaries.

Value of ground handling

According to Swissport, the ground handling arm of the SAir Group, the value (meaning annual revenues) of the ground handling market geographically is: North America, $7.5bn; Europe, $6.4bn; Africa, $1.2bn; and Latin America, $1bn.

Globeground, the Lufthansa subsidiary, has analysed the world market by competitive characteristics. It estimates that ground handling monopolies account for 30% of the market (mainly in Europe) while the fully liberalised ground handling markets, as at Heathrow or Amsterdam, account for 15%. In between is the 55% of the market that offers some degree of freedom for self- and third-party handling.

This is what interests the major international ground handlers as it represents potential the future business, if only they can convince major airlines to out-source their base and hub operations to independent experts.

Interestingly, ground handling operators have been highly localised despite the fact that the aviation business increasingly demands global solutions from most service suppliers. Until very recently there were only a handful of European ground handlers with

operations in more than two countries.

The alliance factor at Schiphol

Independent ground handlers now have to contend with the genuine threat of alliance-based standardised purchasing at major European hubs

Recent developments at Amsterdam Schiphol give an indication of how alliances may shape the future ground handling market. SAir's Qualiflyer Group tendered as an alliance for their handling needs at the airport, and the winner of this contract, for 125 flights a week, was a joint-venture between Swissport and Cargo Services Centre, the Dutch specialist air cargo handler. This was a marriage of convenience utilising the strength of CSC, which accounts for 25% of the cargo handling market at Schiphol and has 75 bases worldwide, and Swissport, the global alliance partner for the Qualiflyer group. Both parties have now signed a marketing agreement to further develop their business relationship on projects worldwide.

Another major tender, covering 210 flights per week, was for the oneworld airlines (BA, Iberia, Cathay Pacific and Finnair). This contract was won by Aviapartners, the Belgium-based independent ground handler. It is interesting to note that oneworld does not have a major European ground-handling partner, since BA withdrew from third party handling work at Heathrow in 1997.

The unanswered question is which handler will win the Star Alliance business (over 100 Lufthansa and SAS flights a week)? The two main handlers without a major alliance contract are Ogden Aviation and Aero Groundservices.

As Aero Groundservices was bought by Globeground in July, it should be the favourite. However, the situation is complicated by the fact that Ogden has now been purchased by Menzies, and in the UK, Menzies and Globeground operate as a ground handling joint-venture and have merged their cargo businesses to form Menzies World Cargo.

GROUND HANDLER PROFILES

Swissport (SAirServices) is a prime example of the new brand-led ground-handlers with a focus on 'quality systems' and global presence.
• Wholly owned subsidiary of SAir Group
• Operates in 115 airports in 20 countries with 15,000 employees
• Major recent purchases - Dynair of the USA
• Overall market position - can now offer meaningful network benefits to airlines worldwide, specifically those that Swissair has invested in
• Major strength - good financial results and financial independence means that Swissport can act independently and buy market share
• Major weakness - dependent on financial strength or otherwise of parent, SAir - investors may demand sale of subsidiaries like Swissport and Gategourmet etc.

Globeground has developed a strong brand in the ground handling market since its formation more than 10 years ago.
• Wholly owned subsidiary of Lufthansa Commercial Holdings with 46 subsidiaries globally employing 17,000 in 23 countries at 85 airports
• Major recent purchase - US-based Hudson General
• Overall financial position is less clear than Swissport as the operation is still dependent on the relationship with the airline and is less accountable for its actions
• Major strength - clear focus on quality management systems.
• Major weakness - perceived over-reliance on the Lufthansa relationship

Menzies Aviation Group The purchase of US-based Ogden Ground Services by Menzies Aviation Group (MAG) for $118m is the most significant recent development in the battle for ground handling dominance.
• Combined group with operations at 57 airports in 20 countries and involves air cargo, passenger and ramp handling.
• Owned by the John Menzies Group (major UK PLC company focussed on distribution with £1.3bn turnover)
• Overall market position - Menzies name is associated with air cargo and distribution services and there would appear to be an interesting opportunity for Menzies to become a 'virtual' integrator, using the belly-hold cargo capacity of the scheduled airlines· Its partnership in the UK with Globeground is supposed to evolve further
• Major strength - unrivalled focus on UK air cargo operations
• Major weakness - little awareness of MAG in the wider ground handling world

Servisair Plc UK-based specialist ground handler, which was recently acquired by the French Group Penauille.
• Operations in 99 airports and 11 countries with 10,000 employees
• Major recent purchase - US-based Global Group
• Market position - Servisair has spread its net intelligently in Europe and the US but has not reaped the reward it expected from the liberalisation of European ground handling
• Major strength - the UK coverage of Servisair means that they can offer a complete UK handling solution to any airline
• Major weakness - Servisair have a difficult situation to handle as MAG develops its UK business

SAir Group: how many turn-arounds can it cope with?

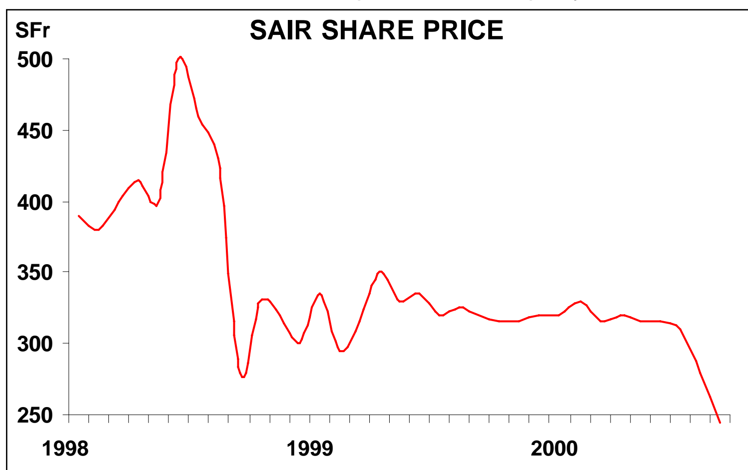
There has been a subtle change in the SAir Group strategy following the announcement of disappointing first-half results. Previously SAir proclaimed that it wanted to be a "market orientated, network minded and quality driven" company. Now it has announced a simpler and clearer approach.

There are two basic elements to the strategy. One, consolidate the Qualiflyer Group and deepen the intercontinental alliances. Two, grow organically the airline-related businesses. This would suggest that the buying sprees are over - no more minority and stakes or purchases of ground-handling or catering businesses to fit into the three non-airline divisions.

The SAir Group is split into four companies:

- SAirLines, comprising Swissair and associates;
- SAirServices which holds the Group's interests in aircraft maintenance, ground handling and information technology;
- SAirLogistics, covering freight forwarding and cargo; and
- SairRelations, encompassing in-flight catering and sales.

The broad thinking behind the structure is that SAir is not just an airline. It is a travel and transportation company within which benefits can be generated through "global networks" and "team spirit" plus careful brand management.



In practice, SAir has concentrated on cross-selling its different services, and has used its alliance strategy to open up new markets. As well as the standard network benefits that can be achieved through code-sharing, joint frequent flier programmes etc., an airline entering an alliance with Swissair is also expected to buy into other SAir Group activities such as ground handling (through Swissport), catering (through Gategourmet) and duty-free (through Nuance).

