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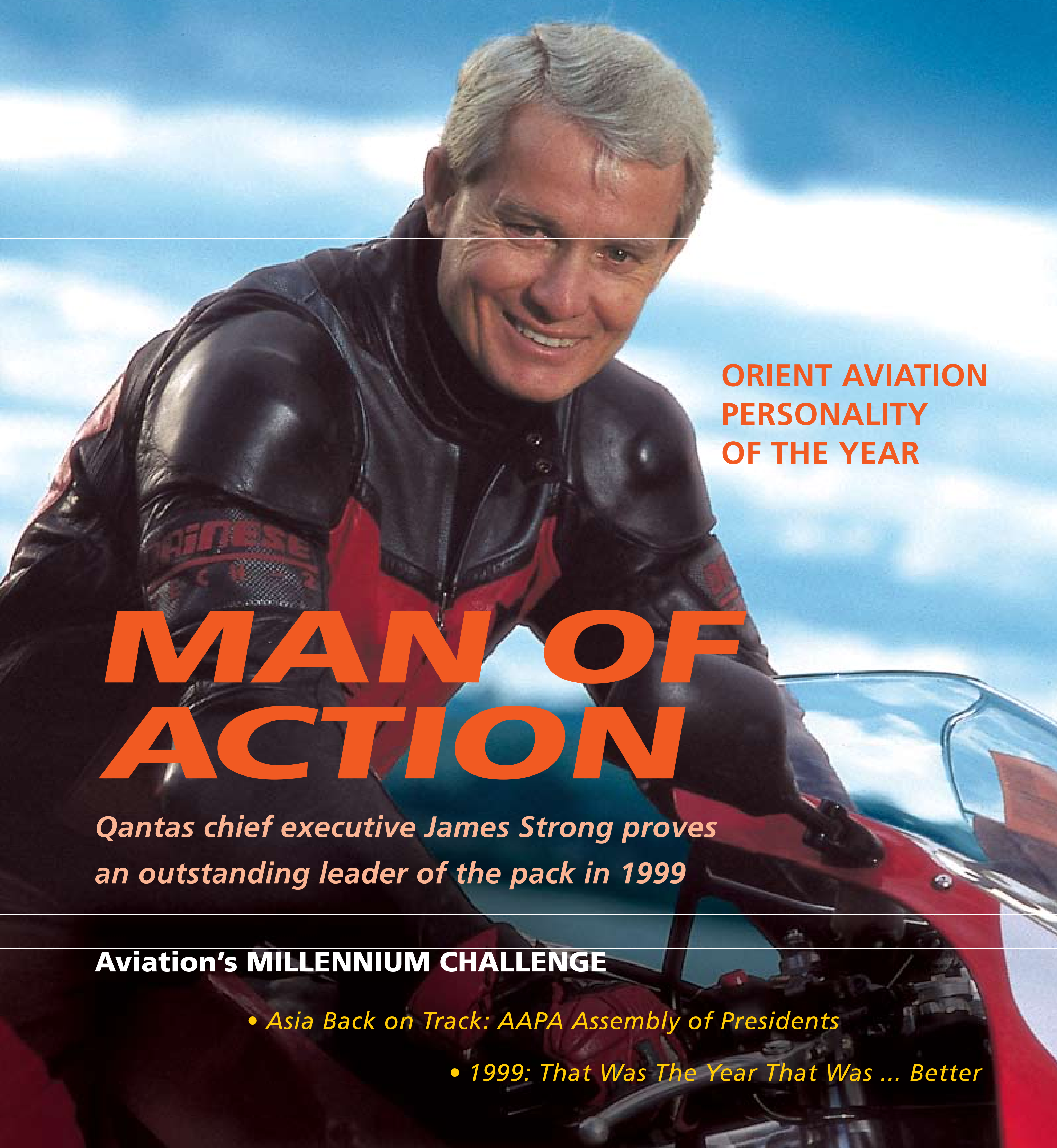

ORIENT AVIATION PERSONALITY OF THE YEAR

MAN OF ACTION

Qantas chief executive James Strong proves an outstanding leader of the pack in 1999

Aviation's MILLENNIUM CHALLENGE

- *Asia Back on Track: AAPA Assembly of Presidents*
- *1999: That Was The Year That Was ... Better*

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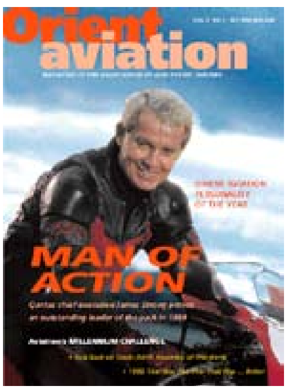
A Profile



Exclusive cover picture: Stuart Davidson

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SPECIAL REPORT

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INFLIGHT ASIA

A 16-page pull-out dedicated to onboard services and technology. In this issue: Korean Air's charm school; Live TV: will it succeed on board?; Qantas food consultant airs his views on premium catering; IFCA/IFSA conference in Sydney: special report; Network: industry news.

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NEW MILLENNIUM, NEW HOPE

We wrote on this page 12 months ago: "... there are signs that possibly, just possibly, (Asia) has turned the corner". We were, of course, referring to the region's worst ever economic downturn.

No one then would have been game to publicly predict the positive developments in the industry, and the region's economies, that have taken place since then.

It is true the Association of Asia Pacific Airlines (AAPA) member carriers posted another poor collective financial report for the 12 months to last March 31. The figures published in late November (details page 34), are no surprise.

And although there were already positive signs of economic improvement early in 1999, it has been the speed of the recovery in the last nine months that has taken people by surprise. Aided by the strengthening economies of their respective countries, most airlines have been reporting increases in passenger and freight traffic and a number of them are recording healthy bottom line results.

Low yields are still a concern, as are rising fuel prices. But what stands out in the AAPA's latest financial report is how effectively the airlines have cut costs and controlled capacity. So even though their operating profit was down 50% on 1997-98, drastic cost savings enabled association members to record a net profit of US$18.6 million this year, compared to a loss of $1.2 billion in 1997-98.

Without exception, the airlines of the region have turned themselves inside out, taking many tough and unpopular decisions to avoid big losses or, for some, the threat of going out of business.

And while the industry is not out of the woods yet, soon airline management will look back on 1997-1999 and say: 'we are better for the experience'.

The airlines of the Asia-Pacific can now face the new century with optimism and a new-found confidence. When the next downturn comes, as it must, they will be better prepared to handle any eventuality, thanks to the events of the last 30 months.

On this upbeat end to the year, *Orient Aviation* wishes its readers a Merry Christmas and a Happy New Year. To those who have endured the roller-coaster ride of the recession, modest celebrations are well deserved.

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Publisher/Managing Editor

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PRESSURE: Shen Yuankang, deputy director of the Civil Aviation Administration of China (CAAC), told a Shanghai gathering of 100 of the nation's aviation elite that China is preparing to open direct transport routes from the mainland to Taiwan, a policy not yet reciprocated by the Taipei political leadership. But Taiwanese airlines have sent more than 1,200 of their staff to the mainland for training in recent years and the mainland, in turn, has organised 32 official delegations to the island state. Have we not heard all this before? The Taiwanese Government is the big nut to crack before the first cross-strait flight takes off.

DISGRACED: The long-term leadership succession at Korean Air is in limbo following the guilty pleas of the flag carrier's chairman, Y. H. Cho, on charges of multi-million dollar tax evasion. Mr Cho faces a possible prison sentence of five years in an investigation his defenders allege was vigorously supported by the country's reforming president.

REVIVED: The quasi-official China Aviation Development Foundation, which owns 71.5% of Taiwan's flag carrier, China Airlines, (CAL) is pushing ahead with its plans to sell a 25% stake in the airline. Rumoured buyers are either the Star or oneworld alliances, in a deal being brokered by Salomon Smith Barney, and intended for consummation by December. Last January Singapore Airlines (SIA) called off talks aimed at acquiring a 25% stake in CAL, reportedly over issues of management control. Since then, SIA has announced it will join Star next April. In November, CAL raised its pre-profit forecast by 62%, to NT$2.8 billion (US$903.2 million), attributing the increase to improved cargo performance and a US$28.4 million insurance payment for the August crash of an MD-11 in Hong Kong. The accident took three lives.

BRAVADO: Air China boss, Wang Li'an, a professional pilot for 41 years, and his deputy, Zhang Fugui, who has been flying commercial aircraft for 38 years, will fly two Air China airplanes on domestic mainland routes at the turn of the decade, to dispel doubts about China's Y2K preparedness. The country's government news agency, Xinhua, reports Captain Wang will pilot his airplane 2,000 km, from Shenzhen to Beijing, on January 1. Mr Zhang will fly to Beijing from a city in China on December 31. Not to be outdone China Southern Airlines (CSA) president, Yan Zhi Qing, will be on board a CSA flight from Guangzhou to Los Angeles at midnight on New Year's Eve. All together, CSA will have four senior executives in flight on different domestic and international flights at rollover time.

PAL BONDING: *Ugnayan* – Tagalo for one-to-one communication – is a linchpin of the management style of Avelino Zapanta, the president and CEO of Philippine Airlines (PAL) for the last five months. Mr Zapanta, a PAL veteran, came out of retirement to take on one of the hottest jobs in the region, at the request of chairman Lucio Tan. His *Ugnayan* policy, which aims to improve staff morale by open discussion, has kept him busy. He personally conducts every session, complaints and all, and most recently held an U.S. *Ugnayan* with his New York staff. The bonding sessions are now being extended to PAL's business partners and government associates. Mr Tan has yet to join Mr. Zapanta on his Ugnayan crusades.

Avelino Zapanta, the president and CEO of Philippine Airlines: talking up a revival

IN THE PINK: United Airlines (UAL), the world's largest commercial carrier, has been voted one of the top 25 companies for gay and lesbian employees. *The Advocate*, a well-respected gay and lesbian news magazine has included UAL in its annual list because of the carrier's recent decision to offer domestic partner benefits to its non-heterosexual staff. American Airlines also made it into the top 25 for following UAL's example on domestic partner travel benefits. Et tu? Cathay, SIA, MAS and THAI et al.

UP, UP AND UP: Those in the know told *Orient Aviation* recently that Boeing China Inc.'s popular president, Ray Bracy, is destined for greater things. They said he is one of "the chosen few" of about half a dozen people at Boeing viewed by the top as contenders for the top. The *very* top.

Well, now he is stepping onto the next rung up the ladder. Although not official, it is said Mr Bracy will be soon be heading to Washington D.C. to take up the post of vice-president of government affairs for the Boeing Commercial Airplane Group.

He has created an excellent impression in the region during his 18 months in Beijing, so much so that those in the Boeing China office will be sorry, very sorry, to see him go.

Meanwhile, a replacement is expected to be announced soon for Rolf Rue, Airbus Industrie's former China chief, who returned to his British Aerospace roots in the UK a few weeks ago. Expect another British Aerospace man to fill Rolf's vacant chair.

CHANGING STATES: The offices of the Association of Asia Pacific Airlines (AAPA) will move from Manila in the Philippines, to Kuala Lumpur, Malaysia in the first half of 2000, it was announced at the 43rd Annual Assembly of 19 AAPA member airline bosses in Tokyo. AAPA director general, Richard Stirland, said it had been decided to move the Secretariat for "administrative reasons". Formerly known as the Orient Airlines Association, the group has been based in Manila since it was set up in the mid-1960s.

RIGHT STUFF: Indonesia's new president, Abdurrahman Wahid, saved his country US$148,000 when he shunned the presidential jet and took a commercial Garuda Indonesia flight, part of the way (to Tokyo) for his meeting with U.S. president, Bill Clinton. He was unable to "fly Indonesian" across the Pacific Ocean and onto Washington because Garuda has dropped its loss-making U.S. services. The flight was an important 'statement' by the president. In the past, sources told *Orient Aviation*, legislators and civil servants have tended to opt, whenever possible, for the award-winning inflight service of Singapore Airlines out of Jakarta, rather than their flag carrier – all at tax payers' expense, of course.

DUTY FREED: In an accelerated campaign to improve the loss-making performance of the new Hong Kong International Airport, the facility's operator, the Airport Authority, has introduced incoming duty free sales from November, a service already offered on a limited basis at Singapore's Changi International Airport and Sydney's Kingsford Smith Airport, where the shops generate healthy profits.

REGIONAL ROUND-UP

Korean Air wins its stripes back from U.S. DoD

The U.S. Department of Defense (DoD) has re-instated Korean Air (KAL) in its Air Transportation Programme, eight months after the Korean flag carrier was removed because of its recent poor accident record. DoD informed KAL of its re-admission on November 25, in a decision which will return considerable business to the airline because of the large U.S. troop and strategic presence in South Korea.

In May, after a series of accidents and near-misses, and a ban on new routes by its government, KAL's U.S. partners drew back from their code-shares with the carrier and the DoD decided it would no longer authorise its personnel to travel aboard KAL.

The airline took the message to heart and implemented a multi-million dollar revamp of its flight training and safety procedures, including bringing in outsider, FlightSafety Boeing Training International, to test and retrain its flight crews. In May, the airline presented its new regime to the DoD's Commercial Aircraft Review Board (CARB). There was a second inspection in October by CARB officers. "The U.S.'s DoD were impressed with our vigilance towards safety and the improved training and checking programmes we have instituted," said KAL's president, Y. T. Shim.

The good news was eroded by the release of a U.S. National Transportation Safety (NTSB) report, which blamed the crash of a Korean Air B747-300, in Guam, in August, 1997 on pilot error. The accident, "a classic Controlled Flight Into Terrain (CFIT) hull loss", according to the NTSB, claimed the lives of 229 of the 254 passengers onboard. Investigators said the airline, the Korean Civil Aviation Bureau and the U.S. Federal Aviation Administration all contributed to the accident.

Virgin move rattles airline stock 'Down Under'

IN late November, Britain's Richard Branson, chairman of Virgin Atlantic Airways, announced he intends to launch a no-frills airline in Australia and claims he does not see his plans facing any political hurdles. Pictured in all major Australia media gripped in a smiling handshake with conservative Australian prime minister, John Howard, the billionaire announced he

Virgin Atlantic Airways: Boss Richard Branson hoping to form no-frills airline in Australia

hoped to start Virgin Australia in mid-2000 and that the company could be listed on the Australian stock exchange.

He added if Rupert Murdoch "rings him up and says he wants to sell it (his 50% share in Ansett Australia), I'd be happy to talk to him".

Earlier in the month, Mr Murdoch said the price of Ansett had doubled to A$1 billion. Shares in Australia's largest carrier, Qantas Airways, fell 15%, the biggest decline since the company was privatised in 1995, when the news broke of the planned airline. Investors also shaved about 3% from Ansett Australia's share price. Mr Branson said at least 50% of all fares on Virgin Australia would cost up to 80% less than those set by Qantas and Ansett in the domestic market.

Results boost for THAI equity sell-off

THAI Airways International (THAI), continues to keep its suitors' corporate hearts aflutter as it contemplates a reported list of eight airline buyers for the 23% plus stake of the carrier it will put up for sale early in 2000.

The announcement of its 1998-99 financial results to September 30 will do the carrier no harm at all.

THAI reported consolidated net profit rose 35% to 5.31 billion baht (US$136.3 million), from 3.93 billion baht a year earlier. The airline said the increase was largely down to rising freight income and "other activities".

THAI's enthusiastic institutional and airline investor interest is expected to push up the price of the deal. However, analysts closely associated with the proposed sale say repeatedly that THAI and the Thai Government, its 93% owner, want a good strategic partner as well as a good price.

In the meantime, Lufthansa German Airlines' executive vice-president alliances, Friedel Rodig, said in Hong Kong that Beijing-based Air China was top of Star's list in its search to sign up a mainland Chinese partner. However, Lufthansa chairman, Jurgen Weber, is on record as saying it could take two to three years before the Chinese airlines are ready to join the major alliances.

Latest from the direct flights rumour mill

AS mentioned in *Perspective*, the question of direct flights between China and Taiwan re-emerges from time to time, usually inspired by those with most to gain.

But the latest rumour is that China is likely to open Shanghai, Xiamen and Guangzhou airports for direct air links with Taiwan. But what is most interesting is that Hong Kong-based Dragonair and Macau-based Air Macau are tipped to be the first airlines to serve the direct routes.

Macau returns to Chinese sovereignty in December and Hong Kong returned to the China fold in 1997.

Currently, the two carriers are flying 'direct' between China and Taiwan via their respective home bases, with only a change in flight number. It is expected under the new plan that the same practices would apply. The two airlines would fly from Macau and Hong Kong to the mainland, change flight numbers, and fly on to Taiwan.

Dragonair eyes larger share of network pie

PARTIES to the present air service agreement between the Special Administrative Region (SAR) of Hong Kong and mainland China are pressuring the two governments to have it re-written, with Dragonair winning rights to fly more services into China. It also is thought Dragonair might be granted more regional routes – in some sort of regional/China route swap – with the airline which once held its majority ownership, Cathay Pacific Airways. A new air services agreement is expected to be announced soon.

Ansett, ANZ launch joint engineering venture

STAR Alliance partners, Air New Zealand (ANZ) and Ansett Australia have formed a joint venture engineering company, Ansett Australia and Air New Zealand Engineering Services, and appointed a U.S. aviation engineering expert, William (Bill) E. Jacobson as chief executive.

The partners expect their combined maintenance, repair and overhaul (MRO) business to deliver US$80 million in benefits to their bottom lines within five years.

"The financial plan for the business indicates the equity value of Ansett Australia and Air New Zealand Engineering Services could reach A$1 billion (US$650 million)," said ANZ managing director, Jim McCrea.

The company intends to use existing facilities in New Zealand and Australia to create a world-class MRO business.

Mr Jacobson has more than 27 years aerospace sector experience, and has worked with GE Engines, Textron Lycoming and AlliedSignal Aerospace. Most recently he was vice-president and general manager of aviation after-market service at AlliedSignal.

Mr McCrea said the new joint venture will transfer work equitably across the Tasman, in both directions, with sites specialising in particular product lines, achieving economies of scale and sharing best work practices.

It is expected third-party work will increase from 1.2 million productive hours to 2.6 million hours within five years.

Ansett Australia executive chairman, Rod Eddington, said the potential for growth through access to increased third party work makes the combined engineering service a critical element in the business plans of both airlines.

There are no plans to reduce staff. Ansett has 2100 engineering staff and ANZ 2300.

Rising costs to delay new Thai airport

THE Bangkok international airport at Nong Ngu Hao is unlikely to be completed on schedule, in 2004, because of increasing costs and delays caused by vacancies on the executive board in charge of the project, a source said yesterday.

The delay could be at least a year. This was a cause of increasing concern, the source at New Bangkok International Airport Co (NBIA) said.

The estimated cost of the passenger terminal has risen to 70 billion baht (US$1.82 billion) from 40 billion baht because of its resplendent glass roof.

First year success for Sydney Airports

IN its first full year of operation, the Sydney Airports Corporation (SAC) has announced a US$31.5 million operating profit on revenue of $198 million, earned after a 1.5% increase in passenger movements and an impressive 15% lift in retail business.