SAir has up until now it has taken an equity-based approach to its Qualiflyer alliance. It may be that SAir has had no other choice given that the Swissair itself is ranked a long way behind Europe's big three (Lufthansa, Air France and BA) in terms of scale. So instead SAir has used its balance sheet to "buy" its partners, often outbidding the "big three" in the process (see *Aviation Strategy*, September 1999). SAir's argument is that because it can extract synergies across a broad spectrum of businesses it can afford to pay a higher price for the equity.

Good in theory, but has it worked? The SAir Group share price performance indicates the stockmarket's view on the strategy.

The headline operating profit figure for the SAir Group for the first half of 2000 was SFr 143 ($84m) but SAirLines alone managed to post an operating loss of SFr155m ($92m) loss versus a SFr 84m profit in the first half of 1999. Of the SFr155 loss, Crossair contributed SFr 6m its first half year deficit since 1992, and Swissair and Balair a further SFr 76m loss. Minority holdings in Sabena, LOT, Volare, Air Littoral, AOM and South African Airways contributed further losses to the tune of SFr 74m.

The first half results for 2000 also saw SAir taking a SFr 360m ($207m) charge to cover restructuring costs associated with its French airline interests and a SFr 347m

($200m charge) associated with the restructuring of LTU.

Because of ownership restrictions, SAir has been limited to a minority stake in its partner airlines, which greatly weakens its managerial control. And even if full control were politically possible, SAir probably no longer has the funds available to make further investments. As at the middle of the year the Group's net debt totalled SFr 4.53bn against SFr 3.93bn of equity, and the balance sheet contains SFr1.8bn of intangible assets related to goodwill in the companies it has bought into.

The SAirLines part of the SAir Group is now faced with pulling off a large number of turn-around strategies at the same time. Whether Swissair has the management resources to achieve this is in question; for instance, Paul Reutlinger, who achieved success at Sabena, has had to be switched to dealing with the very challenging task of integrating SAir's three French associates and Jeff Katz, the former chief executive, has defected to Orbitz, the e-distribution start-up.

SAir now has so many codenames for its various turn-around projects that it is difficult to keep track. The following summarises the current situation.

Swissair

Swissair itself if finding that its unit cost are growing more quickly than its unit revenues - a trend which it blames largely on the increase in fuel prices.

Project "Clean Slate" has set a cost reduction target of SFr 225m by 2002, which seems quite modest given the scale of the airline's recent losses. The Airline Management Partnership (AMP) with Sabena includes integration of the sales forces worldwide, capturing network synergies from operating one network but with two hubs, and reducing distribution costs.

Crossair

Having recorded its first first half-year loss since 1992, the Swiss regional carrier has been awarded an "improvement" project, code-named "Columbus". Improvements of SFr 50m have already been identified primarily through reduced growth, network optimisation and cost savings.

SAIRGROUP CONSOLIDATED BALANCE SHEET (SFr m)

	June 00	Dec 99	Change
Operating net working capital	-431	-360	-19.8%
Intangible fixed assets	1,806	1,767	2.2%
Tangible fixed assets	7,395	6,844	8.1%
Operating investments	1,035	1,169	-11.5%
Operating provisions	-1,733	-1,059	63.6%
Net invested capital	**8,071**	**8,360**	**-3.5%**
Financial assets	1,564	1,379	13.4%
Financial liabilities	-958	-909	-5.4%
Net debts	-4,534	-4,268	-6.2%
Minorities	-190	-212	-10.4%
Equity	**3,953**	**4,181**	**-9.1%**

LOT

SAir outbid both BA and Lufthansa for a 38% stake in LOT, but the airline is currently operating in the red. First half 2000 losses were the equivalent of $16m, though the carrier expects to recover this in the second half. SAir has set a target of $100m in improvements over three years. Priorities for LOT are building the Warsaw hub, increasing revenues and home market share, and systems redesign.

Sabena

At present the Belgian Government retains a 50.5% stake in Sabena, the remainder being held by the SAir Group, which intends to increase its stake to 85% but can only do so after ratification of a treaty between Switzerland and the EU.

It is not clear as to whether SAir's ambitions to take majority ownership of Sabena remain intact. Fresh concerns over Sabena's viability have arisen following the announcement of its six-month results which showed a sixfold rise in net losses to €83.6m ($75.6m) despite an 11% rise in passenger numbers. Sabena last made a profit in 1998,and in 1999 recorded a net losses of €14.1m.

Sabena's new Chief Executive, Christoph Muller (ex-Lufthansa) in September warned that if Sabena was "not making significant progress by the end of the winter" he would be forced "to question the raison d'être of the company".

He went onto to say that if the company

is neither in the position to reach an agreement with employees nor to undergo structural changes the situation could become "life threatening".

Whether the Belgian Government will give the necessary political support to SAir to make these structural changes, which may result in job losses remains in question. The Belgian Minister for state-owned companies response was simply that Sabena was "of too much strategic importance to disappear".

Muller's target is to achieve net profits of €100m within three years. His turn-around strategy, codenamed Blue Sky, includes:

- Selling parts of the airline's 90 subsidiaries in order to concentrate on the core business;
- Freezing any further new investments including re-negotiating with Airbus to slow down the delivery rates for the 34 A320s it has on order;
- Stopping capacity expansion and selling two seven-year-old A340-200 aircraft;
- Restructuring business procedures, such as stock control;
- Accelerating the integration of Sabena with the SAir Group in order to "use all possible synergies". Sales, marketing and route planning have already been put together within the Airline Management Partnership (AMP);
- Improving levels of productivity (in the recent past the strike-prone airline had to calm its employees by granting them extra holidays); and
- Negotiations on new pay levels, planned to take place in autumn.

Air Littoral/Air Liberté/AOM

As mentioned above, SAir has dispatched Sabena's former Chief Executive, Paul Reutlinger to France to take over the operational responsibility for the merger of AOM, Air Littoral, and Air Liberte, three French airline affiliates. Very few examples exist of successful airline mergers, so putting three French airlines together represents a Herculean task. Nevertheless, SAir expects to succeed where previous raiders into the French market have failed, notably BA and KLM, and deliver profits, slated for the second quarter of 2002.

Under a common brand to be announced probably in 2001, the newly merged airline will have a mainline operation, which will operate aircraft above 100 seats, and a regional division operating smaller types from bases at Nice and Montpellier.

The new airline, which will in theory have a 30% share of the French domestic market, can expect fierce competition from a resurgent Air France itself has recently announced a plan to strengthened its control over the domestic market by merging its regional franchisees (Brit Air, Protéus and Regional).

LTU

SAir has had serious problems in its leisure division. The original strategy of creating "charter hubs" and maximising aircraft utilisation by sharing equipment among LTU, Air Europe Sobelair etc. looked over-ambitious and has proved to be impossible.

The German tour operator and airline, LTU , has suffered from overcapacity in the German holiday market, and has been producing heavy losses , estimated at SFr130m at least for this year. SAir has sought to resolve this situation by promoting consolidation with the hope of eliminating overcapacity. Following various failed transactions, the German tourism company, Rewe Touristik, has agreed to buy outright LTU Touristik, and take a 40% stake in the troubled LTU charter airline. West LB bank will have a 10.1% stake in LTU, leaving SAir with the remaining 49.9%.

LTU is forecast to continue making losses through 2001, and achieve break-even in 2002.

TAP

TAP's strategy is called MOP (Modernization and Restructuring Project). A financial turnaround date has been set for TAP of 2002 with €110m of improvements targeted. Improving the Lisbon hub is the major priority. The other element of its Portuguese strategy was to have been cooperation with Portugalia in which SAir expected to take a 42% stake. However, it has been thwarted by an EC ruling that invest-

ments in both the main Portuguese carriers would be anti-competitive.