International traffic rose 4.3%, despite ongoing economic problems in the rest of Asia.

The four airports in the Sydney basin region – Sydney (Kingsford Smith), Bankstown, Hoxton Park and Camden – were operated by Australia's Federal Airports Corporation until July 1998, when SAC commenced trading as a stand-alone business.

"This result demonstrates the group's ability to succeed in a corporatised environment and a very difficult aviation market," said SAC chief executive, Tony Stuart.

Sydney's airports are the only Australian facilities not yet privatised. The delay has been caused by continuing controversy over the site of a proposed second major airport.

Traffic surge for Korean carriers

KOREAN Air and Asiana Airlines carried 26.7 million passengers between January and October, an 11.6 percent increase over the same period of 1998, according to the Ministry of Construction and Transportation. International passengers totalled 9.2 million, a 100.3% jump. Passengers on domestic services were 17.5 million, up 80.5%.

According to the ministry, foreign airlines carried 4.68 million passengers to and from Korea, an improvement of more than 20%.

New licences

'ill-timed'

DESPITE a lack of profitability among existing Indonesian operators, at least three charter carriers are preparing to launch flights as scheduled airlines on domestic routes.

Two of them, Indonesia Airline Aviapatria (IAA) and Pelita Air Services, have been granted licences to operate scheduled services and an application from the third, Mentari Airlines, is under consideration.

However, the Indonesian National Air Carriers Association (INACA) has described the issuing of new licences as "ill-timed".

The secretary-general of INACA, Bachrul Hakim, said existing scheduled airlines were still struggling to recover from Asia's economic crisis.

Mr Bachrul, the commercial director of Garuda Indonesia, said the sharp depreciation of the rupiah against the U.S. dollar has badly hurt the industry.

"Airlines still suffer losses even when they fly with full capacity because the yields are not adequate to cover the aircraft lease fee alone."

He said the government should have cared more about the financial problems currently facing the existing scheduled airlines.

Although he did find the new licences acceptable if the airlines are to operate on routes left unserved following the bankruptcy of Sempati Air and the reductions of flights by other airlines.

The government's aviation department said the 1998 level of 6.5 million domestic passengers is expected to decline about 13% this year. Scheduled airlines last year had a total fleet of 163 aircraft, but only 93 were in operation, with the overall number dropping to 145 this year, of which 104 are flying.

Their combined seat capacity in 1999 is expected to total 10.5 million, compared with 15 million in 1998 and 25 million in 1997.

GE to add ANA to its partners' list

ENGINE giant's GE Aircraft Services has signed a Memorandum of Intent with All Nippon Airways (ANA) and Ishikawajima-Harima Heavy Industries (IHI) to acquire a controlling interest in the Japanese companies' aircraft engine maintenance partnership, which will operate an aircraft component repairs workshop in Yokoshiba, Japan from next April. GE Engine Services, with its international network of overhaul and repair facilities in Xiamen, Singapore, Kuala Lumpur and several European, U.S. and Latin American centres, had record revenue of more than US$5 billion in 1999, company spokesman Rick Kennedy said.

Deals

THE operator of Singapore's Changi International Airport, Singapore Changi Airport Enterprise, confirmed in November it recently paid US$44.6 million for a 7.1% stake in the listed New Zealand company, Auckland International Airport. It was the Singapore company's first offshore strategic investment. Cathay Pacific Airways signed off the leases on two of its B747-200s to Air Atlanta Icelandic for two years from October 31, bringing the Cathay planes now with the Nordic airline to four B747-200s. Meanwhile, it is believed the Hong Kong carrier is in serious discussions with Pakistan International Airlines after the airline told Cathay Pacific in November it wanted an early release from its deal on five leased Cathay aircraft. Korean Air will send its six CF-60 engines to Lufthansa Technik for overhaul over the next five years.

Asiana Airlines: is sharing a traffic boom with its Seoul-based rival Korean Air

Japan Airlines (JAL) plans to float four of its subsidiaries in the next four years and also will launch its 100%-owned JAL Sales Network Company Ltd, in April, after its formal establishment in December.

Ansett suspends, Mandarin adds

ANSETT International will suspend its three times a week Sydney-Taipei services from February 12, because of declining yields. The airline is losing heavily on the Taiwan route which was launched four years ago. Fifteen staff will lose their jobs. In December, Ansett increased its Hong Kong-Sydney service from five flights a week to daily services.

Taiwan's Mandarin Airlines launched flights to Burma in November, its first international service since it merged with Formosa Airlines in August. Management said the three weekly flights between Taipei and Rangoon are aimed at tapping into tourism opportunities in Southeast Asia. Mandarin, majority owned by international carrier, China Airlines, will gradually withdraw its long-haul routes to Australia and Canada.

Routes, code-shares

AIR Macau has commenced two A320 flights a week from Macau to Seoul and three flights a week to mainland tourist mecca, Guilin. Ansett Australia began cross-Pacific code-shares with Star Alliance partners, Air New Zealand – to Los Angeles – and United Airlines – to Los Angeles, San Francisco, New York, Boston, Chicago and Washington – from November 15. Canadian Airlines has dropped its flights to Manila and Hong Kong but will maintain a service on the route with its code-share with Cathay Pacific Airways. EVA Air began its code-share with American Airlines on November 21, bringing the number of partners the second Taipei international carrier has to nine. Korean Air has launched new twice-weekly services from Hong Kong to the Korean island resort of Cheju and from Seoul to Cairo, Egypt. U.S. carrier Northwest Airlines will start non-stop flights between Shanghai and one of its major hubs, Detroit, in the U.S. next April, carrying an Air China flight code. Malaysia Airlines (MAS) and Alitalia are operating together on the Rome-Kuala Lumpur route, while the Malaysia flag carrier has a new code-share with Korean Air, offering direct Kuala Lumpur-Seoul services twice a week. Until October 31, Korean Air flew to the Malaysian capital via Singapore. In January, MAS will add another flight between the countries' capitals, which will bring the MAS flights to Seoul to five a week. MASkargo has started operating three all-cargo (B747-200F) flights a week from Kuala Lumpur to Macau. In response to revived demand, United Airlines will resume its Hong Kong-Singapore service from February 16, after the region's Lunar New Year holiday. Thai Airways International started flying to Danang, Vietnam, three times a week, from November.

As aviation enters 2000 it faces the toughest challenges of its relatively short history. The first decade of the 21st century promises to be a watershed; a period of re-adjustment as airlines, airports, air traffic services, governments and regulators come to terms with new operating realities.

As the dawn of this new century approached, **TOM BALLANTYNE** *flew round the world to discover the views of some of aviation's key players as they prepare for this metamorphosis.*

MILLENNIUM WATERSHED

Critical challenges must be addressed world-wide if the industry is to keep pace with break-neck travel growth in the next century

In the past two months *Orient Aviation* has listened to dozens of aviation industry leaders around the world as they addressed key conferences or spoke individually about the unparalleled challenges the industry will face during the next few years.

They are worried. They believe it is crucial urgent steps are taken to resolve the raft of issues threatening the future viability of an industry that carries more than 1.25 billion passengers across our skies every year, provides jobs world-wide for some 24 million people and is worth in excess of US$1,200 billion in annual gross output.

Indeed, by 2005, air travellers will total more than 2.5 billion annually. By 2010 the industry's economic impact should amount to US$1,800 billion and will provide more than 33 million jobs.

The players are deeply concerned this growth is threatened because, in Europe and North America, the air traffic system is in crisis and is failing dismally to keep pace with traffic increases. They wonder from where the billions of dollars needed to improve infrastructure across the globe, will come.

Airline managements realise they are being confronted with new technology, which is arriving at an ever more blinding speed. It is changing the way they do business and how they interact with customers.

Airline alliances seem to be here to stay. Their emergence is quietly dismantling traditional operational norms and they are developing in such complex directions that even their members are not sure where they will ultimately lead.

As carriers struggle to find ways of stemming continuing yield decline, they are being asked to spend more and more on new systems, such as Communications Navigation Surveillance/Air Traffic Management (CNS/ATM), yet some air traffic service providers are failing to meet their end of the bargain in upgrading infrastructure.

There is a growing realisation, too, that if new fiscal efficiency is to be fostered, infrastructure elements such as airports and ATS will need to be privatised, but also they will need to be controlled to ensure a greed for profits does not overcome the necessity for a uniform, stable and reliable system.

On the safety front, in an industry which undisputedly provides the safest form of transport known to man, there is constant public demand to make it even safer.

And the rules which govern airline operations are coming under increasing pressure, with the World Trade Organisation (WTO) now turning its attention to aviation as the aeropolitical atmosphere in which the entire system breathes grows ripe for reform.

Has the Chicago Convention, aviation's Holy Grail, outlasted its use-by date? There is an increasing tide of opinion – at least in the West – for market reconstruction and for multilateralism to replace bilateralism.

But balancing the needs and demands of shareholder driven capitalism with the understandable nervousness of a slowly developing Third World promises to be the greatest challenge.

Even giants like China, still emerging from decades of socialism, fear the pace of change may outstrip its capacity to cope with it, while small players are nervous as the giants of the industry push through reform which could put them out of business.

Whether or not the players – from diverse nations and industry sectors – and which have their own agendas, can find co-operative solutions remains uncertain. What no one disputes is that in just a decade the industry will be radically different from today.

WANTED:

- *More liberalisation*
- *Better ATM systems*
- *More money*

WARNING: change must be approached with caution

The United States has flagged its intention to press for a radical restructure of the rules governing international aviation by pushing for the replacement of the global bilateral air pact system with a multilateral regime opening up the world's skies to free trade.

U.S. Department of Transportation (DoT) sources in Washington told *Orient Aviation* the first moves are likely to be made in December at a crucial international conference in Chicago – "Beyond Open Skies" – organised by the DoT.

They said the way forward is clear, citing a recent statement by U.S. Secretary of Transportation Rodney Slater: "Our ultimate goal is to replace the thousands of isolated bilateral aviation markets ... with a single, open international aviation market."

Mr Slater may not produce a formal proposal at Chicago, but the sources said it represents an opportunity for the U.S. to "show its spots" and to make it clear it has begun formulating a specific policy in favour of multilateral agreements and an open, worldwide regime.

It represents a new phase in Washington's strategy, moving beyond the relentless and largely successful campaign to forge an array of "open sky" bilateral treaties. It also will place massive pressure on governments in Asia, which are largely divided on the level of protectionism they want to maintain for their aviation industries.

The development follows closely on the late November World Trade Organisation (WTO) Ministerial Conference in Seattle, where air transport was on the agenda for wider inclusion in the General Agreement on Trade in Services (GATS), which currently includes only aircraft repair and maintenance, computer reservations and the sale and marketing of air services.

All of this places the spotlight on an industry facing titanic change. The U.S. multilateralism push comes as mounting evidence emerges that all sectors – airlines, suppliers, air traffic service providers, airports and regulators – are finally confronting the reality they have entered a critical, make-or-break stage of development.

At aviation conferences in Edinburgh and Washington during October and November delegates from more than 60 countries, representing all parts of the industry, expressed increasing alarm over infrastructure problems, lack of capital investment and political blockages to urgently required developments.

'The bottom line is the FAA needs to become more like a business in the way it uses its resources ... it is high time we injected some private sector discipline into the way the FAA is managed' – Don Carty, chairman and CEO of American Airlines

Delegates at both meetings – a Global Summit on International Aviation Infrastructure in Washington D. C. and an International Oceanic Airspace conference in Edinburgh, Scotland, heard almost unanimous calls for a dramatic reduction in the number of air traffic regions, more co-ordination between governments on safety and regulatory fronts and demands that ATS providers catch up with airlines in updating systems.

There was another clear message at these meetings: airports and ATS must all be restructured to make them more business-oriented and to provide them with access to desperately needed capital funds for infrastructure development projects.

The worrying aspect of all this is perhaps reflected by the delegates' list in Washington. The conference turned out to be a global summit largely minus Asia. There was only one speaker from the region, Thailand's Minister for Transport, Suthep Thaugsuban, with several other invitees from the area failing to turn up.

That raises the question whether any co-ordinated plan to reform aviation's guidelines can be successful without the full participation of the Asian industry. Nevertheless, it is clear problems confronting Europe and North America cannot be viewed in isolation and a large number of airlines and Asian governments are expected at the DoT's "Beyond Open Skies" gathering.

In Edinburgh, Britain's Minister for Transport, Lord Macdonald of Tradeston, pointed out that as Third World economies develop, airspace over Africa, Asia and the Far East will become increasingly congested.

The future requires a world ATC system which can respond to rising traffic levels, improve safety and maintain public confidence in ATC, enable efficient handling of aircraft to reduce noise and pollution and deliver a cost-effective service at a price airlines and their customers are prepared to pay, he said.

In this torrid and fluid atmosphere there also are warnings change must be approached with caution. In a discussion paper released before WTO in Seattle, the International Air Transport Association (IATA) argued GATS "is not the vehicle for fundamental reform at this time".

It said applying the Most Favoured Nation

(MFN) principle in aviation could even hold back liberalisation if liberal treatment was not granted on a reciprocal basis. "There is a belief a hybrid system could emerge that would allow multilateral and bilateral arrangements to co-exist depending on national and regional preferences and needs, said IATA.

An opening declaration at the Washington summit, hosted by the George Washington University, described the world's aviation infrastructure as being at breaking point, increasingly capacity-constrained "and at times crumbling".

After three days of deliberations it proposed;

- governments implement significant institutional change and develop incentives for ATS providers to deliver sufficient capacity and efficiency cost effectively.
- governments advocate and accelerate private sector participation in infrastructure financing and development.
- all civil aviation industry stakeholders should make a concerted effort to strengthen the public-private partnership that defines the industry.

There were significant differences in how proposals should be implemented, but the summit is setting up a task force to develop an action plan to define joint solutions to reform the industry.

What is clear from these end of century aviation gatherings is that pressure for change lies in three primary areas; liberalisation, the development of air traffic management and the urgent need for money to cope with infrastructure expansion.

ATS failures and insufficient development funds are closely linked and made more complex by politics. It is recognised, however, that Asia has been far more progressive in airport expansion and the introduction of new ATS systems, such as CNS/ATM, than elsewhere.

U.S. airlines are near breaking point over worsening congestion and lack of funding for the FAA to resolve its problems. As Don Carty, chairman and CEO of American Airlines, put it, "everybody's mad at everybody else".

"Meanwhile, the skies are getting more and more crowded, our air traffic control system is falling further and further behind the modernisation curve, we've got more flights, carrying more people, being delayed longer and longer – and the public is getting angrier and angrier," he said at the Washington conference.

Mr Carty added there is no "silver bullet" answer. It is a multi-faceted problem, which needs a multi-faceted solution. "The bottom line is the FAA needs to become more like a business in the way it uses its resources. I'm not talking about privatisation *per se*, but it is high time we injected some private sector discipline into the way the FAA is managed."

Gordon Bethune, chairman and CEO of Continental Airlines, said the problems of U.S. ATC are of enormous national and international significance. "The truth of the matter is we are operating Fifties technology, installed in the Sixties and out of date by the Seventies," he said.

The U.S. has an astounding 625 million passenger minutes of delays each year, costing the economy US$4 billion. United Airlines president, Rono Dutta, said ATC related delays and cancellations are projected to cost his business US$373 million this year alone, up 22% on 1998.

While airline executives are not convinced outright privatisation of the FAA's ATS role is the answer, Mr Carty said he believes "it is certainly worth taking a hard look at the experiences of Canada, Germany, Australia and New Zealand – to name a few – to see what lessons we can apply to our own situation".

In Europe, the situation is just as bad. British Airways (BA) chief executive, Robert Ayling, pointed to massive increases in delays, up 97% in January, 177% in February and by a staggering 238% in March.

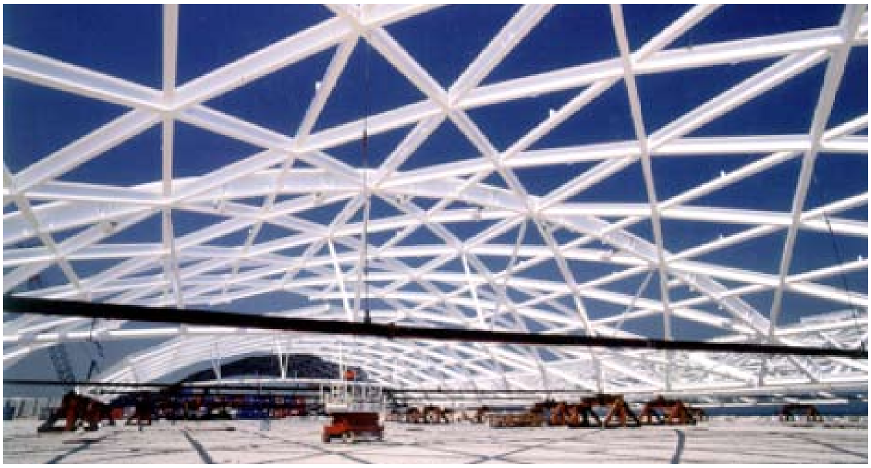
He wants serious rationalisation. "There are 47 different ATC authorities in Europe and that's 46 too many," said Mr Ayling.

The region's air traffic experts agree he is right. The problem is convincing their political masters, who jealously guard national airspace, of this fact.

In the UK, BA is part of a nine airline group which wants to be a stakeholder in the National Air Traffic System (NATS), currently being guided towards a public private partnership (PPP) regime.

Mr Ayling said airlines have control over virtually all of their business "but we can't move a plane five feet without checking with ATC". He believes airlines are the natural partners of government and their objectives are precisely in line with those of the travelling public ... safety of flight, security of investment and sensible growth of capacity.

The concept of airlines holding equity in ATC does concern some sections of the community, although the view on both sides of the Atlantic is ATC must be extricated from politics.



Under construction: Hong Kong's now flourishing Chek Lap Kok airport. Asia has been far more progressive in airport expansion and the introduction of new ATS systems than elsewhere

"It must be performance based, with safety always the highest priority, and it must be subject to government oversight. It has to be accountable. Access to the system has to be guaranteed for all users," said Continental chief Mr Bethune.

Many in the industry believe that in the not-too-distant future air space around the world will be run by only a handful of service providers, operating a system giving airlines seamless transition from one region to the next.

The major problem, they point out, is convincing politicians such a regime is the most efficient way of controlling the skies and is, ultimately, inevitable.

The erratic pace of introduction of CNS/ATM, which promises to bring huge savings to airline operations, also troubles the industry. Tim Ahern, vice-president operations at American Airlines said "frustration results when airlines equip their fleet for the future with the latest technology only to see their investment wasted when facilities are not equipped to handle the technology".

While CNS/ATM-equipped aircraft are now commonplace in Asia and in major international fleets elsewhere, there are still many aircraft which do not have it. There is widespread acknowledgement ATS providers have failed to keep pace with this technology by updating their systems on the ground.

David Allen, Boeing's chief engineer, air traffic management, said the industry is struggling with implementation and technology focused planning is not working. Airlines today are operated by finance people and new equipment decisions are based on strict cost/benefit analysis. "The result is many airlines have an anti-technology attitude because they are concerned about additional cost without benefits," he said.

Mr Allen's argument is that for airlines to be persuaded to fit new systems on their planes they need to be absolutely convinced there is a genuine business case for the expenditure and that they will receive returns on their investment. To achieve this goal, ATS providers have to meet their part of the deal by investing in the ground systems, otherwise airlines will feel they are wasting their time and money. "We need to deal with the uncertainty of infrastructure," said Mr Allen.

Finding the billions of dollars to pay for these improvements will be a major hurdle. All sectors of the industry believe it will be impossible without widespread privatisation and commercialisation of airports and ATS.

The International Civil Aviation Organisation (ICAO) estimates that from 1991to 2010 the cost of world-wide aviation infrastructure modernisation projects could be as high as US$350 billion, with Europe, North America and the Asia-Pacific accounting for 75% to 80% of the total.

According to the Air Transport Action Group (ATAG), a coalition of organisations from throughout the industry, if needed projects don't proceed "the resulting inaction will directly jeopardise the potential for both regional and global economies".

Several government regulators made the point that today most states are no longer willing to pump this kind of cash into system upgrades, demanding instead costs be met on a 'user-pays' basis. The alternative is to privatise or commercialise, but this is a political decision which often takes years to finalise.

Said Continental's Mr Bethune: "We must have access to capital markets. Without the resources, like sufficient staffing and proper equipment and technology, how can the FAA be expected to run the safest and most efficient systems possible?

"Without access to capital markets, how can the FAA make the tens of billions of dollars of investment necessary to modernise our system? The answer is, they can't. Just as Continental could not modernise its fleet at a cost of billions without access to capital markets. We must have significant structural and management reform."

But structural reform is difficult, particularly when the differing needs of various regions are taken into account. FAA Administrator, Jane Garvey, called for "constructive collaboration" among aviation sectors, adding that "our problems are universal".

'There are 47 different ATC authorities in Europe and that's 46 too many' – British Airways chief executive Robert Ayling

But Ghana's director general of civil aviation, Andy Mensah, pointed out Africa had different priorities. "Many African nations must place their priorities on food, health and shelter for their citizens. They would not understand putting air traffic control infrastructure ahead of these basic needs," he said.

His Israeli counterpart, Nery Yarkoni, talked of his country's needs. Israel required unique solutions because its ATC system is run by the military and national flag carrier, El Al, is considered not just an airline, but a "national asset", particularly in troubled times.

There are other barriers to infrastructure development. National Air and Space Administration (NASA) administrator, Daniel S. Goldin, said with 350 airports around the world subject to local noise restrictions, environmental solutions also had to be found. "Right now it's a lose-lose situation so we have to be innovative and come up with solutions which make it a win-win situation," he said.

And as the industry grapples with ways of funding modernisation in a uniform manner it also has to cope with the potential for radical change on the aeropolitical front.

Pierre Jeanniot, IATA director general, said there is no question the air transport industry will continue to liberalise. "Our main concern is that liberalisation proceeds in a manner which produces the best balance of benefits for consumers, airlines and the public interest."

IATA believes before decisions are made in expanding aviation's involvement in GATS, trade negotiators need to be educated about air transport and airlines need to be more informed about the GATS. It also believes:

- ICAO should continue to be the inter-governmental agency dealing with air transport.
- the Seattle WTO Round Table offered the opportunity to clarify what GATS covers and to develop better trade definitions for the air transport sector.
- potential obstacles to market access, such as congestion, environmental measures and taxation should be identified and addressed.
- the airline industry prefers to be dealt with on a sectoral basis and not as part of a package of services and goods.

Karl-Friedrich Rausch, Lufthansa German Airlines' chief operating officer with responsibility for product and services, whose airline is one of the founder members of the Star Alliance, said recently in Tokyo that today's players are multilateral alliances. He predicted the civil aviation industry will be completely transformed if market liberalisation continues to be promoted.

"You can't buy a foreign airline because of traffic rights. But this kind of alliance (Star) is just one step for future mergers. There is no Daimler-Chrysler merger possible in the airline industry for the time being. It will be there in five to 10 to 15 years," he forecast.

What is blatantly clear is that there are, as yet, no commonly agreed solutions to the critical problems of ATC congestion, funding and liberalisation facing air transport as it enters the new millennium.

But it is also apparent that every sector of the industry is increasingly aware of the need for firm solutions and urgent action. As NASA administrator Mr Goldin put it: "The global air transportation system can only be revolutionised when a long-term vision is developed and the industry rolls up its sleeves and gets to work on it. All the constituencies need to buy into it for it to happen."

The consequences of failure for the entire world economy, he added, will be severe if the challenges are not met.

NASA man's earthly dream

The administrator of the U.S. National Air and Space Administration (NASA), Dan Goldin, has a dream and it's simple. It amounts to "day-night all-weather flying" for commercial airlines, with no delays across the system.

It involves enhanced airport capacity and the removal of barriers restricting growth, not to mention making the new millennium the era of safer, more convenient, quieter and cleaner air transportation.

"Sound crazy?" he asked. "We're already working on it."

In a remarkable glimpse into the future for airline operations, Mr Goldin told the Global Infrastructure Summit in Washington D.C. in the U.S., in November, the organisation which sent men to the Moon and space vehicles to Mars is deeply engrossed in solving more earthly problems.

A single storm cell drifting across the northeast corridor of the U.S. can result in delays at Chicago, Los Angeles and Atlanta airports, he said.

"It's a big problem at our current level of 680 million passengers a year. Just imagine how much worse it will be in the years ahead when we get to one billion and 1.5 billion people."

So when Mr Goldin talks about "day-night all-weather" flying he really means it. "How about a system that goes far beyond simple visual imaging through clouds and weather? That enhances the elements you need to see and suppresses the ones you don't.

"How about a reliable and easy system for threat avoidance, regardless of whether the threat is a mountain side or a recently constructed transmission tower? One that provides clear warning advice and guidance to the pilot."

Other new systems NASA is working on include:

- the elimination of turbulence as a hazard within the next five years.
- safer and more efficient spacing of aircraft; one study suggests reducing average aircraft separation by just one mile could increase total capacity by 30%.
- A wake vortex sensing and prediction system that allows controllers to safely and accurately reduce aircraft spacing on approach.

Mr Goldin said tests of a spacing system at the Dallas-Fort Worth airport have already resulted in about a 15% increase in the number of take-offs and landings – the equivalent of adding a new runway.

One of the most exciting projects is called artificial vision. This is the development of advanced sensors, digital terrain databases, accurate geo-positioning and digital processing to provide a perfectly clear 3-D picture of terrain, obstacles, runway and traffic.

"On January 13, 2000, we plan to launch the Shuttle Radar Topography Mission from the Space Shuttle.

"It will give us the first global digital map of the earth.

"This is another way to help pilots avoid flight into terrain," said Mr Goldin.

Another component will be an "aviation weather channel", he said. "Right now, we rely on onboard radar in our planes. But that radar can give us a false sense of security because pilots may not see the severity of a storm, even if it is a level five or level six thunderstorm.

"What I'm talking about is far beyond today's radar. It will be a 3-D depiction of a pathway – the highway in the sky – for safely navigating around or through nearly any weather condition, including hail shafts and windshear, lightening and storm cells."

Mr Goldin said coming up with innovative solutions for removing barriers to growth can make it a win-win situation.

"And when we develop an air transportation system with the amazing capabilities I've mentioned, every nation in the world could take advantage of this smarter system, without huge up-front investments in larger airports.

"As those nations increase their economic base through better air transportation, they will eventually generate the resources to become full participants in the 21st century's radically improved aviation infrastructure," he added.

"No one nation and no one sector can make this revolution happen by itself. For instance, NASA works closely with the Federal Aviation Administration and the Department of Transportation and our partners in industry and academia.

"And when it comes to safety we need to work together with our international partners," he said.

'Safety our North Star'

While the Global Aviation Infrastructure Summit in Washington was not just about safety, it was bound to dominate the early hours of the meeting.

The summit convened a day after the tragic crash of an Egypt Air B767 off the U.S. east coast.

The first keynote speaker, U.S. Transportation Secretary Rodney E Slater, told delegates: "We open today's Global Aviation Summit with the sobering news of the loss of Egypt Air 990."

The tragedy was reminder of the continuing need to improve all aspects of the system, including the infrastructure that supports it, he added, stressing that no-one can talk about aviation without discussing safety.

"Safety is the North Star guiding aviation infrastructure investment at the U.S. Department of Transportation. In the 21st century, aviation can be the key to economic development and a better quality of life even for the poorest nations. Transport is the tie that binds," he said.

Aviation safety in the new millennium

Safety focus needs to shift to alliances

By Barry Grindrod in Canberra

Increasing globalisation in the airline in dustry and the growth of major alliances means the management of air safety needs to shift from individual airlines to alliance groupings, said Ansett Australia executive general manager operations and inflight services, Capt. Trevor Jensen.

"We have to ensure our alliance partners meet our standards," he told delegates at the biennial Safeskies conference in Canberra, Australia, in November.

"If that does not happen then an airline would have to seriously consider whether to take the relationship forward. Failure to do this would be letting the public down."

This will be one of the major demands of aviation safety in the new millennium, demands which will be greater as time progresses, he said.

"At the end of the day, and when all else fails, perhaps the greatest protection we can have is the fall-back position on the 'people-system-risk' equation," said Capt. Jensen.

The changing balance of the three pillars that sustain the complex web of safety culture – people (the characters of action), system (the process of action) and risk (the control of the action) – defines the nature of safety culture within a particular association or the entire aviation industry, said Capt. Jensen.

"Balancing the pillars will be the main agenda in the next millennium," he said.

"The formula is the right combination of a risk-tempered, people-centred safety system."

More and more passengers are "going to be on our shoulders" watching over the airlines, he said. "Perhaps the greatest indicator of the success of aviation safety is the level at which the customer becomes part of the push for more safety. We have to learn to engage all the customers and stakeholders in the development of safety."

Capt. Jensen said there needed to be a paradigm shift, with respect; to the human as a key player. This involved the transition of the person from the inventor of good things into the victim of his invention; from a change in organisation to the quality of change based on first principles. The changes are the transition of a person from purely an operator to a responsible manager and a change in the idea of a person who is susceptible to error to a person creating error.

Ansett Australia executive general manager operations and inflight services, Capt. Trevor Jensen: "Our alliance part-ners must meet our standards"

Capt. Jensen said people determined the overall agenda of aviation safety. In the past, the image of the aircraft was locked in the mind of the designer. Today, this was unthinkable without the input of key groups like customers, management and pilots.

'The quick access recorder is one of the great tools of aviation ... (it) should be mandatory'

"But having more people involved does not mean the industry will be safer," he said. There has been an increase in "technologically-induced" accidents. "Automation has given us a false sense of security."

Capt. Jensen said automation should be more "human-centred".

"For so long we have relied on humans to 'correct' technology glitches rather than use technology to address human limitations. We have achieved a situation that promotes mistrust of automation, rather than surrendering the more complex operation of the aircraft to technology so the human can perform other tasks creatively," he said.

Turning to systems, Capt. Jensen said: "Systematic operations and organisations are good, but sometimes we are so smart we over-systemise. This leads to a breakdown in our defences. We have to be careful we do not take out some of our fail-safe systems."

The quick access recorder (QAR) was one of the great tools of aviation, he said. It should be used across the spectrum of the industry, from flying operations to engineering. He believed the QAR should be mandatory. "People have to face up to their responsibilities. If you have done something wrong, you cannot hide from it all your life," he said.

In terms of risk, Capt. Jensen said aviation should admit it was "pretty poor" in assessing and understanding risk in aviation safety. "The reality is we are too arrogant. The nuclear and petrochemical industries is so far ahead on risk. We have to step outside our box," he said

The industry responded to spikes in the risk graph rather than assessing total risk exposures. "We must step back and look at ourselves, get back to the very core," said Capt. Jensen. "If the policies and procedures coming out of the corporate office are wrong, or unsupported, or not understood in the line, then it will lead to a break down in the safety culture.

"Why should we have to wait for an accident?" Capt. Jensen said.

Technology of the future

CFIT accidents could be eliminated

Former Concorde chief pilot with British Airways, Capt. John Hutchinson, presented a good dream, bad dream scenario for technology in the new millennium.

"Can we make commercial aviation safer? I believe a factor of five or even 10 is quite achievable," he told SafeSkies delegates at their conference in Canberra, Australia, in November.

His dream includes the possibility of eliminating Controlled Flight Into Terrain (CFIT) accidents. "I can safely predict a combination of GPS and other means will allow an aircraft position to be accurately plotted and a forward energy vector produced. I also believe we will know even more closely the terrain of the earth over which we are flying, accurate enough to have errors of no more than a few feet," said Capt. Hutchinson.

"Surely we should be able to put these two pieces of information together in a way, and in a display, which will tell both pilot and air traffic controller just where the aircraft is and where it is going. We should, therefore, be able to eliminate all CFIT accidents."

He added this would happen sooner rather than later. "The bad dream is ... that we will stay with our present mismatch of data display instruments on the flight deck," he said.

Flight data recorders and quick access data recorders would be sources of prime advances in air safety, said Capt. Hutchinson. Although those using the technology had seen significant improvements in safety, it was still backward in many ways.

"I can see, in the very near future, digitally-linked quick access recorders which record not just the parameters and exceedences of speed and height elements, but far more sophisticated units. This new technology will monitor the health of the entire aeroplane, its systems and, incidentally, its pilots," said Capt. Hutchinson.

"This data can be digitally linked to anywhere in the world. I can conceive of one or two companies which can adopt a service role and receive the linked data messages from aircraft all over the world."

Referring to airlines which do not use the recorders, the former Concorde captain said: "I cannot understand how anyone responsible for operations can sleep easily at night knowing the sort of information which can only be collected from data recorders. I find the unspoken conspiracy between crew and their management to avoid the use of these recorders difficult to understand."

Capt. Hutchinson saw far more use of head-up displays, the emergence of enhanced and, eventually, artificial vision, and a reduction of pilot input.

He saw tremendous advances in the design and building of aircraft. He spoke of blended wings, flying wings, wings that connect to two fuselages, one at each end of the wing that can be disconnected for quick turnarounds at airports and supersonic aircraft using new materials and possibly different engines.

'The future of aviation is in larger aircraft'

With air traffic control, the good dream scenario, said Capt. Hutchinson, was the right level of investment in ATC procedures so that digital data linking will become the norm. It will mean free flight concepts will be applied to reduce the time aircraft spend in the air. Also, where necessary, cohesive new ATC planning will increase this capacity and allow an orderly flow of air traffic without delays.

Capt. Hutchinson foresees more sophisticated, ground-based TCAS concepts where data could be analysed more quickly and completely before corrective action is relayed to the aircraft. Satellite navigation and communications will be the norm. Most of it will not be voice activated. It will occur seamlessly.

Better en-route turbulence detection also will be developed.

And supersonic aircraft? "I am sure the time will come when another supersonic aeroplane is built," he said. At the moment, a combination of range, environment constraints, weight and price prohibit the development of an aircraft in large numbers. The future of aviation is in larger aircraft, reducing seat mile costs, said Capt. Hutchinson.

NTSB chief praises China investigators

... but slams FAA for withholding information

By Tom Ballantyne

The chairman of America's National Transportation Safety Board (NTSB), Jim Hall, has complimented China's air safety sleuths for their "excellent job" of investigating three aircraft fire incidents sparked by faulty wiring insulation.

But he slammed the U.S. Federal Aviation Administration (FAA) for failing to forward to the NTSB details of the investigations, which had been sent to Washington from Beijing.

Significantly, the Chinese not only passed on their findings, but raised specific concerns about the flammability of aircraft insulation more than three years before the issue hit the headlines after the September 1998 crash of a Swissair MD-11 off Nova Scotia, in Canada.

Mr Hall has prodded the FAA for years to take speedier action when dealing with safety issues. He said the incident highlighted the critical need for bilateral and regional partnerships and world-wide co-operative action to ensure adequate communication of safety information and timely notifications and reporting of accidents and incidents.

Speaking at the Global Aviation Infrastructure Summit in Washington, the NTSB chairman said the FAA had conducted flammability tests on aircraft insulation after fires on five aircraft – three of them in China – between 1993 and 1995.

"Despite findings that suggested airworthiness concerns, the FAA took no corrective action," said Mr Hall.

"The fires had occurred in three countries, Italy, Denmark and China, but the NTSB only participated in the Italian and Danish investigations.

"Although the Chinese did an excellent job of investigating the three fire events in their country and forwarded their findings and concerns to the manufacturers and the FAA, the Safety Board was never told of the events."

He said the Canadian Transportation Safety Board will determine if those accidents are relevant to the Swissair crash. "However,

National Transportation Safety Board chairman, Jim Hall: do not over-rely on statistics

they certainly illustrate the need for notification and reporting of incidents and accidents by an independent investigation authority in accordance with ICAO (International Civil Aviation Organisation) guidance."

Despite this, Mr Hall believes there has been considerable progress made in the international arena under ICAO. The Global Aviation Safety Plan and the Safety Oversight Programme implemented by the international body "are impressive and positive steps toward improving airline safety on a world-wide basis", he said.

But Mr Hall's criticism was not confined to the insulation issue.

After flying on to the Summit directly from the scene of October's Egypt Air crash off Long Island, which killed 217 passengers and crew, he called for urgent improvements to the amount of data collected by the flight data recorder – the black box – on aircraft.

He disclosed that in a soon-to-be-released report on the NTSB, the international 'think tank', the Rand Corporation, indicates although future major accidents in the U.S. will probably be fewer in number, they will also be more complex.

"If Rand experts are correct, and we believe they are ... we'll need more – and better – data to help us determine the cause of such accidents."

Mr Hall said there is no better argument for improving flight and cockpit data recorders. "At a minimum, we need more parameters recorded, longer recording time, back-up electrical power and improved crash survivability.

"The NTSB has been asking for these enhancements for years. Yet progress to date has been glacial."

The failure to officially expand these parameters and improve the available data has been one of Mr Hall's major frustrations in his five years as head of the NTSB. "I have heard no viable justification for the delay in making these improvements. If we all agree only the most difficult problems remain and that we need improved data to solve them, one must wonder why we are not all doing everything possible to gather as much accurate data as possible," he said.

Mr Hall also cautioned the safety industry against over-reliance on statistics to maintain what is, in reality, aviation's unparalleled record in transportation safety. "Statistical analyses are invaluable. They give us the ability to develop and analyse trends in aircraft accidents.

"However, we can't wait for statistics to tell us where to focus our attention. Unfortunately, catastrophic accidents continue to occur that don't fit the statistical models – and may never fit them.

"And when those accidents occur, one of the keys to preventing a similar accident in the future is an in-depth, independent investigation to identify the underlying factors that led to the accidents...

"...most of the 'easy' accident causes have been fixed and future occurrences prevented. We are left with the 'tough' ones, the ones with multiple causes. They will, by their very nature, make us work harder to solve them."

Air services dispute: Taiwan rejects Philippines move

DEADLOCK!

Now Myanmar tells THAI to cut capacity

By Tom Ballantyne

Air links between Taiwan and the Philippines remained severed at the end of November following Taipei's rejection of a move by Manila to re-instate a scrapped air services pact.