Volare and Air Europe

It is unlikely that SAir will emerge as a serious partner for Alitalia, but it has tied up the Italian charter sector through purchasing stakes in the leading long-haul charter, Air Europe, and short-haul charter Volare, both of which are loss-making.

The two airlines are to be brought under one holding company, the newly branded Volare Group, which will form Italy's second largest airline. Although there are some possibilities for developing scheduled routes, this remains essentially a charter operation while AirOne, in which SAir tried but failed to buy a stake, provides the main domestic scheduled competition to Alitalia.

THY

THY Turkish Airlines now describes itself as a "dormant member" of the Qualiflyer Alliance. At one point it looked likely that SAir would participate in its privatisation, planned for next year, but this is now improbable.

SAA

SAA is the most profitable of SAir's investments, and provides a good example of the cross-selling strategy. GATX Flightlease, the joint venture between GATX Capital and the SAir Group, has placed eight SAir-owned 737-800s with SAA, and Flightlease is in its own right supplying an additional eight 737-800 aircraft. In return SAA is trading seven A320s into the GATX Flightlease. However, SAA, despite SAir's 20% stake, remains in the Star alliance.

The American alliance

The defection of former partner Delta to Air France has been quickly made up for by the substitution of American Airlines. The fact that Switzerland and Belgium have "Open Skies" agreements with the US has allowed both Swissair and Sabena to develop a range of codeshare flights with American. Sabena codeshares to 81 US cities beyond its US gateways, and Swissair to 74 US cities.

American of course remains in oneworld, and BA may well now attempt to restore full relation with the US carriers in the wake of the ending of the KLM negotiations.

SAIRGROUP OPERATING RESULTS BY DIVISION, JAN-JUN 2000 (SFr m)

	SAir Lines	SAir Services	SAir Logistics	SAir Relations	SAir Group
Revenue	3,315	1,506	769	2,941	**7,512**
EBITDAR	345	181	62	253	**873**
EBITDAR margin	10.4%	12.0%	8.1%	8.6%	**11.6%**
EBIT	-155	91	60	120	**143**
EBIT margin	-4.7%	6.1%	7.8%	4.1%	**1.9%**
Net invested capital	3,039	1,504	132	3,004	**8,071**
ROIC	-10.2%	12.0%	91.0%	8.0%	**3.5%**
Headcount	11,281	18,288	1,421	41,436	**72,617**

The whole group

The other three pillars of the SAir Group fared much better in the first half of 2000. SAirServices had an operating margin of 6.0% and contributed SFr 91m in operating profits. SR Technics has been re-branded SR Technics Group in order to help push for a "global presence" and now encompasses regional operations in Switzerland, France and the US. The maintenance company is also finalising joint ventures in South Africa with SAA and is hoping to form a component overhaul business in Hong Kong with Cathay Pacific. Swissport (ground handling) is now the largest ground handler in the world thanks to the acquisition of Dynair.

SAirRelations enjoyed an operating margin of 4.1% for the first half of 2000 and contributed operating profit of SFr 120m. Gate Gourmet is now ranked number two globally following the acquisition of the Dobbs Group.

SAirLogistics provided the strongest result of the four divisions in the first half contributing operating profits of SFr 60m with an operating margin of 7.8%.

The two key questions about the SAir strategy are: is the sum of the parts truly reflected in the share price and are the benfits generated by the ancillary services justified by the airline investments. If the answers are no, pressure will be exerted by shareholders to break the group up.

Northwest: Asian resurgence behind profit recovery

AMR's interest in Northwest Airlines this past summer drew much attention to the fourth largest US carrier's formidable array of strategic assets - an extensive Pacific network, a lucrative transatlantic alliance with KLM, strong domestic hubs and a controlling stake in Continental. But Northwest has still not returned to the profitability levels achieved before its 1998 labour troubles. What strategies will it employ to make the most of those assets?

The $300m net profit reported for 1999 was well below the $597m posted on similar revenues for 1997.The latest results, an operating profit of $252m and a net profit of $115m for the June quarter, represent 8.6% and 3.9% of revenues. Those margins are perfectly acceptable at a time when fuel prices are at a record high, but competitors like Continental, United, Delta and American still achieved operating margins of over 10%.

Since the strike Northwest's unit revenues have rebounded strongly, reflecting a swift and complete recovery of leisure traffic and continued improvements in Pacific markets. Non-fuel costs have remained under control despite expensive new labour agreements and the need to spend on restoring image. In the June quarter Northwest's costs per ASM excluding fuel rose by just 0.4%.

But the important high-yield traffic segment has still not recovered fully from the 1998 events. Debacles like the January 1999 snowstorm in Detroit, when passengers were forced to remain on an aircraft on the ground for eight hours, have not helped. Even though surveys suggest that Northwest's customer service and operational performance are now excellent, there have evidently been lingering problems with customer relations.

Over the past year or so Northwest has come at or near the top in the DoT's domestic on-time performance, flight completion and baggage delivery rankings. This should help it recapture fully its former business traffic share and restore its yield and profit margins (to the extent permitted by fuel prices) in the remainder of this year and in 2001.

Northwest is expected to report essentially flat earnings for the quarter ended September 30, which would be in line with the industry trend. Strong revenue performance, helped by United's troubles, was offset by higher fuel prices - the carrier bore the full brunt as it was completely unhedged in the latest quarter. But the fourth quarter may see a profit improvement because Northwest has 75% of its fuel requirements for that period hedged at around $19 a barrel.

The current First Call/Thomson Financial consensus forecast for 2000 is net earnings before special items of $3.26 per share. This would be exactly the same as last year's reported figure or 12.8% higher than the $2.89 reported before special items. The range of 11 analysts' estimates, from $2.70 to $3.62, is rather wide.

Longer-term earnings outlook is relatively bright in light of the fuel hedges that will kick in, expected full recovery of business traffic and continued strengthening of Pacific demand and unit revenues. The current consensus estimate for 2001 is $4.10 per share or around $377m - still well below the 1996 and 1997 peaks.

Northwest's cash reserves, which halved to $480m in the six months to December 31, 1998, have now recovered to their former strength - $1.1bn at the end of June. Total liquidity was $2.4bn. However, long term debt has risen from $2.8bn at the end of 1997 to around $3.7bn at present, and stockholders' equity was just $122m at the end of June.

The favourable financial trends have had little impact on the company's share price, which fell to a low of $16 in March, after plummeting from $65 to around $25 in the six months leading up to the strike. Speculation about a merger with American

temporarily lifted the stock to $39 in early July, but since then the price has fallen back to the mid/high 20s. With a P/E ratio of just 7.6 in late September, the stock continues to be recommended as a "buy" or "strong buy" by most analysts.