The Philippines ended the air service agreement between the two countries on September 30 after repeated allegations Taiwan's two operators, China Airlines (CAL) and EVA Air, had been poaching sixth freedom traffic on the route and impacting on the viability of Philippine Airlines (PAL).

In the meantime, a separate row has erupted over air links between Thailand and Myanmar, with Rangoon threatening to ban Thai Airways International (THAI) flights because of alleged contravention of capacity rules.

There were hopes the Taipei-Manila clash might end after the Philippines, in early November, unilaterally restored their cancelled agreement, clearing the way for the resumption of air links and the re-opening of talks on a new treaty.

But Taiwan rejected several conditions imposed by the Philippines, including the strict capacity controls imposed on its operators.

Taiwan's Transportation Minister, Lin Feng-cheng, countered by setting three conditions Manila must meet before direct air links can be re-opened; the Philippines must recognise the original 1996 agreement, official talks must be conducted and Manila must promise not to unilaterally scrap any future pact.

A spokesman for the Philippines president, Joseph Estrada, said Manila would stand firm on the conditions and had already "patiently accommodated" Taipei. He added the conditions were meant to prevent EVA and CAL from poaching passengers from financially troubled PAL.

The refusal by both sides to back down has left the prospect of an early resolution unlikely.

Meanwhile, the disagreement is diverting passengers into the hands of other airlines, which are picking up traffic flying between the two countries via third ports. Hong Kong's Cathay Pacific Airways, in particular, has experienced an increase in passengers to Taipei and Manila.

While no precise numbers have been released, it is understood Cathay is attracting a large percentage of an estimated 15,000 to 20,000 passengers who travel between Taiwan and the Philippines each week. Cathay flies Hong Kong to Taiwan 12 times daily and has 39 weekly services to the Philippines.

In an effort to prevent the leakage, PAL chairman, Lucio Tan, has announced that the carrier is selling tickets at US$150 one-way on the Taipei-Hong Kong-Manila route, 25% below the normal rate.

The bilateral battle continues at an extremely difficult time for PAL. Mr Tan said despite restructuring efforts the critical time for the financially beleaguered operator is not yet over. Although the airline posted an operating profit in the first six months of the year "PAL is still in the intensive care unit", he said.

At the same time, the potential for further bilateral disputes involving Manila remains real. Philippines Foreign Secretary, Franklin Ebdalin, has warned the Philippines will not hesitate to scrap the air pact with South Korea if Seoul continues to ignore repeated requests, made over several months, for a re-negotiation of the treaty.

He said Korean Air and Asiana Airlines also have ignored a request by PAL for a meeting on the issue.

Manila was demanding an answer from Seoul by the end of November because it also wants to deal with alleged violations by Hong Kong and Singapore airlines. Mr Ebdalin said Singapore was the last on Manila's list because "it has comparatively the least violations among the four".

In Myanmar, air authorities have asked THAI to reduce capacity on flights from Bangkok to the nation's capital, Yangon, or hand over a share of revenue on the route, which is also served by Myanmar Airways International.

The dispute arose after Myanmar threw out a written understanding signed between the airlines two years ago, which allows THAI to raise passenger numbers into Yangon to 3,800 a week from 3,500.

Myanmar has told the Thai flag carrier it must lower its capacity to 2,500 a week or hand over 12 % of the US$16 million in annual revenue earned on the route.

In November, a delegation from the Thai Government visited Myanmar in an attempt to resolve the differences, but neither party has made any official comment on progress. It is understood they are discussing a proposal for profit-sharing on the route.

Both THAI and Myanmar Airways operate two daily services on the short flight between Bangkok and Yangon.

Thai Airways International: Myanmar says either to lower capacity or share revenue

Dramatic reversal for AAPA carriers after dismal 1998; effects of economic crisis 'will soon be history'

ASIA BACK ON TRACK

By Barry Grindrod and Tom Ballantyne in Tokyo

President of host carrier, All Nippon Airways, Kichisaburo Nomura (right) with AAPA director general Richard Stirland at the AAPA's 43rd Assembly of Presidents in Tokyo

The bad news is the members of the Association of Asia Pacific Airlines (AAPA) saw their operating profit collapse by more than half – or just over US$1 billion – in the latest fiscal year, the steepest decline in association's 33-year history.

But the good news is most of the airlines have largely recovered during 1999 from the 30-month Asian economic recession and a healthy swing to profitability is expected for AAPA carriers in the current year.

This dramatic about-turn, reported in the AAPA's annual report, published in November, particularly reflected the recovery of the Asian economies of Korea, Taiwan and Singapore, which reported impressive Gross Domestic Product growth in the first half of 1999. Major travel destinations, especially Thailand, also are booming.

"Passenger and freight traffic were set back a year as a result of the crisis," said the annual report, "but the lost ground has been mostly made up in 1999. It is expected that by 2000 .... the effects of the crisis on the airlines will be history."

In the year under review, to March 1999, passengers carried system-wide on the 19 AAPA member airlines decreased by 6%, to 209 million. Fifty eight per cent of the drop-off was on domestic routes. Revenue passenger kilometres fell 1.6% and with available seat kilometres slightly higher, load factor dropped marginally from 68.6% to 68.4%.

The decline in traffic, along with discounted air fares and the depreciated currencies of the region, resulted in a fall in revenue for the second consecutive year, said the report.

Combined operating revenue of AAPA airlines, which decreased by 3.4% in 1997-98, fell an additional 14.9% to US$44.4 billion to March 31 this year.

AAPA director general, Richard Stirland, said "the crisis finally provoked the kind of cost-cutting measures that were long overdue".

This was amply reflected in the 1998-99 financial statement. Operating expenses dropped 13.5%, to US$43.3 billion. Other expenses totalled US$779.7 million, compared to US$3 billion in the previous year. These savings enabled AAPA carriers to record a small, but significant, US$18.6 million after-tax profit in the 1998-99 financial year, a marked improvement on the collective carriers' net loss of US$1.2 billion in the previous year.

Depressed yields and slack demand meant all sources of revenue declined, said the report. Passenger revenue fell 16.2%, to US$32.8 billion. Cargo revenue, the only source of growth in 1997-98, dropped by 10%, to US$7.5 billion.

Unit revenue (revenue per available tonne kilometre) plunged by 15%, to 38 U.S. cents. Overall yield dropped 13.5%, to 58 U.S. cents per revenue tonne kilometre.

Yield in international operations, which had dropped by 10% in 1997-98, fell an additional 13%, to 44 U.S. cents last year.

Expenditure declined across the board. Unit cost (cost per available tonne kilometre) shrank 13.5% to 37 U.S. cents.

The focus of most streamlining operations, and consequently the sector which registered the largest cost-savings, was general and administrative expenses. Fuel and oil costs, once the largest expenditure item, dropped to third place, after ticketing, sales and promotion and user charges and station expenses. Fuel and oil made up 12.9% of costs, 1.8 percentage points lower than the previous year.

Eight airlines posted positive net results, but only Australian carriers, Qantas Airways and Ansett Australia, increased their profits. The others were Singapore Airlines (SIA), Korean Air (KAL), Japan Airlines (JAL), Thai Airways International (THAI), EVA Air and Vietnam Airlines.

KAL, JAL and Vietnam Airlines managed to replace the red ink on their 1997-98 balance sheet with black last year. Going in the opposite direction, from black to red, were Cathay Pacific Airways and China Airlines (CAL), while losses at Malaysia Airlines (MAS) and All Nippon Airways worsened.

The worst performers in the year under review were Garuda Indonesia and Philippine Airlines (PAL). If enduring the regional economic downturn was not bad enough, Garuda also had to contend with political and social crises as it battled to survive. Temporarily paralysed by several labour disputes and a pilot strike, PAL suspended operations for 10 days during 1998.

While the dramatic depreciation of most regional currencies in 1997 was not repeated in 1998, their weakness still accounted for decreased U.S. dollar results for a number of AAPA airlines.

If currency effects are factored out, said the annual report, consolidated AAPA airline results would show operating revenue and expense increases of 1.9% and 4.2% respectively, which put operating results for member carriers 53.1% lower than in 1997-98.

Seven airlines, THAI, Garuda, EVA Air, KAL, MAS, Qantas and SIA, reported increased revenue and expenses in local currency, but, along with other member carriers, had reduced revenue and costs in U.S. dollar terms.

The economic recession was not the only factor to hit the AAPA airlines. Industrial unrest, accidents, airport start-ups, health scares in Hong Kong and Malaysia and the socio-political unrest in Indonesia all played their part in the passenger traffic collapse.

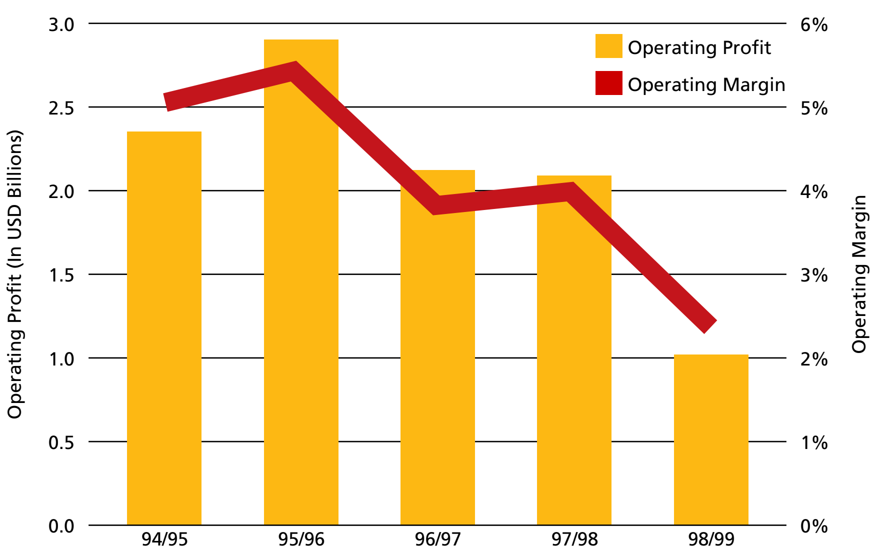
However, the effects of the recession dominated the airlines' performance. Passenger traffic hit rock bottom in March 1998, but recovered by September that year and has continued its upward momentum. Revenue passenger kilometres and passengers carried were consistently strong from December 1998 to June, 1999.

The cargo market trawled its lowest depths in July, 1998, but its performance had turned positive by January, 1999, as a result of strong demand in the intra-Asia and Asia-Pacific/North American cargo sectors.

Financial Report at a glance (in US$ millions)

	1998-99	*1997-1998*	*%change*
OPERATING REVENUE	44,382.9	52,177.4	-14.9
Passenger	32,848.9	39,203.2	-16.2
Freight	7,467.7	8,296.1	-10.0
Others	4,066.3	4,678.1	-13.1
OPERATING EXPENSES	43,335.0	50,077.5	-13.5
OPERATING PROFIT	1,047.9	2,099.9	-50.1
OTHER EXPENSES	779.7	2,965.6	–
NET PROFIT AFTER TAX	18.64	(1,222.5)	–

Operating profit and margin – systemwide operations



RESOLUTIONS PASSED AT THE ASSEMBLY

- To promote the establishment of internationally accepted emergency response standards and practices at airports in the region and for airport authorities and airlines to work together in developing initiatives and conducting emergency exercises.

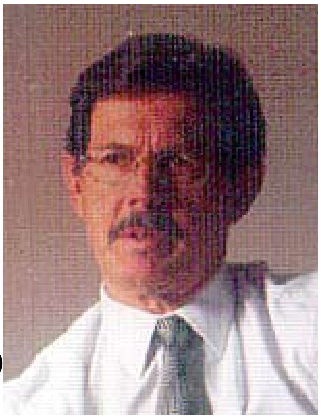
- To reinforce safety co-operation among member airlines. (See separate story).

- Support efforts by governments and the aviation industry to work within ICAO to establish an agreed increase in noise certification stringency.

- Support the early ratification of the 1999 Montreal Convention. This is intended to replace the 70-year-old Warsaw Convention and its supplements. The new conventions provide a uniform liability system of international law covering air transport, particularly liability for death or injury of passengers and loss or damage to baggage and cargo.

- Support adequate radio frequency spectrum allocation for aviation and seek to ensure aviation safety by countering any commercial pressure that seeks to re-assign and/or co-assign aviation frequencies to other users.

Calls for a crackdown on oil cartels



Air New Zealand managing director, Jim McCrea: "Airlines are not allowed to collude under competition law. How on earth do the oil producers get away with it?"

Air New Zealand (ANZ) managing director and new chairman of the Association of Asia Pacific Airlines (AAPA), Jim McCrea, issued a forthright challenge to global authorities in November to halt oil cartels from using their combined muscle to control fuel prices.

With carriers still striving to complete restructuring following the Asian economic crisis, costs outside their control – such as oil pricing and airport and airways charges – remained "clouds on the horizon", said Mr McCrea.

During a press briefing at the AAPA's 43rd Assembly of Presidents in Tokyo, he said airline markets are more competitive than ever and it is extremely difficult for them to pass on increased oil costs – fuel is now twice the price it was a year ago – to the market.

"Airlines are not allowed to collude under competition law. How on earth do the oil producers get away with it? They are all companies. They either reduce production or reduce refining capacity.

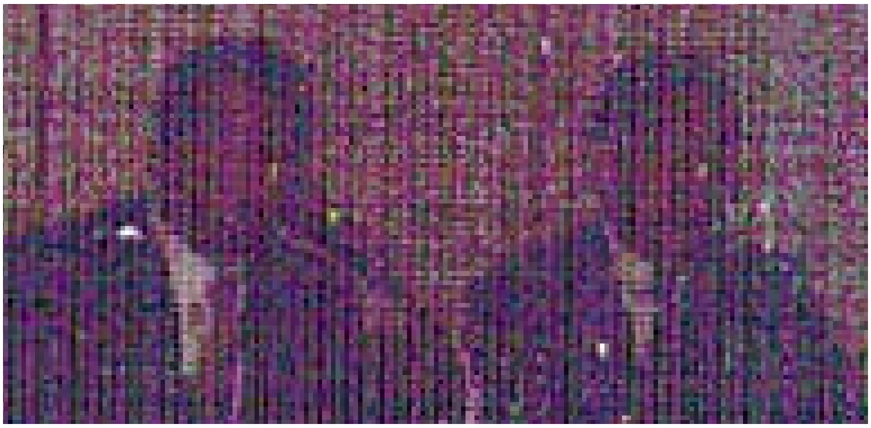
"If we reduced output in terms of our capacity or put up our prices we would be legislated against. In fact, we would be fined. So there is an issue here that needs to be dealt with," said Mr McCrea.

He added he was "upbeat" about the recovery, but deeply concerned about the price of oil. "Why do we have a situation where the cost of energy can be regulated, when world markets are totally deregulated? There is a conflict there."

His views were supported by other airline bosses. Garuda Indonesia president, Mr Abdulgani, the new deputy chairman of the AAPA, said while his airline was trying its best to improve operational efficiency, the increase in oil prices was having a "great impact" on costs. He hoped oil pricing could be deregulated.

And he suggested that while Indonesia is a member of the Organisation of Petroleum Exporting Countries (OPEC) it did not necessarily mean higher oil prices had a positive effect on the country's economy.

"For Indonesia, the increased price of oil, in some ways, has a good impact on government revenue, but since we also import so many things, the increase in the price of oil also increases the price of all commodities. resulting in an overall negative impact," said Mr Abdulgani.



Malaysia Airlines chairman, Tajudin Ramli (left), and Garuda Indonesia president, Abdulgani: both want oil prices deregulated

Malaysia Airlines chairman, Tan Sri Tajudin Ramli, said oil companies were not asked to pay the social costs expected of airlines, such as taking on the responsibility to carry passengers in and out of a country to help tourism and business development.

Mr McCrea said airways and airport charges also are major concerns to airlines. "It is interesting that as airports privatise and are sold, not long afterwards, the new owners re-value the purchased assets and, on the basis of re-valuing, put the charges up. Yet they still maintain they are only recovering the cost of capital or retaining their rates of return.

"That's a circular argument and an invidious argument. Something has to be sorted out in competition terms," he said.

GLOBAL AND REGIONAL ECONOMIES

Air New Zealand's Mr McCrea said markets are more competitive than ever. "Markets are more liberal and much more deregulated than ever. But in some areas, there is still slightly more capacity than demand. So we are all struggling to find the right economic balance.

"We are working very hard on our cost structures and on improving our productivity. Most of us are encouraged about the future, because of the market recovery and because we are much more efficient than what we might have been before the Asian crisis."

Malaysia Airlines chairman, Tajudin Ramli, agreed airlines are heartened by the latest figures and said: "We believe the airlines in this region will be able to benefit from the encouraging economic environment."

AAPA director general, Richard Stirland, described airline traffic figures in the past six to eight months as "quite amazing". Since the first signs of growth in September, 1998, there has been eleven straight months of expansion in the market.

"It is worthwhile to note the growth and the resurgence has not been across the whole region. There are some areas where either the growth in traffic is weak or the yields are weak. But I don't think there is any doubt the airlines have re-established growth and most of them have turned the corner in terms of profit. Some of the financial results next year, when they are announced, will be quite surprising in a positive sense."

SAFETY:

In a set of formal resolutions, AAPA carriers agreed to additional steps to reinforce co-operation on safety between member airlines. While reiterating air travel remains the safest mode of commercial transportation, they agreed every possible step must be taken to continuously improve aviation safety.

The Assembly's airlines resolved that, through the AAPA Secretariat and the association's Flight Operations and Safety Working Group (FOSWG)., they should participate in the U.S. "Safer Skies" initiative and the Flight Safety Foundation (FSF) controlled flight into terrain (CFIT) and accidents on approach and landing (ALA) task forces.

The FOSWG has been instructed to review the FSF tools for CFIT and ALA prevention and ensure all member airlines use them appropriately.

Member airlines also are being encouraged to analyse their safety infrastructures by referring to audit checklists such as those of the British CAA Safety Audit Checklist or the JAR-OPS Safety Audit Checklist.

AAPA director general, Mr Stirland, said safety is an issue which cannot be avoided. It needed to be discussed and the association would be burying its head in the sand if it did not do so.

"However, I think the issue has to be put into perspective. One has to look at figures and the accident record over a period of years. The fact is that in terms of the size of the industry in this part of the world, the number of landings and take-offs and number of revenue tonne kilometres, the record is not as good as say Europe or the U.S., but it is considerably better than let's say Latin America or Africa.

"There have been a number of high profile accidents in the region in the last 18 months. One can't deny the fact that they have disproportionately involved a small number of airlines.

"From all the evidence available to us these airlines are taking the whole subject of what one might term safety culture very seriously. They have implemented a whole raft of measures. Millions of dollars have been devoted to this by those carriers. The efforts they have gone to, the replacement of staff that has taken place, I think these are all very positive indicators that safety is certainly at the top of everybody's agenda and that one should see that reflected in the future."

Out with the old in with the new

As AAPA member airlines looked to increase the efficiency of their fleets, it has been a case of out with the old and in with the new in the last 12 months.