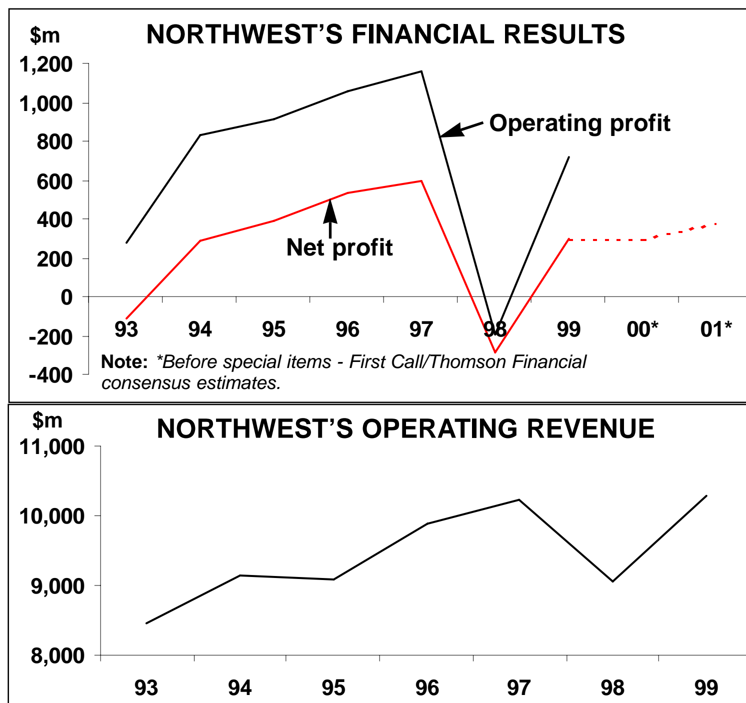
Rising labour costs

In the mid-1990s Northwest benefited from an $886m three-year package of wage concessions secured from all of its unions in August 1993. In the second half of 1996 the wages snapped back to the pre-concession levels. The net impact of that on the profit and loss account was not that detrimental (because the company was able to stop issuing stock to employees), but the subsequent inability to secure new contracts led to labour actions and a strike in 1998 that cost the company far more than what it saved in 1994-96.

The strike was settled when the pilots signed a four-year contract, which represented a straightforward compromise - among other things, 3% annual pay rises in return for some productivity concessions. This made possible a new phase in management-pilot relations and subsequent matters, such as pay rates on the A319, were settled quickly.

Since then Northwest has concluded new contracts with seven other unions. The latest of those, a five-year agreement ratified by the flight attendants in May, was particularly welcome because it brought to a close a painful three-year negotiating process. Last year flight attendants rejected an earlier tentative deal and staged a "sickout", which led to the company filing a lawsuit against the union (dropped when the contract was signed).

Just one more contract needs to be secured to complete the "1996 round" - with Aircraft Mechanics Fraternal Association (AMFA), which represents 9,400 mechanics, cleaners and custodians who voted to get out of IAM two years ago. But those talks appear to be just as tough going as the previous ones. While non-economic issues have been resolved, the two sides reportedly remain far apart on the issue of compensation.



Northwest estimated in a recent SEC filing that the new flight attendant contract will cost it $75m in 2000. The deal provides for retroactive pay from August 1996 at 3.5% of annual salaries and will bring pay rates to industry-leading levels. In combination, the new contracts mean substantial annual increases in labour costs. However, this should not lead to much of a competitive disadvantage because many other major carriers in the US now face similar cost pressures.

If the AMFA deal is concluded this year, as was earlier hoped, Northwest will have a two-year breathing space before the pilots' contract becomes amendable in September 2002. The fact that the new contracts are staged will make the next negotiating round easier to manage.

Asian recovery

Northwest has the highest Asian revenue exposure among the US carriers. Its transpacific and intra-Asian services accounted for 23% of its total revenues last year (down from 30% in the mid-1990s), compared to 15% for United, the number two US carrier in that region. Consequently,

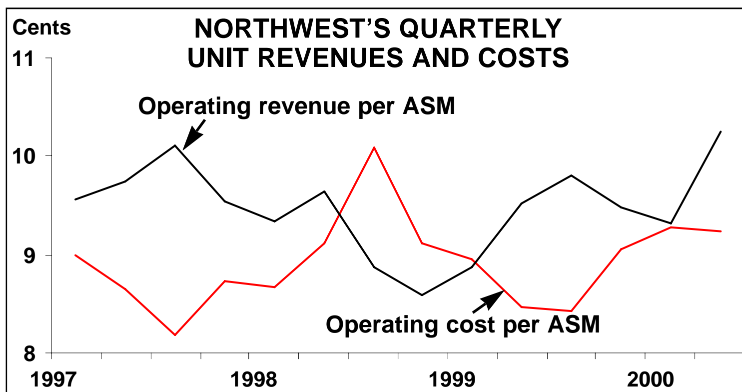
the Asian crisis had a devastating financial impact. After earning $94-97m annual operating profits in Asia in 1995 and 1996, Northwest posted a small $10.5m loss in 1997 and a massive $465.7m loss in 1998. The 1998 Asian loss far exceeded the combined $336.4m operating profit earned in domestic and Atlantic operations.

The carrier contained the crisis by suspending the worst performing routes, cutting capacity and restructuring its network extensively in favour of more nonstop service in business-oriented markets. This and the start of a gradual recovery in Asia (though not in Japan) about 18 months ago helped reduce the Asian operating loss to $135.1m in 1999.

The slump in Japan bottomed out about a year ago. Northwest's Pacific division has been recording RPM growth and yield improvements since the third quarter of 1999. In the past three quarters, revenue growth has been running at around 20% and unit revenue growth at 13-19%. The June quarter saw a record 83.1% average load factor in the Pacific division (up 3.1 points). The carrier said recently that while leisure traffic to and from Japan has recovered well, business traffic has been slow to return.

All of this indicates that Northwest is approaching breakeven and may even return to marginal profitability in Asia this year. It is well-positioned to capitalise on the region's recovery and new opportunities.

Two new market developments are worthy of note. First, Northwest is expanding aggressively on promising new business routes like Detroit-Nagoya, which was introduced in 1998 and will see daily 747-400 flights from next April. Second, it has been expanding service in the Detroit-Shanghai market and is bidding for some of the ten new weekly frequencies available to US carriers next year (with obviously no guarantee of getting any - there are seven carriers in the race).



Like many of its competitors, Northwest has been fortunate to experience healthy or improved conditions simultaneously in all of its regions this year. North American traffic and yields have been extremely strong, while the transatlantic market has staged a surprising recovery. After a long decline, Northwest's unit revenues there rose by 3.5% and 5.3% in the March and June quarters respectively, and passenger revenue surged by 24% in the latest period.

Benefits from freight

Northwest is the only US passenger airline to operate 747 freighters - there are now ten in service after the addition of two last year. Freight has been a strong growth area this year, recording a 25% surge in revenues in the June quarter to account for 7.2% of total revenues.

The reason is the recovery of Asian economies. Northwest's freighter operations cover Tokyo, Osaka, Hong Kong, Shanghai, Taipei, Bangkok, Singapore, Guam and Manila, while the domestic points served are New York, Chicago, Los Angeles, San Francisco, Seattle and Anchorage. The China freighter service, linking Detroit and Shanghai and complementing the passenger service, was introduced in October 1999.

The latest developments include the launch of the Northwest/JAL cargo codesharing alliance last month (September), initially on the US-Japan routes. Also, Northwest has just acquired two more "late-model", ex-United 747-200s, which it is converting from passenger configuration to freighters and expects to place into service in the first half of next year.

Further hub strengthening

Northwest's hubs - Detroit, Minneapolis and Memphis in the US, Narita in Japan and Amsterdam in Europe - are among its great-

est assets and continue to be the focus of expansion and improvement efforts.

Most significantly, Detroit, where Northwest has been growth-constrained for a number of years, will get a new terminal in late 2001 (apparently on time and on budget). The new facility will raise the number of gates from 64 to 99 and will be able to handle 14 widebodies and ten international flights at the same time. The addition of a fourth runway in 2002 will further enhance Detroit's value as a domestic hub.

The other major building project at present is Satellite 3 at Tokyo Narita, where Northwest will move when it is completed (hopefully) in late 2004 or early 2005. The "absolute state of the art facility" has been designed to facilitate Northwest's hub-type operation, which is unique among the foreign operators serving Tokyo.

In June Northwest undertook what it called its largest-ever single service expansion when it launched a fourth bank of flights to fill a late afternoon void at its smallest hub, Memphis. Together with its commuter affiliate Northwest Airlink, the carrier added 47 new flights, representing a 25% increase, mostly to cities already served throughout southern US.

Northwest was able to score valuable points in another of summer characterised by flight delays when FAA statistics for 21 major hub airports showed that Minneapolis, Detroit and Memphis were among the best on-time performers in the June quarter.

Predatory complaints

Northwest was previously lucky in that its route system had minimal exposure to low-cost new entrants. That changed when carriers like Spirit, Sun Country, AccessAir and Pro Air discovered Minneapolis and Detroit. But none of that has posed any threat because of the extent that Northwest dominates its hubs. AccessAir filed for bankruptcy protection in November 1999, while Pro Air has struggled financially and has just been grounded by the FAA for safety violations.

But Northwest now faces a lawsuit filed by Spirit alleging anti-competitive behaviour, partly due to gate dominance, at Detroit.

This is a serious matter that dampens Northwest's otherwise bright prospects.

To make things worse, Minneapolis-based Sun Country has just released a study, prepared by airline competition expert Dr. Paul Stephen Dempsey, that outlines "the history of predatory and monopolistic practices of Northwest Airlines that have driven low-fare carriers from the marketplace and resulted in higher fares". The carrier has called for action from Twin Cities' business leaders and the government.

Fleet plans

Northwest is in the process of gradually simplifying and modernising its fleet, which will include the retirement of its 727s, DC-10-40s and, eventually, the DC-9s (the MD-80s have already been eliminated). The carrier continues to take delivery of regional

NORTHWEST'S FLEET

	In operation	On order
727-200	31	
757-200	48	25
747-200	23	
747-200F	10	
747-400	14	
A319	16	53
A320	70	12
A330		16
DC-9	171	
MD-80	8	
DC-10	45	
Total	**436**	**106**

Source:ACAS

jets, A319s and 757s for expansion.

Previously the intention was to retire the 727-200s in 2002 and 2003 (before their age check), but the process will now start in mid-2001 following a July agreement with Boeing to accelerate deliveries of five 757-200s from 2004 to 2001 and five A320/319s from 2002 to 2001. This will lead to substantial operating cost savings, given the continued escalation of fuel prices.

The A319, which was introduced last year, is also considered to be a good replacement for the DC-9-50. At the other extreme, RJs are also expected to replace some of the DC-9s. Northwest recently took delivery of the last three of 36 ordered AVRO RJ85s and the first of three CRJ-200s due to arrive this year.

This strategy means that the current 171-strong DC-9 fleet may have shrunk to 100-125 by the time those aircraft will have to be retired, which will be when they start nearing the end of their certified life of 105,000 cycles. But Northwest will still need a replacement 100-seater.

The 747s are utilised mainly on the Pacific, though some fly transatlantic sectors between Pacific runs. The long-term plan is to transfer the transatlantic DC-10-30s to the domestic market, and Northwest is currently evaluating possible replacements.

Alliance considerations

One of Northwest's greatest strengths is its longstanding relationship with KLM. It was the first to secure antitrust immunity in the US and it is much more advanced in terms of the extent and depth of coordination than any of the other international alliances.

However, efforts to expand the Wings alliance have not been very successful, which has raised questions about where the Northwest/KLM partnership is really heading. The setbacks include the recent breakup of the KLM/Alitalia relationship, after the three-airline combine had already secured antitrust immunity in the US. What will now happen to Northwest's highly profitable codeshares with Alitalia?

By Heini Nuutinen

Northwest has continued to expand codesharing with Continental, in which it holds a 13.5% stake and 50% voting interest. The carrier says that the alliance generated $30m in additional benefits in the June quarter. But Continental now wants to buy back the stake, and the DoJ lawsuit challenging the 1998 purchase is expected to go to court sometime over the next 12 months.

Northwest's president and CEO John Dasburg provided some interesting insights into the company's strategy and the workings of the Northwest/KLM relationship at a Merrill Lynch conference held in June. Dasburg explained that the two carriers linked up originally because they both found themselves similarly disadvantaged by their medium size and then divided the responsibility of "finding a solution" in their own regions.

KLM will have the final say about Northwest's codeshares with Alitalia because "KLM has the final say in Europe and we have the final say in North America". Dasburg said that KLM would obviously take into account the fact that the healthy profits from the deal go into the joint venture and "will tell us what they'd like us to do with that" before the initial one-year deal comes up for renewal.

The Northwest/KLM agreement has ten more years to run and the airlines are "totally integrated", so Dasburg believes that the alliance will survive any new relationships that the two develop in their respective regions.

Did Northwest ever seriously consider AMR's proposals? It reportedly turned down American's final offer of up to $65 a share as inadequate, demanding at least $100 per share. Dasburg pointed out that while the company is by law obligated to consider attractive offers, embarking on a right strategy (a reference to the KLM alliance) is another way to maximise shareholder value.

Northwest is anxiously waiting for the DoJ's response to the proposed UAL/US Airways merger, because it is a much more integrated transaction than the blocking rights Northwest secured in Continental. If the UAL/US Airways deal is allowed, Northwest believes that the DoJ will withdraw its objection to Northwest/Continental and the two could then apply for and obtain antitrust immunity. Otherwise, Northwest is prepared to defend its strategy in court.

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EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1992	129.6	73.5	56.7	134.5	95.0	70.6	89.4	61.6	68.9	296.8	207.1	69.8	445.8	293.4	65.8
1993	137.8	79.8	57.9	145.1	102.0	70.3	96.3	68.1	70.7	319.1	223.7	70.1	479.7	318.0	66.3
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74.0	334.0	243.6	72.9	503.7	346.7	68.8
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73.0	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72.0
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
July 00	18.8	13.5	71.6	21.1	18.2	86.0	11.8	9.8	83.0	45.2	38.0	84.1	67.5	54.0	80.0
Ann. chng	4.6%	8.8%	2.8	2.5%	7.5%	4.0	2.0%	5.4%	2.6	1.9%	7.0%	4.0	3.0%	7.7%	3.5
Jan-Jul 00	120.2	75.8	63.1	132.0	103.4	78.4	80.3	62.2	77.5	294.6	228.3	77.5	436.8	319.2	73.1
Ann. chng	6.1%	8.2%	1.2	6.5%	9.6%	2.2	3.0%	5.8%	2.1	4.3%	8.4%	2.9	5.1%	8.7%	2.4

Source: AEA.