The AAPA fleet grew by 2.2%, from 1,248 aircraft last year to 1,275 at November 1. The number of B777s expanded from 50 to 83 and B747-400s increased from 221 to 236. Twenty nine older B747s were discarded, as were 20 Airbus A300s.

AAPA narrowbody aircraft climbed from 394 to 420, while the number of widebodies increased by just one, to 855, reducing the aircraft type in the AAPA fleet to 67.1%.

The average age of the total AAPA fleet is 7.83 years, compared to 7.88 in 1998.

The inclusion of aircraft operated by Ansett subsidiaries, Kendell Airlines, Skywest Airlines and AeroPelican, added to the numbers.

Philippine Airlines reduced its planes from 40 one year ago to 26. Garuda is operating 42 aircraft. eight less than at the end of 1998.

V.I.P. Guests in Focus

Dragonair chief executive Stanley Hui, (left), with U.S. senator, James L. Oberstar, ranking Democrat on the House Transportation and Infrastructure Committee

Air Transport Association of America president and CEO, Carol B. Hallett

ASSEMBLY CLOSE-UP

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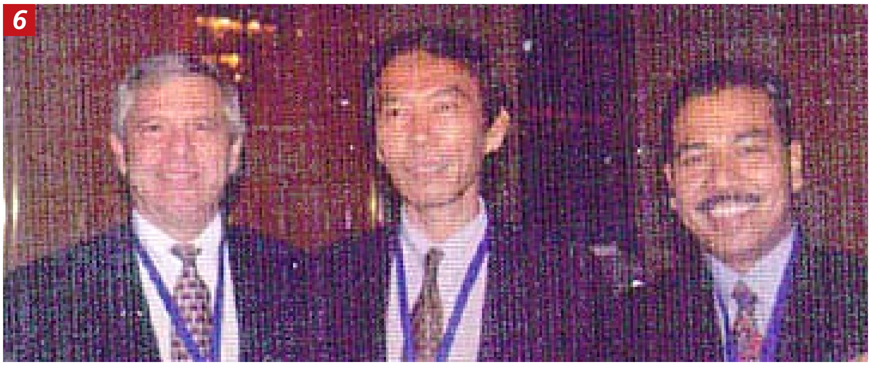

Delegates and guests mingle at the 43rd Assembly of Presidents in Tokyo in November

1. *Cathay reunion: Former Cathay Pacific managing director and now executive chairman of Ansett Australia, Rod Eddington (centre), renews acquaintance with Cathay chief operating officer, Philip Chen (left) and regional manager Japan and Korea, Michael Whitehead*
2. *Philippine Airlines president, Avelino Zapanta (left) and Air New Zealand managing director and new AAPA chairman, Jim McCrea.*
3. *Singapore Airlines deputy chairman and chief executive, Dr Cheong Choong Kong, with Qantas Airways regional general manager Japan, Hideki Hitosugi*
4. *Air Transport Association of America president & CEO, Carol B. Hallett, with Global Aviation Associates senior vice-president, Charles R. Chambers*
5. *Singapore Airlines executive vice-president commercial, Michael J. N. Tan (left) with China Airlines president, Sandy K. Y. Liu*
6. *AAPA technical director, Leroy Keith (left) with Vietnam Airlines deputy director corporate affairs, Nguyen Huy Hieu (centre) and Garuda Indonesia general manager Japan, Sudiarto Sugito*
7. *China Airlines director corporate and marketing planning, Sherman Yeng*
8. *Japan Airlines president, Isao Kaneko*
9. *AAPA executive assistant to the director general, Nina Posadas, with Philippine Airlines Japan and Korea country manager, Genaro 'Bong' Velasquez*

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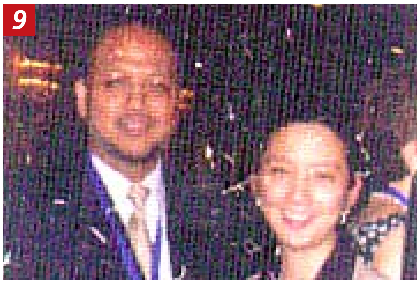


OA award for Qantas chief

Orient Aviation publisher and managing editor, Barry Grindrod, left, presents Qantas chief James Strong with the 1999 Orient Aviation Personality of the Year award at the Assembly of Presidents in Tokyo

Qantas Airways chief executive, James Strong, is Orient Aviation's 1999 Personality of the Year. He received the award from the magazine's publisher and managing editor, Barry Grindrod, during the AAPA's 43rd Assembly of Presidents, in Tokyo, in November.

"The award is largely the culmination of the work Mr Strong has done since he joined Qantas Airways in October, 1993," said Mr Grindrod.

"Five years and five successive record profits, with a sixth likely for this year, achieved in a period that included Asia's worst recession, is an outstanding achievement.

"He has led the airline through privatisation, the complexities of a merger with Australian Airlines, which coincided with his arrival at Qantas, and developed a successful and harmonious relationship with 25% partner British Airways.

"Qantas has undergone extensive restructuring and rationalisation during Mr Strong's tenure. He has built a strong management team and together they have achieved what was once thought impossible in the industry; Qantas has smoothed out the cycles, a historical burden for airlines.

"Mr Strong has guided Qantas from a cumbersome and bureaucratic state-owned entity into a lean business. While the airline's board and management recognise they must produce profits for shareholders, they also are aware its bread and butter, the passengers, must be offered constantly improved service levels, network strength and reliability.

"Mr Strong's influence on Qantas Airways, which showed its strength in withstanding the Asian recession, has made our decision an easy one."

Strong Man of Qantas. Page 40.

Looking ahead to 2000

After two years of successfully predicting doom and gloom for the region's aviation industry, AAPA director general Richard Stirland casts a largely upbeat eye on it into the new century.

"There is a continuity and trend line in aviation which makes prediction forward for at least 12 months a reasonably secure occupation," he says somewhat modestly in A Forward Look at 2000, in the AAPA's annual report.

But, unfortunately, one of the more predictable events of the year is the rise in fuel prices. "Not just because of increased demand," said Mr Stirland, "but also because OPEC has a new-found sophistication in its adjustment of production, and also because those refineries producing jet fuel are subject to ever-increasing environmental controls and curbs."

The steep increase, he said, would spur action on 270 minute ETOPS plus for twin engine aircraft and increase the momentum of the introduction of CNS/ATM.

"Environmental pressures also will be a cost-effective spur for CNS/ATM and the realignment of some of the more tortuous air routes of the Asia-Pacific region," said Mr Stirland. Yet another factor will be the introduction of overflight fees by the U.S. in 2000.

Mr Stirland speculates on a reduction in landing and parking fees at Hong Kong's Chek Lap Kok (CLK), resulting in more flights, more passengers and more revenue for duty free shops, thus leading to a further cut in charges. This would bring CLK closer to Singapore's Changi than Japan's Narita or Kansai. "We live in hope," he said.

China should see a further consolidation of airlines in 2000 and, paradoxically, an opening up of airports in the interior to more international services, albeit of a regional nature.

Chongqing, Xian and Xiamen airports could all support more international services to Japan and Southeast Asia, he said, if reciprocal rights were available.

Mr Stirland predicted a resurgence of Garuda Indonesia and a revitalising of domestic carriers in Indonesia in 2000. "Conversely, one of the old, established international airlines could cease to operate, with its services to reappear under a different name and logo."

The renewed growth of traffic, allied with a failure of political will in Japan to expand Narita, must inevitably lead to the launch of the A3XX, to provide capacity within existing slot constraints, said the director general.

He expected the Korean carriers to overtake the Japanese airlines in international revenue tonne kilometres with their own aircraft, but the latter will be well ahead in providing code-share and alliance services.

But there was one subject on which Mr Stirland refused to make any forecast – the air rights dispute involving the Philippines, Taiwan and, potentially, other countries in the region.

STRONG man of Qantas

BARRY GRINDROD speaks in Sydney to the man who has led Australia's national carrier to five years of record profits

It may surprise some people that Qantas Airways chief executive and managing director, James Strong, was a boxing champion in his youth. Toe-to-toe fisticuffs is not associated with a man better known for his bow ties.

And he says, with some pride, he was never once knocked to the canvas in the ring.

Those gritty, battling ways have served James Strong well through a colourful and varied life that has taken him from the rough and tumble of the mining industry to the lawyer's office and from the brewing business to the airline industry (twice).

From his early days in mining, when he worked in some of the most isolated and inhospitable regions of Australia, in temperatures often exceeding 40 degrees, he has come out a winner.

His latest achievement was to lead Qantas to its fifth record profit in as many years, results made more extraordinary given Asia's economic recession in the last two years.

But the dogged groundwork for coping with the pressures of the downturn was carried out in Mr Strong's tumultuous early days at Qantas, when he cleared out the old management and set about restructuring the airline in preparation for privatisation and a listing on the Australian stock exchange. They were not the happiest of days, but the seeds of the new Qantas were sown then.

"There was vehement opposition to myself and management generally to all things we were doing in the early days. We were portrayed as destroyers," said Mr Strong. "The confrontation was unbelievable.

"But I was not phased by it. It was a similar story when I was at Australian Airlines. I always say you have got to know where you are going and resolutely keep an eye on it. You have to cope with the setbacks as no more than detours along the way."

After years "fighting in the trenches", as Mr Strong describes it, the atmosphere at Qantas has been completely transformed. "The biggest difference is that now the perception of the company is one of success," said Mr Strong.

The chief executive describes himself as an "agent of change". "I have always enjoyed jumping into the deep end of another business. Being an architect of major change is very satisfying," he said.

When Mr Strong met with *Orient Aviation* in late October, it was six years to the week that he had rolled up his sleeves at Qantas and started to do just that.

And how.

An earlier attempt to prepare Qantas for the float had been called off because the market did not have an appetite for the stock, based on the

Photo: Stuart Davidson

airline's financial performance and the knock-on effects of the Gulf War and an international recession.

Mr Strong's brief on his arrival was to make Qantas attractive to the investment community. This included reducing debt levels, restructuring routes, increasing the utilisation of equipment and generally putting the balance sheet in shape. He also was faced with reversing a hostile industrial relations environment, lifting productivity and cutting costs.

"Basically, we had to overhaul the whole business. But one of the early things we had to do was restore Qantas' competitiveness in the domestic market because the merger between Qantas and Australian (Airlines) had not gone well. There was a lot of internal friction," said Mr Strong.

"The product in the domestic market was being beaten by Ansett hands down, both in terms of market share and profitability.

"With the luxury of hindsight, the preparation went remarkably well. The float on the Australian Stock Exchange on July 31, 1995, was achieved in a very short period and the amount of change in that time was remarkable.

"Qantas today has not just been modified. It is a different company, not only in its financial performance, but in the whole approach to business and the way people think about business."

Mr Strong's own self belief, it seems, has rubbed off on the workforce.

"There is a much deeper understanding of the remorseless drive required today, due to forces beyond our own business in terms of liberalisation, changes in government policy, the relentless downward pressure on yields and the need for us to operate in a very disciplined, commercial way. We are light years away from four years ago.

"What is really rewarding is the attitude of most of our people. They are coming to terms with the way the industry has changed and accepting responsibility and ownership for the future of the company instead of sitting back and thinking everything will be taken care of by government policy. There is the realisation the future lies in our own hands.

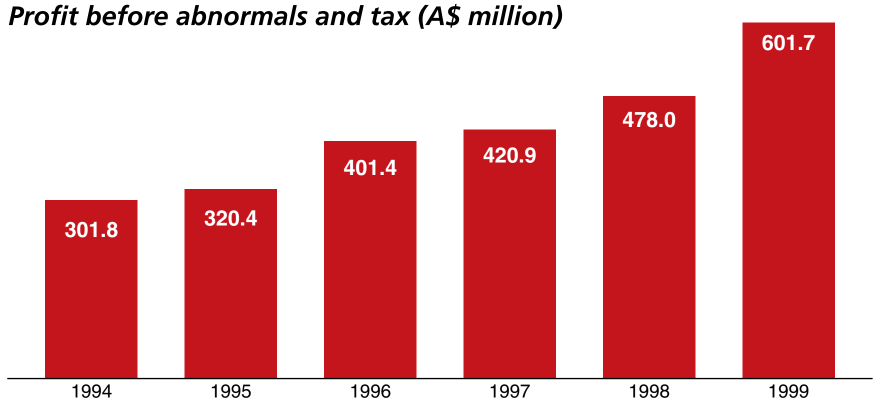
"There is a more aggressive attitude today about what we can do and to need to do it to survive in the future.

"What is gratifying is that this is happening at every level and every part of the company.

"We have been through traumatic processes such as competitive tendering. People have had to compete to hold their jobs against outside contractors. The amazing thing is that from among those people whose jobs were threatened – they could be baggage loaders or people checking in customers – leaders came forward and formed teams that put together bids to hold their jobs.

"The natural leadership shown in switching attitudes from what used to be a very confrontational industrial relations environmental to

Profit before abnormals and tax (A$ million)



Qantas performance since 1994

Debt repayments

- Cumulative debt repayments since 1994 amount to $3.8 billion.

Gearing (adjusted for operating leases)

- Despite capital expenditure of $1.2 billion in the year to June 30 this year, book leverage improved slightly to 39% debt to 61% debt plus equity. Market leverage was significantly lower due to the strength of the Qantas share price
- Since June 1994, book leverage has fallen by 32 percentage points.

ASKs per employee

- Business improvement programmes, competitive tendering initiatives and staff commitment to achieving key performance indicators (KPIs) resulted in 2.8% improvement in employee productivity for the year ending June 30, 1999.
- Since 1994, employee productivity has improved 19.4%

Passenger numbers

- The number of passengers has increased 35% since June 30 1994.

Shareholder return versus selected ASX indices

- From the Initial Public Offering to June 30, 1999, Qantas outperformed the Australian Transport Index, All Industrials Index and All Ordinaries Index.

STRONG on alliances:

"Alliances are important and will be increasingly important. We have to be as efficient as possible in the use of capital, who code-shares with whom and the integration of various things.

Nothing happens unless you spend a lot of time working out the detail. You have to be realistic. Too many people expect too much, too quickly. There is nothing worse than making promises and not delivering on them. The key issues in alliances are how far can you go and how quickly.

There is a very good feeling among the partners of oneworld. There is a uniform commitment in going forward.

No alliance is saying any airline which flies in this part of the world is the same as an airline in another part of the world. What we are saying is that if you are flying in a part of the world where we do not fly, we have a partner there who is very good."

one where they are now virtually running their own business is the deeper cultural change and one which is vital for the company to have a future.

"In the early years at Qantas change was forced by a small management group and at times in quite dramatic ways.

"Now we are through that era lots of new initiatives are coming from people. It is no longer a centralised dictated style of driving change. It is almost democratic change in the degree of understanding and support. I believe people have amazed themselves."

Mr Strong is convinced it was the new Qantas culture which carried the airline so successfully through the recent Asian recession. "The irony is Qantas's reputation was most enhanced, internally and externally, by the Asian downturn and the ability of the airline to power through it.

"Up to then most people did not see the benefits of all the restructuring, but when we powered through people started to say that while they did not like what we were doing they could see it made us a stronger company.

"I find it ironical that a setback has changed most people's perceptions. Even in the market people started to take notice; that is if you run a business like ours very tightly you can reduce the cyclicality and can avoid some of the downturn risk. Our stock was basically re-rated as a result," he said.

James Strong and his wife Jeanne-Claude relax in Canberra Photo: Stuart Davidson

Looking to the future, Mr Strong said some of the most powerful forces shaping the industry will be outside the control of airlines. The three key forces, he said, are the economic situation in major markets, government policy and rate of change and competitor tactics.

He expected the strong domestic, European and North American markets to remain important. Qantas will continue as key member of a world alliance, he said, and there are big issues to be tackled in information technology, individually and alliance-wide.

Meanwhile, Qantas will evaluate the 300-seater aircraft, but no decision has been made on a manufacturer, said Mr Strong. The airline is continuing to buy B747s. Its fleet stands at over 100 aircraft with an additional 40 planes with its subsidiary carriers. "We are not an airline that goes in for big orders of 20 or 30 aircraft. We have a very stable fleet. Growth depends on year-by-year economic conditions and commercial opportunities," he said.

"With yield, no one sees any real change from the long-term downward trend. It's a fact of life we all have to cope with. It puts enormous pressure on us to continuously improve the efficiency and productivity of the business," said the Qantas chief.

But while Qantas's future seems bedded down in the millennium the industry continues to speculate about Mr Strong's tenure at the airline. In recent months there have been rumours he will be moving on – or up.

He denies, however, that he will succeed Gary Pemberton as chairman – at least in the near future – and completely dismisses any suggestion he will head the global oneworld airline alliance.

"I have worked in about six different industries. I always like the concept of testing myself in another environment and having to prove myself all over again," said Mr Strong.

And, it seems, there are still a few battles to be fought before the bell rings on his career at Qantas. "I still enjoy what I am doing. Qantas is an Australian icon. I have a strong emotional attachment to the airline and to the people in it.

"In terms of size and degree of difficulty, Qantas is the *piece de resistance* for me," he said.

STRONG on BA

"Our partnership with British Airways (BA) is excellent. It is the key to our continued success on the kangaroo route. We virtually schedule and operate our fleets as one integrated business. If you look at the history of the route over the past two decades it has had a very ordinary performance, but it is now a consistently good performer for us. There is a deep relationship between the two airlines at a personal and business level which I do not see changing."

STRONG
on regulation:

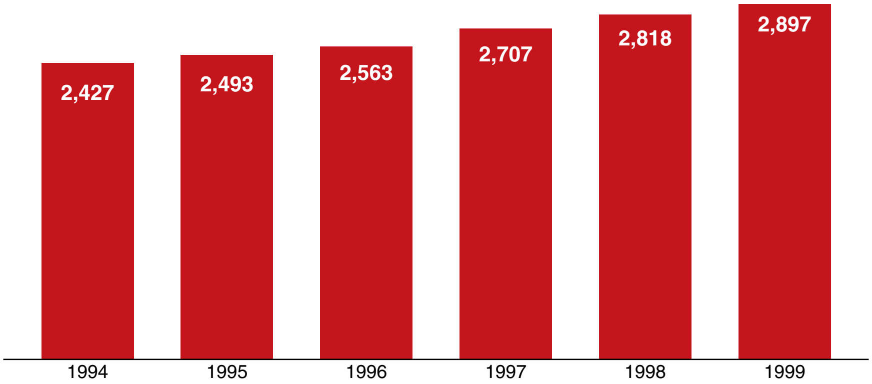
"Further liberalisation has occurred in Australia following a lengthy government review. We do not pretend there should be a halt to liberalisation. It is inevitable. What we have argued with the Australian Government about is how it should be done, the rate of it and being very analytical about the consequences of each step, not just in terms of a competitive outcome, but also in terms of the long-term structure of the industry in Australia.

It is all too easy for people to take for granted there will always be a Qantas employing 30,000 people and investing in the Australian industry in every aspect of our business.