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total international		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
1992	857.8	536.9	62.6	134.4	92.4	68.7	123.1	85.0	69.0	48.0	27.4	57.0	305.4	204.7	67.0
1993	867.7	538.5	62.1	140.3	97.0	69.2	112.5	79.7	70.8	55.8	32.5	58.2	308.7	209.2	67.8
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62.0	300.3	212.9	70.9
1995	900.4	591.4	65.7	130.4	98.5	75.6	114.3	83.7	73.2	62.1	39.1	63.0	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64.0	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	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
July 00	89.4	70.3	78.6										34.5	28.6	82.8
Ann. chng	1.6%	4.2%	2.0										6.3%	10.6%	3.2
Jan-Jul 00	600.8	436.1	72.6										218.0	167.2	76.7
Ann. chng	3.8%	6.0%	1.5										5.6%	9.4%	2.7

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

ICAO WORLD TRAFFIC AND ESG FORECAST

	Domestic			International			Total			Domestic growth rate		International growth rate		Total growth rate	
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK %	RPK %	ASK %	RPK %	ASK %	RPK %
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**	2,004	1,392	69.4	2,745	1,969	71.8	4,750	3,361	70.8	4.9	7.2	5.6	6.0	5.3	6.5
***2001**	2,100	1,440	68.5	2,907	2,063	70.9	5,009	3,503	69.9	4.7	3.5	5.9	4.7	5.4	4.2
***2002**	2,161	1,463	67.7	3,022	2,119	70.1	5,182	3,582	69.1	2.8	1.6	3.9	2.7	3.5	2.2
***2003**	2,233	1,533	68.7	3,170	2,253	71.1	5,403	3,788	70.1	3.4	4.9	4.9	6.3	4.3	5.8
***2004**	2,317	1,607	69.4	3,332	2,393	71.8	5,651	4,000	70.8	3.7	4.8	5.2	6.2	4.6	5.6

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, July 2000.

DEMAND TRENDS (1990=100)

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

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

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)						Exchange rates (against US$)						LIBOR
	US	UK	Germany	France	Japan		UK	Germ.	France	Switz.	Euro**	Japan	6 month Euro-$
1991	104	106	104	103	103	**1991**	0.567	1.659	5.641	1.434	0.809	134.5	5.91%
1992	107	107	109	106	105	**1992**	0.570	1.562	5.294	1.406	0.773	126.7	3.84%
1993	111	109	114	108	106	**1993**	0.666	1.653	5.662	1.477	0.854	111.2	3.36%
1994	113	109	117	110	107	**1994**	0.653	1.623	5.552	1.367	0.843	102.2	5.06%
1995	117	112	119	112	107	**1995**	0.634	1.433	4.991	1.182	0.765	94.1	6.12%
1996	120	114	121	113	107	**1996**	0.641	1.505	5.116	1.236	0.788	108.8	4.48%
1997	122	117	123	114	108	**1997**	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
1998	123	120	124	115	109	**1998**	0.603	1.759	5.898	1.450	0.896	130.8	5.51%***
1999	125	122	126	116	108	**1999**	0.621	1.938	6.498	1.587	1.010	103.3	5.92%***
***2000**	127	126	127	117	108	**Sep 2000**	0.687	2.222	7.453	1.730	0.880	107.5	6.59%***

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

JET OPERATING COSTS ($/block hour)

Narrowbodies				Widebodies	
727	2629	DC-9	1802	747-200	7193
737-200	1991	MD-80	2140	747-400	6454
737-300	1958	MD-90	3978	767-200	3168
737-400	2111			767-300	3342
737-500	1880	**Regional jets**		777-200	3803
737-700	1396	CRJ	1090	DC-10	4975
737-800	1665	Emb 145	1012	L-1011	5398
757-200	2576			MD-11	4607
A319	2254				
A320	2306				

Source: Airline Monitor Note: Based on 1999 US carriers' returns: Operating costs = Labour, fuel, maintenance (inc. maintenance burden), depreciation and rentals.

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Boeing	Sep 29	Singapore Airlines	10 A3XXs		2006+	Plus 15 options
	Sep 25	Ryanair	3 737-800s		2Q 2002+	
	Sep 8	Air France	4 777-200ERs		2002	Conversion of options/GE 90-94B
Bombardier	Sep 21	Lufthansa CityLine	10 CRJ-700s		1Q 2001	Conversion of options

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

	Group revenue US$m	Group costs US$m	Group operating profit US$m	Group net profit US$m	Total ASK m	Total RPK m	Load factor %	Group rev. per total ASK Cents	Group costs per total ASK Cents	Total pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
American*														
Oct-Dec 98	4,152	3,857	295	182	64,317.3	43,811.6	68.1	6.46	6.00	19,805	9,526.7	5,060.1	53.1	90,460
Jan-Mar 99	3,991	3,954	37	158	62,624.3	41,835.4	66.8	6.37	6.31					
Apr-Jun 99	4,528	4,120	408	268	67,313.8	47,945.9	71.2	6.73	6.12					
Jul-Sep 99	4,629	4,603	547	279	67,972.2	48,792.9	71.8	6.88	6.26					
Oct-Dec 99	4,477	4,206	271	280	65,751.2	44,328.2	67.4	6.81	6.41					98,700
Jan-Mar 00	4,577	4,365	212	132	64,392.8	43,478.4	67.5	7.11	6.78					104,500
Apr-Jun 00	5,011	4,494	517	321	67,000.4	50,538.7	75.4	7.48	6.71					105,900
America West														
Oct-Dec 98	507	470	37	20	10,037.2	6,491.9	64.7	5.05	4.68	4,335	1,261.2	688.1	54.6	11,687
Jan-Mar 99	520	469	51	26	10,135.4	6,485.5	64.0	5.13	4.63	4,263				
Apr-Jun 99	570	494	76	42	10,446.0	7,204.8	69.0	5.46	4.73	4,724				
Jul-Sep 99	553	511	41	22	10,522.9	7,502.8	71.3	5.26	4.86	4,896				
Oct-Dec 99	569	532	37	29	10,594.0	7,307.8	69.0	5.37	5.02	4,822				11,575
Jan-Mar 00	563	552	11	15	10,440.8	6,960.5	66.7	5.39	5.29	4,612				12,024
Apr-Jun 00	618	570	48	33	10,979.8	8,091.7	73.7	5.63	5.19	5,206				12,158
Continental														
Oct-Dec 98	1,945	1,817	128	66	30,557.4	21,273.3	69.6	6.37	5.95	10,637	3,664.5	2,339.0	63.8	41,118
Jan-Mar 99	2,056	1,896	160	84	30,938.8	22,107.0	71.5	6.65	6.13	12,174				
Apr-Jun 99	2,198	1,942	256	137	32,448.3	24,009.1	74.0	6.77	5.98	11,493				
Jul-Sep 99	2,283	2,071	21	110	34,711.0	26,380.3	76.0	6.58	5.97	11,922				
Oct-Dec 99	2,158	2,073	85	33	33,771.2	24,094.4	71.3	6.39	6.14	11,347				
Jan-Mar 00	2,277	2,223	54	14	33,710.2	24,143.0	71.6	6.75	6.59	11,201				
Apr-Jun 00	2,571	2,292	279	149	34,406.9	26,534.0	77.1	7.47	6.66	12,084				
Delta														
Oct-Dec 98	3,448	3,128	320	194	57,810.9	39,947.7	69.1	5.96	5.41	25,531	8,244.1	4,699.3	57.0	76,649
Jan-Mar 99	3,504	3,148	356	216	56,050.3	39,163.9	69.9	6.25	5.62					
Apr-Jun 99	3,957	3,315	642	364	57,957.3	43,422.1	74.9	6.83	5.72	27,438				
Jul-Sep 99	3,877	3,527	350	352	60,710.8	45,528.3	75.0	6.39	5.81	27,183		5,258.2		72,300
Oct-Dec 99	3,713	3,705	8	352	58,265.1	40,495.3	69.5	6.37	6.36	25,739				
Jan-Mar 00	3,960	3,605	355	223	57,093.8	39,404.4	69.0	6.94	6.31	25,093				72,300
Apr-Jun 00	4,439	3,863	606	460	59,753.4	46,509.8	77.8	7.48	6.46	28,333				73,800
Northwest														
Oct-Dec 98	2,212	2,404	-192	-181	37,947.0	26,534.3	69.9	5.83	6.34	12,962	6,125.2	3,588.9	58.6	50,503
Jan-Mar 99	2,281	2,295	-14	-29	37,041.3	26,271.8	70.9	6.16	6.20					
Apr-Jun 99	2,597	2,333	264	120	40,541.5	30,900.2	76.2	6.41	5.75					
Jul-Sep 99	2,843	2,472	370	180	43,194.5	33,562.1	77.7	6.58	5.73					
Oct-Dec 99	2,555	2,461	94	29	39,228.3	28,618.2	73.0	6.51	6.27					
Jan-Mar 00	2,570	2,573	-3	3	39,486.0	28,627.4	72.5	6.51	6.52					
Apr-Jun 00	2,927	2,675	252	115	42,049.6	33,523.5	79.7	6.96	6.36					
Southwest														
Oct-Dec 98	1,047	888	159	100	19,763.0	12,603.4	63.8	5.30	4.49	13,291	2,504.1	1,317.4	52.6	26,296
Jan-Mar 99	1,076	909	167	96	19,944.0	12,949.2	64.9	5.40	4.56	12,934				
Apr-Jun 99	1,220	966	254	158	20,836.9	15,241.7	73.1	5.85	4.64	14,817				
Jul-Sep 99	1,235	1,029	206	127	21,903.8	15,464.0	70.6	5.64	4.70	14,932				
Oct-Dec 99	1,204	1,050	154	94	22,360.7	15,047.8	67.3	5.38	4.70	14,818				27,653
Jan-Mar 00	1,243	1,057	155	74	22,773.8	15,210.2	66.8	5.46	4.77	14,389				27,911
Apr-Jun 00	1,461	1,146	315	191	23,724.3	17,624.9	74.3	6.16	4.83	16,501				
TWA														
Oct-Dec 98	747	813	-66	-79	13,452.4	8,731.6	64.9	5.55	6.04	5,574	1,863.7	982.8	52.7	21,321
Jan-Mar 99	764	802	-38	-22	13,352.4	9,205.2	68.9	5.72	6.01					
Apr-Jun 99	866	848	18	-6	14,274.4	11,130.9	78.0	6.07	5.94					
Jul-Sep 99	876	935	-59	-54	15,188.0	11,524.3	75.9	5.76	6.16	6,928	1,957.0	1,248.6	63.8	20,982
Oct-Dec 99	809	913	-104	-76	14,501.6	9,687.1	66.8	5.58	6.30	6,038				
Jan-Mar 00	954	939	15	-4	15,465.4	11,607.0	75.1	6.17	6.07	7,020				
Apr-Jun 00														
United														
Oct-Dec 98	4,281	4,090	191	54	70,620.9	49,484.4	70.1	6.06	5.79	21,616	10,774.4	6,182.8	57.4	94,903
Jan-Mar 99	4,160	4,014	146	78	67,994.5	46,899.8	69.0	6.12	5.90					
Apr-Jun 99	4,541	4,108	433	669	71,573.6	50,198.9	70.1	6.34	5.74					
Jul-Sep 99	4,845	4,226	619	359	74,043.0	55,628.0	75.1	6.54	5.71	23,765				96,700
Oct-Dec 99	4,480	4,286	194	129	70,715.9	49,172.2	69.5	6.34	6.06	21,536				96,600
Jan-Mar 00	4,546	4,294	252	-99	68,421.1	46,683.5	68.2	6.64	6.28	20,141				96,100
Apr-Jun 00	5,109	4,504	605	408	70,913.5	53,624.8	75.6	7.20	6.35	22,412				98,300
US Airways														
Oct-Dec 98	2,121	1,943	178	104	23,318.8	16,112.3	69.1	9.10	8.33	14,202	3,171.1	1,754.5	55.3	40,664
Jan-Mar 99	2,072	1,983	89	46	22,745.8	15,405.8	67.7	9.11	8.72					
Apr-Jun 99	2,286	2,007	279	317	23,891.7	17,557.5	73.5	9.57	8.40					
Jul-Sep 99	2,102	2,213	-111	-85	23,006.6	17,205.6	71.7	8.76	9.22	13,984				40,613
Oct-Dec 99	2,135	2,256	-121	-81	24,705.9	16,714.2	67.6	8.64	9.13	14,075				41,636
Jan-Mar 00	2,098	2,237	-139	-218	24,250.3	15,568.7	64.2	8.65	9.22	12,804				42,727
Apr-Jun 00	2,433	2,265	168	80	26,171.9	19,557.4	74.7	9.30	8.65	15,554				42,653
ANA														
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	4,541	4,329	212	146	44,156.0	29,032.0	65.7	10.28	9.80	21,970				
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	5,591	5,842	-251	6	49,646.9	31,844.9	64.1	11.26	11.77	27,430				
Apr-Jun 00														
Cathay Pacific														
Oct-Dec 98	1,769	1,713	56	-45	31,367.0	21,173.0	67.5	5.64	5.46		5,649.0	3,847.0	68.1	
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,695	1,664	31	17	28,801.0	19,325.5	67.1	5.89	5.78		5,267.0	3,581.6	68.0	
Jul-Sep 99	SIX MONTH FIGURES													
Oct-Dec 99	1,989	1,658	331	133	29,313.0	22,167.9	75.6	6.79	5.66		5,600.0			
Jan-Mar 00	SIX MONTH FIGURES													
Apr-Jun 00	2,070	1,765	305	285	29,839.0	22,588.1	75.7	6.94	5.92		5,483.0			
JAL														
Oct-Dec 98	TWELVE MONTH FIGURES													
Jan-Mar 99	14,555	14,249	305	249	123,097.8	84,092.9	68.3	11.82	11.58	35,492	18,405.3	11,890.4	64.6	
Apr-Jun 99														
Jul-Sep 99														
Oct-Dec 99	TWELVE MONTH FIGURES													
Jan-Mar 00	14,665	14,254	411	181	126,282.4	88,478.5	70.1	11.61	11.29	37,247	18,856.7	12,738.0	67.6	
Apr-Jun 00														