What we are trying to say is if too much change occurs for what is an attractive short-term outcome in terms of say another competitor with a lot of capacity and that destroys, over a period of time, the viability of a healthy Australian industry, then there is a very big issue about the net benefit that flows out of that in terms of good jobs and consistent investment in Australia in the industry.

It is obvious to anyone that foreign airlines come and go in this market, as in others, and bring a lower level of investment and employment to Australia. If greater change occurs over a period of time which allows and forces the Australian industry to make itself competitive, which we believe we have been, then you can possibly get the best balanced outcome; that is more competitive fares with plenty of capacity, but still a modern Australian industry which can be part of the future and not just something that will be put out of business."

ASK's per employee (000)



on those closest to him:

"An outstanding characteristic at Qantas is the quality of the board and management relationship. Our board is more engaged in understanding strategic issues and business than any board I have worked with, yet there is separation between executive management and the board. This is down to the quality of our chairman, Gary Pemberton. He is a very astute businessman.

We also have a great management. (Deputy managing director) Geoff Dixon is the smartest commercial operator in Australia. I first met him in 1970 when I was working in the mining industry in the Northern Territory and we have grown together. The contribution of Geoff and his team is much under-rated in the industry. (Deputy managing director and finance chief) Gary Toomey is also highly regarded in the business, Gary, like Geoff, worked with me at Australian Airlines.

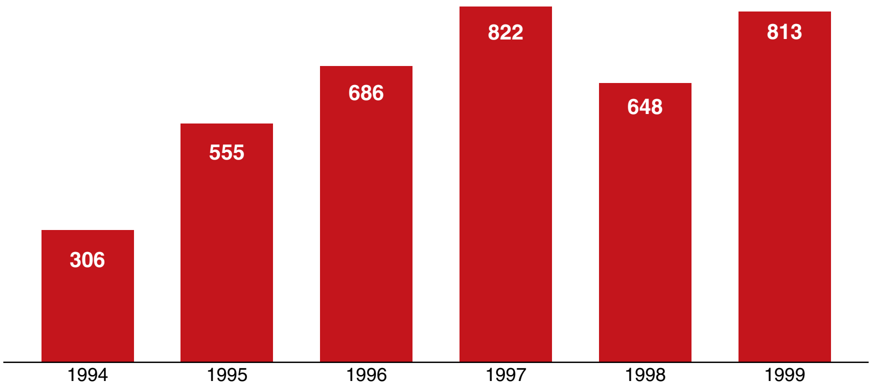
Importantly, we have a lot of bright people coming through internally. We have to think about succession plans."

Geoff Dixon

Gary Toomey

Qantas chairman Gary Pemberton: "very astute businessman"

STRONG
Qantas debt repayment (A$ million)



STRONG
on the Olympics:

"The profitability implications of the Olympic Games have been overdone. While you might have a large volume of traffic associated with the Olympics, I think a lot of business will be backing away during that period.

That will affect the yield mix. It's a good period to be going into, but I think some people get a little excited about the profit implications of it."

ACTION MAN

When James Strong was seen by a television audience of millions presenting the trophy to the winner of the Australian 500cc Motor Cycle Grand Prix earlier this year he was, as usual, looking his sartorial best.

What people did not know was that leather-clad motor cycle enthusiasts, Mr Strong and his wife, Jeanne-Claude, a medical practitioner, had themselves ridden for two days to join the tens of thousands of fans at the grand prix.

The Strongs share three powerful state-of-the-art motor cycles. Mr Strong has a 750cc Suzuki GSX-R and a BMW K1200 RS sports bike. Dr Strong has an 1100cc Italian Bimota SB6 machine.

Former Australian world champion, Michael Doohan, is a hero of the Qantas chief and a friend. But motor cycles are not the only extreme interests of the Action Family Strong.

The couple are avid mountain and rock climbers. A few years ago, Mr Strong was injured when he was caught in a rock fall at 15,000 feet, while abseiling down a rock face at night.

They also are keen sailors and scuba divers. Dr Strong has held a pilot's licence for over 20 years; twin engine instrument rated. Mr Strong flew, too, and although having flown solo, work commitments meant he did not have the time to complete the licence. He has made up for that somewhat by adding parachuting and bungee jumping to his list of extreme sporting achievements.

Apart from boxing, he was also a useful rugby player in his younger days when he attended the elite Duntroon Royal Military College, in Canberra, Australia.

"People say I must have come from a privileged background, but I was brought up on a small dairy farm. My parents struggled to make ends meet," said Mr Strong.

He decided to opt for military life on the spur of the moment. "I was told only one in 6,000 were accepted for Duntroon and I didn't stand a chance. That made me determined to apply."

With two years of Boys' Club boxing under his belt, he won the welterweight title in his first year at Duntroon. "You had to box, there was no choice. It was part of the character assessment," he said.


Photo: Stuart Davidson

The Strongs motor cycled two days to the Australian Motor Cycle Grand Prix

It must have stood him in good stead when, one year before graduation, he decided the military life was not for him. He chose instead to throw himself into the tough world of mining. It was in those early mining days that Mr Strong met one of his lieutenants, Geoff Dixon, now a deputy managing director of Qantas.

For 13 years he worked for Nabalco, before being appointed head of the Australian Mining Industry Council in his mid-thirties.

In 1985, the "agent of change" entered the airline industry for the first time when he accepted the job of chief executive of Trans Australia Airlines (TAA). In four years Mr Strong not only changed the government-owned airline's name to Australian Airlines, but also succeeded in putting the carrier on a firm commercial footing. When he left in 1989 it had taken the domestic market leadership from Ansett.

Mr Strong used his experience at Australian to good effect when he arrived at Qantas in 1993, which had taken over Australian Airlines in the same month.

But before then, there were a couple of other changes of tack, more deep ends in which to plunge. Having completed a law degree part-time when he was with Nabalco, he joined a major firm of solicitors in 1989. As national managing partner and chief executive, he engineered several major mergers to create Corrs Chambers Westgarth, one of Australia's largest law firms.

From mining, to airlines, to law and, finally before joining Qantas, to brewing. In the early 1990s he said yes to an offer to head Magnum Corp in New Zealand. The brewer was in serious trouble when he arrived. Mr Strong changed its name to DB – and its fortunes. Stability returned. Mr Strong put the froth back on top of the beer company. He was the toast of its workers.

Where next? According to Mr Strong he is staying put for now. But when the time comes to move on it will have nothing to do with boredom. "It's impossible to be bored in the aviation industry, especially at Qantas," he said.

IATA members face safety audit

By Tom Ballantyne

From early 2000 the International Air Transport Association (IATA) will require all prospective new member airlines to pass a safety audit before they are officialy admitted to the organisation.

The move by IATA is designed to improve safety standardisation in the airline industry.

IATA's director general, Pierre Jeanniot, said the long-term goal is to implement safety audits on a regular basis, possibly every five years, for its 265 member carriers.

Speaking exclusively to *Orient Aviation* during a visit to Sydney, Mr Jeanniot said the introduction of safety audits has been one of his aims since taking the helm of IATA in 1993.

He said steps to recruit officials to conduct inspections are underway and although no specific date has been set for the first audits he expected they could begin in the first quarter of 2000.

Mr Jeanniot believes the audits will be a critical element in a world-wide, co-operative effort to maintain and improve safety standards among airlines as they face mounting operational pressure through traffic growth.

Airlines will be required to pay for the cost of the audits. When completed, the carrier will receive a report, which will list any

IATA director general Pierre Jeanniot: safety audit a long held personal goal

deficiencies in maintenance, engineering or other aspects of safety. These problems will have to be remedied before an airline can be admitted to IATA.

An extension of the scheme to existing members will need to be endorsed by the IATA membership. This could take some time, possibly several years, said the IATA chief.

However, it is understood the basic concept is winning mounting support, particularly among the world's major operators. They see it as a valuable tool, not only on the general safety front, but in the development of global airline alliances.

Alliances have spawned an unprecedented number of code-share flights and with a growing number of airlines selling seats on partner airlines' services, a carrier needs to be satisfied the safety standards of its partners are at least equivalent to its own.

Already, the issue has entered the public arena through the suspension of code-share flights by several airlines dissatisfied with a partner's safety standards. One case occurred earlier this year when Delta Air Lines, Air France and Air Canada pulled out of code-shares with Korean Air after a series of incidents involving aircraft of the Seoul-based carrier.

Many of the big alliance carriers now insist on conducting their own safety audits on prospective code-share partners.

However, Mr Jeanniot suggested approaching a potential partner to demand such a right can be "a rather delicate issue" for an airline endeavouring to cement a commercial relationship with another carrier.

"Airlines have indicated they would far prefer it if there was a reliable alternative and that if an audit was available, it would be best done through an independent and reliable inspection," he said.

It is planned there will be a permanent team of inspectors, many recruited from airlines.

It is thought airline maintenance and engineering experts nearing retirement would be suitable applicants. They could work on a contract basis for IATA, extending their years of experience in the industry.

China's WTO challenge

China's imminent entry into the World Trade Organisation (WTO) will force the country's airlines to be more competitive as they face greater challenges in the market place from foreign carriers, according to a paper prepared by the Civil Aviation Administration of China (CAAC).

It also predicts a widening of foreign involvement in aircraft maintenance and reservations systems, but said corporate restructuring at Chinese airlines will be accelerated and internal management improved to enable carriers to enhance their international competitiveness.

Details of the paper were published by the China Daily*, which quoted the CAAC as saying that "in terms of aircraft maintenance, we will allow Chinese air companies to have their planes and engines repaired outside China and permit foreigners to establish joint ventures in China to provide aircraft maintenance services. We also pledge that Chinese air maintenance companies can employ foreign expertise and managerial talents".*

Although several large maintenance joint ventures already are in business in China and the CAAC's computer ticket booking system has been linked with similar systems in more than 10 countries, limitations remain on these operations in certain areas.

The paper said entry into the WTO will open these sectors wider to foreign involvement. "In this case," according to the CAAC, "China's international air market share may further shrink."

China's airlines have come a long way in the past two decades, gradually transforming themselves from a single, state controlled bloc to an industry which has several listed carriers and can boast of other airlines operating on a true commercial basis.

Many analysts believe the WTO breakthrough will prompt a resurgence in growth in the airline sector. The industry has been artificially held back for several years by Beijing because the CAAC leadership has feared the country's aviation infrastructure was incapable of keeping pace with market demand for air services.

The China Daily *reported a CAAC senior official's projections that the nation's civil aviation industry will grow at around 8% a year in the next decade. This figure compares with a global rate of about 5%.*

In November, CAAC director, Liu Jianfeng, said China planned to "open more air routes, add advanced aircraft and build a group of key airports and air traffic control facilities to raise the capacity of civil aviation".

By 2000, he added, the number of passengers will reach 57.5 million a year, more than double the figures of 1992.

China is building and upgrading 41 airports, which will handle 95% of the country's air traffic.

THE SILENT KILLER

The recent release of Korean Air's B747 Guam accident report cites pilot fatigue as a contributing factor. I wonder how many regulators, managements, pilots and airline staff really know what fatigue is.

I have followed the release of data from studies of this phenomena over the course of the last 35 years. Unfortunately, many colleagues and managers in the industry either have not read this data or have used the information to increase productivity at the expense of flight safety.

Fatigue, and the study of fatigue, should be understood by all aviation related personnel if the industry is to reduce the death toll from accidents where fatigue is a causal factor.

What is aviation fatigue? In aviation medical terms it means a pilot who is mentally, physically, physiologically and psychologically impaired as a direct result of exposure to the flying environment.

I have heard fatigue described as tiredness, and even a lack of self-discipline, by other pilots. I have rarely heard fatigue discussed by management except perhaps in the overall content of aviation medicine. Herein lies the root of the problem. Lack of fatigue awareness. Fatigue is too often treated as an individual's medical problem rather than a system problem.

This is partly due to the aviation culture of a state and its airline, but also to the short history of the study of fatigue in aviation. These studies really began in earnest in the late 1950s to the early 1960s, as a direct result of the space race.

With the advent of jet transport, long distance, fast travel – but more importantly, the rapid crossing of many time zones in a single flight – was being experienced by airline crews. This led to the use of data and methods already pioneered by the U. S. National Air and Space Administration (NASA) and other space travel agencies to form the basis for the study of aviation fatigue. Other government, and semi-government aviation bodies and airline and pilot groups have completed studies in the intervening years.

Regrettably, a lot of this data is wasted because it is poorly disseminated to user groups. These studies also are considered by many airline managements either as industrially sensitive or as an individual's medical problem.

It has been my observation that this state of affairs was tolerable 10-15 years ago when the industry was more regulated. Since deregulation, however, fatigue is a subject that deserves closer scrutiny by airline regulators, airline management and pilots. Crew resource management (CRM) has increased the awareness of all of us about the human factors involved in flight safety. Aviation fatigue is a subject I believe deserves at least as much scrutiny if we are serious about reducing accident statistics.

> *'I predict that as competition increases, technology advances and more people and goods need transporting by air, aviation fatigue will assume a more prominent role in the cause aircraft accidents'*

The proper place for fatigue countermeasures is firmly in the safety department of an airline, not the medical pending tray. Most airlines purport to place a high degree of importance on flight safety matters. They point to management trees showing the flight safety director with direct input to the CEO. In reality, if there is cost involved, the true management tree would show the safety department is on par with fleet managers and that all of them are fighting for the same corporate budget.

Pilots, too, need to be able to openly discuss fatigue matters without fear of being branded unfit, unhealthy or somehow too weak to complete company rosters. The understandable fear that surrounds discussing anything vaguely medical, as far as it concerns the individual pilot and his/her licence, is a major cause for concern.

Fatigue needs to be studied and assessed and counter-measures promulgated in-house by management on an operational procedure basis. The aviation medical doctor suffers from a fatal flaw when it comes to doing something about fatigue. He or she relies on hard data (case history) before being able to produce a result. The present attitude of regulatory authorities and airline managements to aviation fatigue means the data is not going to present itself openly. Rather, it is going to be a contributory factor in a string of causal factors in an aircraft accident.

Suggested remedies include:

- scheduling management introducing systems that use fatigue counter-measure rules, including the effects of time zone change on flight fatigue.
- recognition by crewing and scheduling departments of the disparity between day and night flights. It is commonly acknowledged that one hour day flying is equivalent to 1.5 hours night flying. It is also generally recognised that flights departing between midnight and 6am local time are at higher risk of fatigue than at any other time. Double crew in these cases markedly reduces fatigue by allowing more in-flight rest.

The body's many clocks require 24 hours

to catch up with every two hours of time zone disruption. Most responsible airline managements allow 72 hours at home base after any long-haul trip that crossed more than six time zones.

- Lowering of unnecessary stress levels by not scheduling simulator, class room, management or any form of company duty 24 hours before a flight. Management pilots and check and training pilots suffer from fatigue too!
- Adequate rest facilities at layover ports, i.e. more attention to sleeping facilities such as noise, darkness and security requirements.
- Training of crews by competent instructors in personal fatigue counter-measures is required. Techniques such as how to sleep on command; maintaining a sleep log; the benefits of napping; sleep patterns while on a trip; what time zones are best to try and maintain during a trip pattern; the effects of climate, food, water, drugs and alcohol, noise and light on fatigue. Physical, mental, psychological and physiological effects of fatigue. Clues to look for in you and your crews' behaviour that demonstrate the onset of fatigue.
- Improved training for aviation medical staff is needed in fatigue and associated counter measures. They need accurate data-gathering and retrieval systems so they can assist and advise management about the company's true risk to flight safety from flight fatigue.

A case in point must surely be Korean Air. Everything about the way KAL operates has been put under the safety spotlight in recent months. Scheduling rules, training requirements, CRM and the increased use of outside aviation specialists are being employed to increase the flight safety awareness of the company management and staff. I hope that improved fatigue training and the use of counter-measures are on its agenda.

Wise counsel suggests the image of fire engines and ambulances at an accident scene is by far the bigger nightmare than any bean counter's complaints about money spent on fatigue counter-measures. I predict that as competition increases, technology relentlessly advances and more people and goods need transporting by air, aviation fatigue will assume a more prominent role in the cause of aircraft accidents.

To prove me wrong I hope regulatory authorities and responsible industry players will all do their part to introduce, and make mandatory, aviation fatigue counter-measures.

The Captain is a long-haul pilot working with an Asian airline.

1999 IN REVIEW

Critical change, sometimes transformation, were the hallmarks of the region's aviation industry in 1999.

The change took varied forms and, in several cases, among star airline performers, it was in place long before January 1, 1999.

At one level in 1999, the airlines continued to conduct their operations on the near-sacred principles of increased productivity and reduced costs. They conceived of new strategies to manage periods of over-supply and declining yields over the longer-term.

These strategies have re-written the route networks of many airlines, restructured and, in some cases, reduced individual fleets, forced through new pay and productivity deals in a tightened job market and resulted in thousands of sackings and redundancies from the managing directors down – most spectacularly at Korean Air and Garuda Indonesia – at many airlines.

Sadly, too, the region's safety record was unsatisfactory. There have been crashes and incidents that have highlighted the cultural problems that remain to be resolved in the cockpits and cabins of a number of the region's airlines. More optimistically, a majority of those with below pass safety records are spending millions to correct these problems.

But at a deeper level, the response in 1999 to Asia's first downturn since the end of World War II has been fundamental for carriers. At every level of airline operations more barriers of conventional operations continue to collapse – whether they be in air service agreements, new partnerships forged with former rivals or new equity deals moulded to produce greater profits for the industry.

Underpinning these trends is the mantra of the nineties – airline partnerships – consummated at their deepest level by global airline alliances. At year end, there will probably be three viable alliances in place, with a fourth struggling to get up and running.

Hardly a month went by in 1999 without an airline announcing either it will join an alliance or the media being invited to attend the formal admission of a new member into an alliance.

Even more frequent were the "engagements" of many airlines as they linked up in code-shares or through the galloping membership growth of airline frequent flyer programmes. In some cases, the partnerships have resulted in an alliance union. In others, they were mismatched, but the never-ending search for new partners, especially if they serve the new markets of China, continues.

Yes, in 12 months, the landscape of Asia-Pacific aviation has been transformed. It is a sleeker, more vibrant, and in many cases, a more open and original industry than it was a year ago.

The crisis has brought change and accelerated the pace of its implementation.

In 2000, the year when it is predicted the industry will finally climb out of its 30-month trough, expect more of the same at an even more breathtaking pace.

Singapore Airlines: astute management produced healthy profit

ON THE

An *Orient Aviation* cover story in mid-year (Taking Stock, June) canvassed the chief executives of the 19 member carriers of the Association of Asia Pacific Airlines (AAPA). We asked them what steps they had taken to combat the downturn and asked them to speculate on the future.

The survey revealed:

- Airlines had taken the toughest decisions in their history; for some it was a question of their survival
- Many had imposed widespread staff cuts
- Greater emphasis was being placed on information technology
- Capacity growth to be more conservative
- There was a greater acceptance of alliances than pre-recession
- The chief executives felt the days of big yields had gone forever with greater efficiency necessary to compensate

In the last year, a number of airlines have sold, or are looking to sell, non-core assets like engineering and maintenance, catering and training facilities.