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

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US$m	US$m	US$m	US$m	m	m	%	Cents	Cents	000s	m	m	%	
Korean Air														
Oct-Dec 98	4,109	3,834	275	266	47,931.0	32,276.0	67.0	8.57	8.00	19,714	6,682	5,225	76.6	
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99	TWELVE MONTH FIGURES													
Oct-Dec 99	4,340	4,177	163	232	49,516.0	36,693.0	74.0	8.76	8.44	20,564	7,827	5,995	78.2	
Jan-Mar 00														
Apr-Jun 00														
Malaysian														
Oct-Dec 98	TWELVE MONTH FIGURES													
Jan-Mar 99	1,966	1,556	410	-183	45,442.3	30,592.9	67.3	4.33	4.97	13,709	6,649.0	4,030.0	60.6	
Apr-Jun 99														
Jul-Sep 99														
Oct-Dec 99	TWELVE MONTH FIGURES													
Jan-Mar 00	2,148	1,652	496	-67	48,906.0	34,930.0	71.4	4.39	3.38		7,531.5	4,853.4	64.4	
Apr-Jun 00														
Singapore														
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	2,421	2,130	291	341	41,725.5	30,843.7	74.9	5.80	5.10	6,537	7,958.5	5,540.3	69.6	
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	2,577	2,259	317	346	43,145.7	32,288.3	74.8	5.97	5.24	6,752	8,251.9	5,852.7	70.9	
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	2,459	2,203	256	439	44,582.6	33,430.1	75.0	5.51	4.94	7,030	8,665.8	6,185.7	71.4	
Apr-Jun 00														
Thai Airways														
Oct-Dec 98														
Jan-Mar 99														
Apr-Jun 99	TWELVE MONTH FIGURES													
Jul-Sep 99	2,858	2,695	163	136	51,788.0	37,642.0	72.7	5.52	5.20	16,331	7,309.0	5,097.0	69.7	
Oct-Dec 99														
Jan-Mar 00														
Apr-Jun 00														
Air France														
Oct-Dec 98	SIX MONTH FIGURES													
Jan-Mar 99	5,550	5,552	-2	56	51,394.0	38,242.0	74.4	10.80	10.80					
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	5,249	4,889	360	316	56,934.0	43,896.0	77.1	9.22	8.59	20,600				
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	4,831	4,430	401	41	55,508.0	41,650.0	75.0	8.70	7.98	19,200				
Apr-Jun 00														
Alitalia														
Oct-Dec 98	5,152	4,432	720	235	51,638.4	35,427.2	68.8	9.98	6.86	24,103			18,825	
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	2,074	2,132	-58	-14										
Jul-Sep 99														
Oct-Dec 99														
Jan-Mar 00														
Apr-Jun 00														
BA														
Oct-Dec 98	3,585	3,431	154	-114	44,454.0	29,736.0	66.9	8.06	7.72	10,747	6,277.0	4,111.0	65.5	64,608
Jan-Mar 99	3,343	3,481	-138	-119	43,544.0	29,537.8	67.8	7.68	7.99	10,285	6,130.0	3,933.0	64.2	64,366
Apr-Jun 99	3,527	3,378	149	302	45,813.0	32,032.0	69.9	7.70	7.37	11,733	6,437.0	4,215.0	65.5	65,179
Jul-Sep 99	3,933	3,742	191	49	47,465.0	35,873.0	75.6	8.29	7.88	12,983	6,690.0	4,689.0	70.1	65,607
Oct-Dec 99	3,473	3,476	-3	-112	45,347.0	30,192.0	66.6	7.66	7.67	11,084	6,469.0	4,270.0	66.1	65.800
Jan-Mar 00	3,097	3,281	-184	-247	44,533.0	29,328.0	65.9	6.95	7.37	10,778	6,253.0	4,041.0	64.6	64,874
Apr-Jun 00	3,488	3,342	146	-85	44,826.0	32,295.0	72.0	7.78	7.46	11,633	6,475.0	4,407.0	68.1	61,411
Iberia														
Oct-Dec 98	4,451	4,100	351	356	45,041.6	32,520.0	72.2	9.88	9.10	21,753		3,740.0		22,065
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99	TWELVE MONTH FIGURES													
Oct-Dec 99	3,712	3,659	53	179	50,227.6	34,606.8	68.9	7.39	7.28	21,877				
Jan-Mar 00														
Apr-Jun 00														
KLM														
Oct-Dec 98	1,673	1,661	12	-15	18,476.0	13,767.0	74.5	9.05	8.99		3,214.0	2,415.0	75.1	33,761
Jan-Mar 99	1,550	1,670	-120	-45	17,716.0	13,294.0	75.0	8.75	9.43		3,088.0	2,284.0	74.0	33,892
Apr-Jun 99	1,626	1,547	79	37	18,778.0	14,302.0	76.2	8.66	8.24		3,253.0	2,427.0	74.6	34,980
Jul-Sep 99	1,731	1,596	135	32	19,630.0	16,083.0	81.9	8.81	8.13		3,352.0	2,640.0	78.8	35,226
Oct-Dec 99	1,450	1,479	-29	-17	19,014.0	14,434.0	75.9	7.63	7.78		3,280.0	2,550.0	77.7	35,128
Jan-Mar 00	1,361	1,436	-75	-142	18,627.0	14,084.0	75.6	7.31	7.71		3,238.0	2,453.0	75.8	35,348
Apr-Jun 00	1,600	1,509	91	39	18,730.0	15,149.0	80.9	8.54	8.06		3,276.0	2,549.0	77.8	27,267
Lufthansa***														
Oct-Dec 98	2,929	2,106	823	96	25,530.0	18,259.0	71.5	11.47	8.25	9,819	5,204.0	3,676.0	70.6	55,368
Jan-Mar 99	3,301	3,210	91	64	25,445.0	17,942.0	70.5	12.97	12.62	9,658	4,972.0	3,435.0	69.1	56,420
Apr-Jun 99	3,322	3,012	310	97	30,500.0	22,279.0	73.0	10.89	9.86	11,444	5,626.0	3,993	71.0	53,854
Jul-Sep 99	4,049	3,677	382	184	31,335.0	23,866.0	76.2	12.92	11.73	11,891	5,699.0	4,142.0	72.7	
Oct-Dec 99	3,398	2,964	434	378	29,120.0	20,313.0	69.8	11.67	10.18	10,807	5,503.0	3,930.0	71.4	66,207
Jan-Mar 00	2,831	2,742	89	11	28,599.0	19,781.0	69.2	9.90	9.59	10,355	5,422.0	3,751.0	69.2	
Apr-Jun 00	4,159	3,935	223	400	31,865.0	24,405.0	76.6	13.05	12.35	12,249	5,988.0	4,338.0	72.4	
SAS														
Oct-Dec 98	1,368	1,266	102	46*	8,116.0	5,089.0	62.7	16.86	15.60	5,431				27,071
Jan-Mar 99	1,203	1,227	-24	-3*	8,062.0	4,713.0	58.5	14.92	15.22	5,017				27,110
Apr-Jun 99	1,357	1,294	63	60*	8,466.0	5,571.0	65.8	16.03	15.28	5,580				27,706
Jul-Sep 99	1,173	1,150	23	12*	8,450.0	5,667.0	67.1	13.88	13.61	5,589				27,589
Oct-Dec 99	1,210	1,083	127	138*	8,227.0	5,210.0	63.3	14.71	13.16	5,536				
Jan-Mar 00	1,145	1,179	-34	-33*	8,253.0	4,992.0	60.5	13.87	14.24	5,314				28,060
Apr-Jun 00	1,289	1,176	113	112*	8,492.0	70.7	15.18	13.85	13.85	6,236				28,295
Swissair**														
Oct-Dec 98	2,187	2,070	117	165	20,476.8	15,391.3	75.2	10.68	10.11	5,277				10,396
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,932	1,877	55	57	23,411.0	16,130.0	68.9	8.25	8.02	7,784				10,715
Jul-Sep 99	SIX MONTH FIGURES													
Oct-Dec 99	2,344	2,272	72	125	21,934.0	16,839.0	76.8	10.69	10.36	6,081				
Jan-Mar 00	SIX MONTH FIGURES													
Apr-Jun 00	1,916	2,006	-90	2	25,476.0	18,241.0	71.6	7.52	7.87	9,162	3,972.8	2,719.6	68.5	

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

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