Leading the recovery in the early part of the year were Thai Airways International (THAI), Korea's Asiana Airlines and Taiwanese carriers, China Airlines and EVA Air.

The Australian and New Zealand carriers reacted quickest during the crisis. Who can argue with Qantas Airways remarkable record of five record-breaking profits in five successive years?

Chairman Gary Pemberton reported at the company's annual general meeting in November that the airline's performance was on course to make it six record profits in a row.

Singapore Airlines (SIA) and EVA Air were perceived as the most entrepreneurial airlines in fending off the recession.

Now, as the economies of the Asia begin to recover – some quicker than others – the early results of the shake-out are beginning to emerge.

SIA announced in October that its group net profit was up 23.3%, to S$577 million (US$345.5 million), for the six months to September 30, a rise of S$109 million over the same period in 1998. Group revenue increased 14% to S$4.3 billion.

The airline's profit after tax rose 26.9% to S$507 million, an increase of S$108 over 1998. Operating profit for the period climbed 52.3% to S$374 million, up S$129 million. Revenue rose 15.1% to S$3.95 billion.

Overall load factor improved three percentage points to 70.9%, as a 12% growth in traffic outpaced a 7.3% increase in capacity. Productivity per employee improved 14.8%.

However, despite Asia's upturn, the recovery of travel remains fragile, said SIA. Sustained growth will hinge on continued economic improvement in the region, Japan's recovery efforts and the strength of the U.S. economy.

In the same six-month period, two of Japan's three international carriers reported a surge in operating profits, largely due to efforts to reduce operating expenses. Japan Airlines' (JAL) posted an 8.4% rise in operating profit to 30.1 billion yen (US$286.3 million)

Although after-tax net profit was down 34.8%, JAL said trends in Japan's economy indicated consumer confidence was slowly improving. "While the overall business envi-

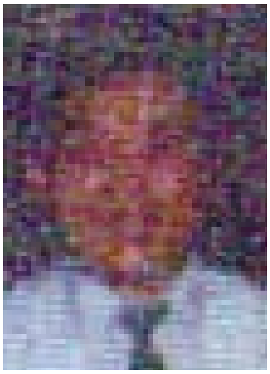
NEWSMAKERS IN 1999

LUCIO TAN
Philippine Airlines chairman

Love him or hate him he was rarely out of the headlines in 1999, as indeed he was in 1998. Most importantly, his airline is still in business.

ABDULGANI
Garuda Indonesia president

Secured a fiscal lifeline from the government and is guiding Garuda to an operating profit for the first time in a decade.



WU RONGNAN
Xiamen Airlines president

Personally led a team into the teeth of a typhoon as it lashed Xiamen and spent 12 hours on the airport apron ensuring his aircraft were secure.

MEND

Japan Air System: operating profit tripled in the first six months of 1999

ronment is still depressed there are signs of recovery," said a spokesman.

Demand on JAL's international and domestic services was good, but revenue was affected by intensifying competition and declining corporate travel.

Japan Air System's operating profit more than tripled year-to-year to 7.75 billion yen, with cost-cutting and foreign exchange gains attributed to the rise.

Cathay Pacific Airways, which recorded its first loss in 35 years last year, bounced back with a decent profit of HK$108 million (US$14 million) in the six months to June – and it's getting better. Cathay recorded a passenger load factor of 82% in August, up from 73% in the same month in 1998 and its highest figure in over 18 months.

Once again, the result was put down to the improvement in the Asian economy. In November, Cathay added three flights a week to Seoul and is resuming a twice-daily service to Sydney in preparation for the Sydney 2000 Olympic Games.

'Entrepreneurial' EVA posted a pre-tax profit of NT$277 million (US$8.7 million) in the six months to June, compared to a loss of NT500 million in the same period in 1998. It was double EVA's original forecast. The carrier said it would have no trouble in reaching its 12-month target of a NT$1.27 billion pre-tax profit.

EVA acted quickly in the early days of the recession by putting greater emphasis on its cargo markets.

In the last two years it has increased its MD-11 freighter fleet from three to nine aircraft. It also has added to its combi fleet.

Cargo revenue reached 40% of the airline's total income in 1998 and EVA is looking to push this up to 50% by 2002.

EVA sold shares to the public for the first time in October.

Thai Airways International (THAI) has been another outstanding performer in 1999. It announced a net profit rise of 35% to 5.3 billion baht (US$136.3 million) to September 30. Freight, too, played a large part in the result.

While Qantas maintained its record-breaking ways, its rival Ansett Australia, under the direction of executive chairman Rod Eddington, continued its revival with a five-fold increase in profit to US$100.4 million.

Its South Pacific 50% shareholder, Air New Zealand, clocked up increased profits of US$119.1 million and both carriers, having joined the Star Alliance in March, are looking to the global grouping to boost bottom line results.

Garuda Indonesia is undergoing dramatic changes in fortune. In addition to the Asian recession, Garuda has had to contend with other factors way beyond its control, including the knock-on effects of the violence in East Timor.

But with new and transparent management, under the leadership of its president Abdulgani, a successful venture with Lufthansa Consulting and a major financial package from its government, Garuda is posting an operational profit and looking to pay off US$1.36 billion in debt.

When it comes to shake-ups, shake- outs and shake-downs, Philippine Airlines has been through just about every possible crisis (see separate story). But it has suvived.

Y. H. CHO

Korean Air chairman

In the news for all the wrong reasons. Most recently he admitted tax evasion after a government investigation into his family for fraud and embezzlement.

Y. K. SHIM

Korean Air president

Took over from Y. H. Cho in June and told sceptics: 'I am running the airline, not the Cho family'. He is overseeing sweeping safety upgrades at the airline

BILLY C. L. LAM

Hong Kong Airport Authority CEO

After a chaotic opening in 1998, Mr Lam and his staff have turned Chek Lap Kok into a good news airport. Landing charges were reduced 15% in October.

KAL spends big on safety

'This will work. No other airline in the world has made such a huge commitment to air safety,' Capt. Bill Hardy, Korean Air's vice-president for special projects outlining the airline's US$200 million safety upgrade in mid-year

Once again the Asia-Pacific region has recorded a patchy safety perform ance in the last 12 months.

In February, a China Southwest Airlines Tupolev 154M crashed, killing all 61 people on board.

A month later, a Korean Air (KAL) MD-83 skidded off the runway at South Korea's Pohang domestic airport.

Nineteen of the 156 passengers and crew were injured and the plane was a write-off. In April, a KAL freighter crashed shortly after take-off from Shanghai.

Its three-man crew and several people on the ground died.

In November, the South Korean Government imposed a one year ban on the carrier launching new international routes after the U.S. National Transportation Safety Board cited pilot error as the main cause of the airline's 1997 B747 crash in Guam. Two hundred and twenty eight passengers and crew were killed in the accident.

On the plus side for KAL was the signing in July of a US$30 million contract with FlightSafety Boeing Training International to train and re-train all its pilots.

More than US$200 million is being invested in safety programmes throughout the airline. Inflight technology such as Enhanced Ground Proximity Warning Systems (EGPWS), Traffic Collision Avoidance Systems (TCAS) and Aircraft Communication Addressing and Reporting Systems (ACARS) will be either fitted or upgraded throughout the fleet.

Operations manuals have been completely re-written and a "quantum leap" taken in the development of CRM.

"This will work. No other airline in the world has made such a huge commitment to air safety," Capt. Bill Hardy, vice-president for special projects told *Orient Aviation* in mid-year.

The region's safety record was better in the second half of the year, but lives were still lost in some tragic incidents.

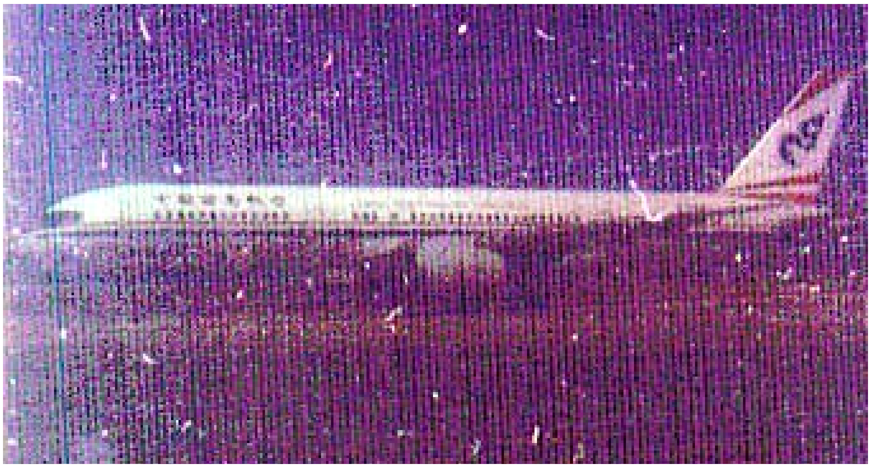
In July, an Air Fiji Bandeirante crashed, killing all 17 on board and during an August typhoon at Hong Kong's new Chek Lap Kok airport, a China Airlines MD-11 flipped over on landing and caught fire. Three people were killed and more than 200 of the airplane's 315 passengers were injured.

In September, a Qantas Airways' B747-400, an airline with one of the best safety records in the world, overshot the runway in Bangkok and came to rest on a golf course. Its landing gear was damaged. No one was hurt.

- Air rage has continued to dog the industry during 1999. Singapore Airlines and Cathay Pacific Airways have featured in high profile court cases which have seen passengers jailed for violent behaviour on board.

- A crackdown on the size and number of carry-on bags was introduced at Singapore's Changi airport in mid-year. The move had across-the-board support from airlines and airport and aviation authorities. It was hailed as a breakthrough on an issue which is a growing threat to cabin safety: a fact sometimes ignored by carriers reluctant to antagonise passengers who carry overweight luggage onboard.

- In October, a China Southern Airlines captain was criticised by Hong Kong Civil Aviation Department officials for failing to report that 45 passengers on his plane had been injured, seven seriously, when his aircraft struck turbulence 15 minutes before landing at Chek Lap Kok airport. Once on the ground the captain sent a radio message to the airline's ground handlers who relayed a request to ambulance crews to help out. Passengers said no warning of turbulence had been given by the flight crew, nor were 'fasten seat belts' signs switched on.



China Southwest Airlines: blemished China's good safety record of recent years when a Tupolev 154 crashed in February, killing all 61 passengers on board

Airline chiefs respond to CAAC pressure

Following losses of more than US$300 million in 1998, the Civil Aviation Administration of China (CAAC) put airline bosses under intense pressure to produce improved results this year.

In February, chief executives were told that if they recorded a loss in 1999 they would receive an official, public warning. A second successive loss would result in their dismissal, the CAAC edict threatened.

Surprise, surprise, by the end of the first half of the year several carriers had turned around their economic performances. Apart from better and more motivated management at most mainland airlines, airlines improved their bottom lines by selling or leasing excess capacity. A CAAC decision to slash the airport construction fund tax and ban ticket discounting – a move not entirely successful – was a welcome boost to their incomes.

By June, the rumour mill was running wild with the news that the CAAC had informed China's 30-plus carriers they must merge into four or five groups by the end of 1999, to increase efficiency.

The biggest surprise of the proposed restructuring was the reported plan to combine two of the Big Three carriers, China Southern Airlines (CSA) and Air China, based in Guangzhou, in the south, and Beijing, in the north, respectively. The success of the merger was viewed with scepticism by most disinterested parties as the cultures of the two carriers are so different.

Time and better results from the nation's airlines seem to have pushed the plan down the CAAC's list of immediate priorities, although few would doubt that some kind of industry shake-up that will reduce the number of airlines flying in China makes economic sense. A handful of carriers already have been swallowed up by larger carriers.

Exceptional performers in 1999 have included Yunnan Airlines, based in Kunming in southwest China. The mainland's most profitable carrier, it made 50 million yuan (US$6.5 million) in 1998. Sources at the airline said the CAAC put this figure much higher.

It was set a target profit of 380 million yuan by the CAAC, but had already topped 290 million in the first six months of 1999.

Yunnan was also named among the safest airlines by the CAAC, along with Xiamen Airlines and Sichuan Airlines.

In January, Hainan Airlines applied to launch an airline in Tibet. Not surprisingly, given Beijing's opposition to an independent Tibet, island-based Hainan is still awaiting approval from the CAAC for the launch.

But Hainan is not regarded as one of China's most ambitious carriers for nothing. In August, it ordered 19 Fairchild Aerospace 328JETS, worth more than US$226 million, with options on an additional 20 aircraft. The first 328 arrived in Hainan in October.

Hainan Airlines' executive jet subsidiary, Deer Jet, also took delivery of its third aircraft, a Raytheon Hawker 800XP.

The southern China-based carrier is responding to the CAAC's call for airlines to prioritise short-haul regional and commuter aviation. Shandong Airlines, which has already proved thinking small can be big business, has ordered new commuter planes. It has eight Saab 340s in its fleet of 14 aircraft.

On September 16, Shanghai's new US$2.1 billion Pudong Airport had its 'soft' opening with domestic carrier, Shanghai Airlines, beating its big brother rival, China Eastern, in winning first flight honours. Hongqiao Airport will continue to operate in Shanghai. Only a handful of foreign carriers, including Japan Airlines, All Nippon Airways and Lufthansa, have said they will fly out of Pudong.

Not to be outdone, further north in the nation's capital, Beijing Capital International Airport opened its expanded airport for daily business on November 1. CSA was the first and only 'tenant' for a time, after it conducted early test operations. But other carriers will be moving into the facility, which is the centrepiece of a major expansion project that has cost China almost 9.2 billion yuan (US$1.1 billion).

The main terminal has an area of 336,000 sq. metres, making it the largest airport terminal in China.

In late October, French president Jacques Chirac announced, during a visit to France of China's president, Jiang Zemin, that the Beijing Government had authorised the purchase of 28 Airbus Industrie aircraft, valued at about US$2.35 billion. The order, said President Chirac, is for 20 narrowbody A319/318s and eight A340s. The big question for several analysts and, no doubt, rival Boeing, is has China's well-publicised moratorium on widebody aircraft been lifted?

Air Traffic Control

China has been upgrading its ATC systems in 1999. It will open its first CNS/ATM (Communications Navigation Surveillance/Air Traffic Management) air route before the end of December, which will offer a speedier link to Europe. A second route, over the North Pole to the U.S., will be launched sometime in 2000.

The CAAC's air traffic management bureau director general, Chen Xuhua, said in October China faced difficulties in flight operations because of congested airports, outdated ATC systems and lack of advanced training for its controllers. The government has agreed to reduce ATC centres from 34 to 10 and flight information region boundaries will be extended, employing the latest technology. Tenders are out to upgrade and equip new ATC centres in Beijing, Shanghai and Guangzhou.

INSIDE CHINA

That was the year that was...

ACQUISITIONS

Singapore Airlines (SIA) has money to spend on buying into other airlines. Unfortunately it has not had much luck this year. It started when a deal to buy a stake in China Airlines fell through at the beginning of 1999, when no agreement could be reached on the extent of SIA's management control. Next, it withdrew from a bid to buy into South African Airways.

But its biggest disappointment came with its failure to secure a 50% stake in Ansett Australia. In March, News Ltd settled with SIA on a price of A$500 million (US$320 million) with SIA to sell its stake in Ansett. But then it pulled out in June, citing SIA's failure to reach agreement with Ansett's other 50% shareholder, Air New Zealand (ANZ). ANZ was pursuing its pre-emptive right to buy News Ltd's share.

SIA said enough was enough and walked away from the deal.

ANZ is rumoured to be still interested in buying the remaining equity, but News Ltd chairman, Rupert Murdoch, said the asking price has doubled to A$1 billion. In June, Ansett announced a five-fold increase in net profit to A$140.8 million. It joined the Star Alliance in March. This move is expected to add another 10% to its profit figures.

However, all is not lost for SIA. There is still the long-running saga of the sell-off of 23% of Thai Airways International (THAI) equity. Originally scheduled for mid-1998, the sale now looks likely to take place by the first quarter of 2000, but SIA has plenty of competition for the minority stake. Also in the frame are THAI's Star Alliance stable mates, Lufthansa and United Airlines, and oneworld alliance members, British Airways, Qantas Airways and American Airlines. Delta Airlines, Air France and Swissair are other airlines in possible contention.

The Thai Government owns 93% of THAI and will initially reduce this to 70%, although it has said it intends eventually to cut this back to less than 50%.

AIRCRAFT ORDERS

In August, China Airlines (CAL) announced the largest aircraft order in Taiwan's history and the biggest in the region for four years.

Within 24 hours it signed purchase agreements for 13 Boeing B747-400 freighters, valued at US$2.5 billion, with four options, and seven Airbus A340-300s with options for an additional A340 and four A330-300s. The Airbus order was worth US$1.8 billion.

Boeing threw a spanner in the works when it alleged there had been political interference in the deal. It had expected CAL to order the B777 rather than split the order with Airbus.

- Singapore Airlines confirmed its commitment to purchase 10 ultra-long range Airbus A340-500 aircraft in mid-February; five firm orders and five options.
- In October, Cathay Pacific Airways ordered two Boeing B747-400 freighters. Only days earlier it announced it was to lease three A340-300s from Air China. In November, it leased a third and fourth B747-200 to Air Atlanta Icelandic.
- The executive chairman of a revitalised Ansett Australia, Rod Eddington, said he expects to put a fleet proposal to his board before the end of the year. After improving the airline's profit five-fold in 1999, he is likely to receive a positive response.

Lots of speculation about the Thai Government's plans to sell 23% of its shares in Thai Airways International in 1999, but little action

The new Kuala Lumpur International Airport: its operator Malaysia Airports Holdings to become Asia's first listed airport company

AIRPORTS

Hong Kong's Airport Authority relented in September and, in a major about-face, cut landing and parking charges at the new Chek Lap Kok airport by 15%, from January 1, 2000.

A campaign of strong opposition to "excessive" fees had been waged by airlines and lobbyists, including the International Air Transport Association, the Hong Kong Board of Airline Representatives (BAR) and Association of Asia Pacific Airlines in the months leading to the July, 1998, opening of the airport and since then.

The reduction was less than the 25% demanded by airlines, but was welcomed nevertheless. BAR chairman Ronnie Choi said the reduction in charges would be an incentive for many airlines to increase services in 2000.

Singapore's Changi airport also cut charges by 10% during the year.

- In November, Singapore Changi Airport Enterprise bought a 7.1% stake in New Zealand's listed Auckland Airport. Analysts predicted Changi's share would rise over time.
- The New Bangkok International Airport at Nong Ngu Hao, scheduled to open in 2004, could be delayed by at least a year because of increasing costs and delays caused by

mass board resignations.

The estimated cost of the passenger terminal rose to 70 billion baht from 40 billion baht.

- Malaysia Airports Holdings was estimated to have raised M$275 million (around US$73.4 million) in a flotation which makes it Asia's first listed airport.

The airport operator, which manages and operates 37 airports in Malaysia, made M$341 million profit in 1998, a 45% profit over the previous year. It is expecting a better result this year. Malaysia Airports will become one of only six publicly traded airport companies in the world, four in Europe and one in Auckland, New Zealand.

Work started on a new US$500 million international terminal at Manila's Ninoy Aquino International Airport in December. It will be completed in 2002.

- While the Australian Government appears committed to the Badgery's Creek site for its new international airport, it has made no firm decision and there are suggestions it might opt initially to build a smaller airport.

There remain questions over the environmental impact of the proposed site and the possibility of cutbacks in funding for the project. Additional budget spending required for Australia's involvement in East Timor may eat into the project's funds. The timing of a government decision on how it will proceed remains unclear at this stage.

ON COURSE: South Korea's new international airprot at Inchon is on course for a 2001 opening.

ALLIANCES

IN – Air New Zealand and Ansett Australia joined the Star Alliance in March. All Nippon Airways became the fourth airline from the Asia-Pacific to take up official membership in October. Thai Airways International was a founder member of the world's largest airline grouping.

MAYBE – Japan Airlines (JAL) was still being tipped as a future member of the oneworld alliance during 1999, but by year-end the carrier had not committed itself to membership. The rumour mill said it may make a decision by March. Cathay Pacific Airways and Qantas Airways represent the region in oneworld.

In May, China Eastern Airlines (CEA) president, Li Zhongming, said he hoped CEA would join oneworld. He was speaking in Sydney at the signing of a code-share agreement with Qantas Airways. Mr Li said he had had lengthy talks with Qantas chief executive, James Strong, and, in April, with American Airlines chief, Don Carty, both oneworld members. He accepted membership would not be in the "immediate future".

Lufthansa German Airlines chairman, Jurgen Weber, said in late 1999 he favoured Beijing flag carrier, Air China, as the mainland's representative in the Star Alliance. Lufthansa's engineering subsidiary, Lufthansa Technik, and Air China are joint venture partners in the Aircraft Maintenance & Engineering Corporation (AMECO) at Beijing's Capital International Airport.

But no one is claiming everything in the alliance garden is rosy. Australia's Competition and Consumer Commission early this year raised concerns about the "market power" of alliances. And the U.S. General Accounting Office told a Senate transportation sub-committee policymakers will have to determine if the potential benefits of proposed alliances exceed their potential harm.

Unions, too, have expressed reservations. Aircraft engineers in Australasia in mid-year said work could be moved to other partner airlines leaving the door open for job losses.

Meanwhile, the alliance airlines are anxious for airports to bring all their partners under one roof. While this is possible, said one airport director in August, it could take years to achieve.

DISPUTES

A pilot dispute at Cathay Pacific Airways resulted in a new word for the dictionary – a sick-out.

After months of negotiations between management and the flight crew union over proposed pay cuts for senior pilots, in return for stock options, the parties failed to reach agreement. Cathay found itself faced with a lengthy list of sick pilots.

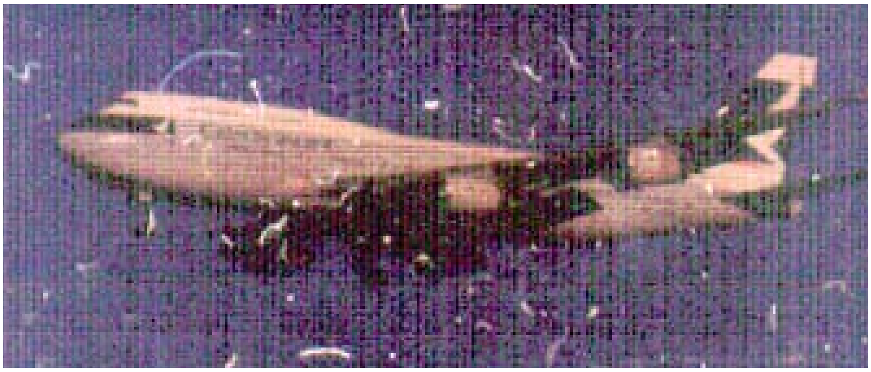
The flight crews claimed they were suffering from stress caused by the uncertainty of the lengthy pay talks. Hundreds of flights were cancelled over a two-week period, costing the airline an estimated HK$500 million (US$64.1 million).

When the dust had settled, the parties agreed to a cut in the salaries of 700-plus pilots, by an average of 7% over three years, for those based in Hong Kong. Pilots based overseas accepted a 18-22% reduction. Both groups received stock options in return for salary cuts. Junior pilots' pay, the so-called B-graders, will receive pay rises of 5% over three years.

The agreement will save Cathay US$180 million over 10 years.

- Pilots in Korea have been fighting a losing battle – at least to date – to form their own trade union.

They have the backing of the International Federation of Airline Pilots' Associations (IFALPA), which believes cockpit crew unionisation is important in encouraging improvement in air safety.



Cathay Pacific Airways: its operations caught a cold when "stressed out" pilots went down sick during a pay dispute

Orient Aviation reported in October that Korean Airlines and Asiana Airlines argue crew are employed partly as special policemen charged with protecting people's lives. As such they are civil servants who cannot form a union under South Korea's existing constitution.

The pilots say they are rendering a service to airline customers and should have labour rights.

- In July, 38 locally employed engineers staged a sit-in at Papua New Guinea's Air Niugini over a pay dispute. The were fired. In November, PNG's Arbitration Tribunal ordered the reinstatement of the engineers. The tribunal criticised the actions of both parties, but laid greater blame on the airline's management. Another 58 local engineers also were sacked when they walked out in sympathy.

PROMOTED

- In late January, Luis Juan Virata was appointed president of Philippine Airlines and took over the day-to-day chief executive officer duties of chairman Lucio Tan. Within weeks he had been toppled and Mr Tan was back running the show. In mid-year, PAL veteran Avelino Zapanta was appointed president.
- Former Air Pacific CEO, Andrew Drysdale, is the new head of Australian regional carrier, Hazelton Airlines.
- After five months as acting president, China Airlines confirmed the appointment of 51-year-old Sandy K. Y. Liu (right) as president.

- In July, Shim Yi Taek took over as president of much troubled Korean Air after the president of the country, Kim Dae Jung, called on the founding Cho family to relinquish management of the airline. He made his appeal during a Cabinet meeting after a series of accidents. Former president, Y. H. Cho, moved into the chairman's office, previously the domain of his father, C. H. Cho, who retired.

RETIRED

- Malaysia Airline's managing director, Wan Malek Ibrahim, took early retirement in July. When news of the M-D's decision leaked out in February, chairman Tan Sri Tajudin Ramli denied Mr Wan Malek was disillusioned and said his retirement was for personal reasons.
- In May, Cathay Pacific Airways chairman Peter Sutch (right) retired after 28 years with the airline. He had seen it grow from a small regional carrier into one of the most respected and profitable airlines in the world. He was succeeded in Hong Kong by James Hughes-Hallett.

NOTABLE

- It must be one of the year's most outstanding stories of hands-on leadership. In October, a typhoon hit the Chinese southeastern coastal city of Xiamen head on. Unable to find shelter for all his aircraft, Xiamen Airlines president, Wu Rongnan, led a team of executives and workers onto the airport tarmac to tie down the aircraft. Mr Wu and his team remained at the mercy of the typhoon for 12 hours. Some days later, at a banquet in Xiamen, Mr Wu showed Boeing China Inc. president, Ray Bracy, rope burns on his legs, incurred as he fought alongside his staff to protect the aircraft.
- Following a British Airways-led call for tougher air rage legislation, the British Government extended the Air Navigation Order to legislate against any passenger who "acts in a disruptive manner" towards crew. Pressure is now being put on other countries to extend their jurisdiction to crack down on air rage incidents.
- Japan's major carriers, Japan Airlines (JAL), All Nippon Airways (ANA) and Japan Air System (JAS) decided on a show of strength to demonstrate their Y2K compliance. In September, a JAL B747, an ANA A320 and a JAS A300-600 took off into the night at five minute intervals and switched the clocks forward to December 31, 1999. Midnight came and went, the Minister of Transport and the three airline presidents declared the exercise an unqualified success. It had not come cheap. The total cost of the compliance programme was put at US$66 million.
- A major hailstorm which swept through Sydney in March caused about US$75 million in damage to aviation and airline facilities at Kingsford-Smith airport. More than 20 aircraft were hail-damaged.
- Royal Brunei Airlines selected its first female cadet pilot. Sariana Nordin started her 18-month *ab initio* course at the British Aerospace training school in Adelaide in July.
- Beijing's top airport 'bird-buster', Professor Xi Baoshu (right), told *Orient Aviation* in September of his latest technology to rid airports of fog. The centrepiece of his prototype is a five-metre long loudspeaker that was once used to blast communist propaganda across the Taiwan Strait to coastal Taiwanese residents. It can be heard 12 kms away and the professor says the sound waves break up the fog particles.

PAL defies the odds

Philippine Airlines (PAL) and its chairman and majority shareholder Lucio Tan will not forget 1999 in a hurry. They are still flying, indeed making money, but the odds on this 12 months ago were long.

The year started with much promise. Mr Tan hired a team of five ex-Cathay Pacific Airways managers, headed by Peter Foster, as consultants.

Their priority was to win the confidence of a small number of the 8,000 plus creditors who were owed the lion's share of an outstanding US$2.25 billion debt, and prepare a rehabilitation (survival) plan for the Manila Securities and Exchange Commission.

Perhaps the magnitude of their job was reflected in the fact each man was assigned a round-the-clock armed bodyguard.

The plan was submitted in March and eventually accepted, although it was far from easy to achieve. Senior PAL executives played a bizarre game of musical chairs in those months and Mr Tan fell out with his consultants, who were on their way back to Hong Kong by September.

PAL reduced its fleet from 54 aircraft to 22, slashed routes and staff and sold off non-core businesses.

In the six months to September 30, however, it posted a net profit of 32.7 million pesos (US$811,000). This was a massive turnaround from the 6.11 billion pesos loss in the same period a year earlier, when the airline was crippled by a 22-day pilots' strike and a temporary closure.

PAX, CARGO: AIRLINES ENJOY BEST OF BOTH WORLDS

The August consolidated results of Association of Asia Pacific Airlines (AAPA) carriers reflected another month of robust growth. Passenger traffic (PAX) surged by 10% and passengers carried rose by 9.5% over the same month in 1998.

With only 13 carriers submitting data for the month, it is worth noting that revenue passenger kilometre (RPK) and PAX levels reached were remarkably high. The good results were helped by the fact that August is normally the busiest month of the year for a majority of AAPA members.

With capacity growth restricted to 3.8%, reporting airlines registered a record high load factor of 79.6% for the association, which is 4.5 percentage points higher than August 1998.

Another highlight of the month's results was the RPK and PAX levels achieved by Japan Airlines (JL), Singapore Airlines (SQ), Thai Airways International (TG), All Nippon Airways (NH) and EVA Air (BR), which exceeded all previous years. Cathay Pacific Airways (CX) and China Airlines (CI) also reported their highest RPK levels and Asiana Airlines (OZ) registered its largest ever PAX figures.

Nine member airlines posted across-the-board increases in all passenger traffic measures. Five of the nine carriers experienced double-digit RPK and PAX growth: Philippine Airlines (PR), Asiana Airlines, All Nippon Airways, China Airlines and Japan Airlines. However the inflated growth in Philippine Airlines' traffic was the result of comparisons with its low base figures in the same period in 1998, which were effected by the Manila-based carrier's pilot strike. Garuda Indonesia (GA), with -14.5%. and Vietnam Airlines (VN), with -0.03%, were the only AAPA airlines to report negative traffic growth.

Controlled capacity expansion resulted in remarkably high load factors. Except for Philippine Airlines (68.8% load factor), all members managed to fill more than three quarters of available capacity on their airplanes. EVA Air achieved the highest passenger load factor (PLF) at 84.7%, followed by Asiana Airlines (84%).

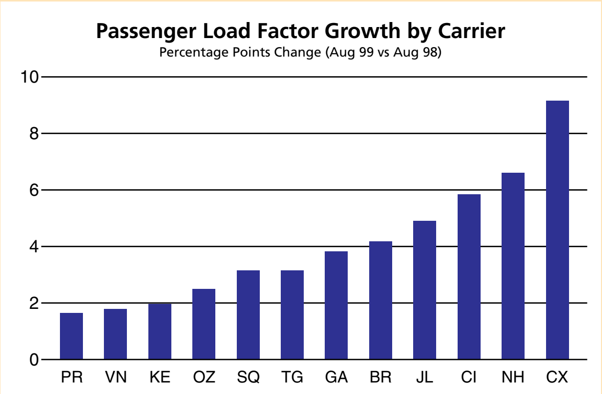
Other AAPA carriers with August load factors higher than 80% were Vietnam Airlines (82%), China Airlines (81.6%) and Korean Air (80.5%). Cathay Pacific's high load factor of 81.8% was partly due to a 9% capacity reduction.

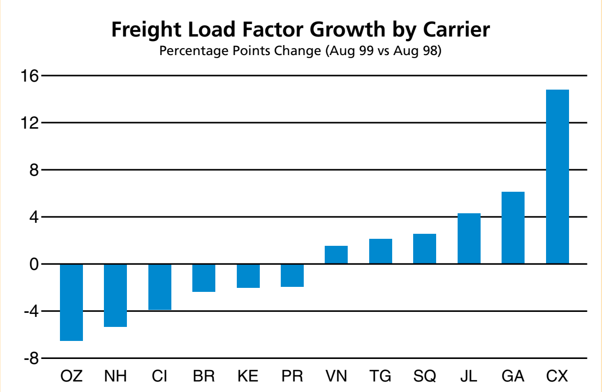
Cargo Results

Cargo traffic in August 1999 rose by 15.8% over the same month last year, while capacity expanded by 12.4%. This increased activity resulted in a 66.9% load factor, up 1.9 percentage points.

All airlines logged positive freight tonne kilometre (FTK) growth except Garuda Indonesia (-17.2%). Eight member airlines posted double-digit FTK growth, led by Philippine Airlines (42.9%) and Asiana Airlines (37.5%). However, these two airlines had reported huge traffic losses, for different reasons, in the same period in 1998.

An improvement in Taiwan's economy pumped up the freight traffic of EVA Air and China Airlines by 22.5% and 19.5% respectively. In terms of load factor, Cathay Pacific reported the biggest improvement, up 14.8 percentage points to 68.1%. Although lower than the same month last year, the load factors of China Airlines and EVA Air were the highest for AAPA members in August, at 80% and 77% respectively. Philippine Airlines had the lowest load factor (33.2%).





Results for the 12 months to August 31, 1999

Passenger traffic for the twelve-month period ending August 31, 1999 grew by 8.1%. Passengers carried rose by 8.6%. These substantial increases in RPK and PAX are not surprising given that the period under review consists of 12 consecutive months of growth. Traffic, which had declined after the onset of the regional economic downturn in late 1997, turned around in September 1998 and has continued to gain momentum since then.

A moderate rise in capacity (1.3%) resulted in a 4.6-percentage point improvement in load factor to 71.6%.

Seven member airlines registered across-the-board increases in all passenger traffic measures, led by Thai Airways and China Airlines, both of which posted double-digit growth in RPK and PAX. All Nippon Airways recorded significant increases in RPK (10.7%) and PAX (12.7%). But a slightly faster expansion in capacity (11.4%) pushed down load factor by 0.4 percentage points to 66.5%; the second lowest load factor, for the Japan carrier.

EVA Air (13%) and Singapore Airlines (12.8%) also showed impressive RPK growth. Two airlines, Philippine Airlines and Garuda Indonesia, remained on the negative side of the scale with RPK declines of 45.1% and 7.3% respectively. With the exception of All Nippon Airways, load factors of all member airlines rose, due to generally improving traffic demand in the year to August 31. Nine members logged minimum load factors of 70%. Asiana Airlines reported the highest PLF at 76.8%, due to a decline in capacity. Philippine Airlines, despite a 45.6% contraction in its capacity, registered the lowest load factor of AAPA carriers (64.2%).

Cargo Results

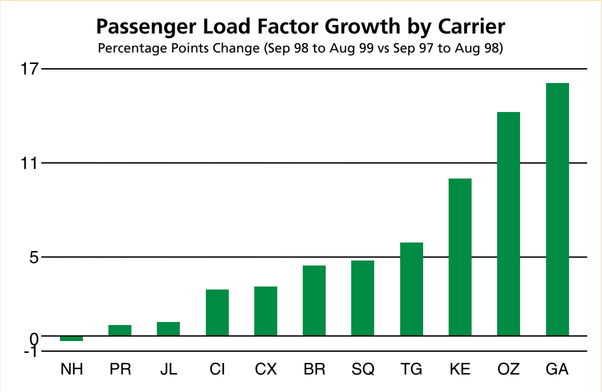
Freight traffic in the 12-month period increased by 6%. Marginally faster capacity expansion (6.4%) pushed down the load factor by 0.3 percentage points to 68.8%. All member airlines experienced positive growth in the year to August 31, except Philippine Airlines and Garuda Indonesia. EVA Air (21.7%), All Nippon Airways (15.9%) and Asiana Airlines (12.1%) had remarkably high freight traffic growth, but only Cathay Pacific increased capacity, freight tonnage and load factor.

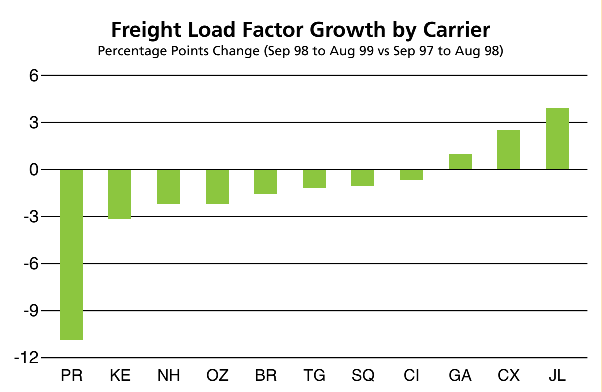
Due to capacity expansion in the middle of the period under review, a majority of AAPA airlines recorded a decline in freight load factor (FLF). China Airlines registered a FLF above 80%, followed by EVA Air (78.3%), Korean Air (78%) and Asiana Airlines (75.9%). Philippine Airlines barely filled one-third of its capacity and recorded the lowest figures among reporting carriers.

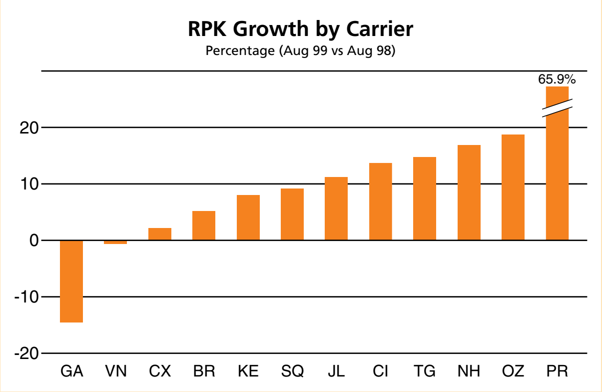
Summary

The consolidated passenger traffic results for August 1999 support opinion that the region's aviation industry is truly on the mend. High RPK and PAX figures indicate travellers are returning to the airlines in droves, although the August figures might be slightly distorting as it is the month usually considered to be the peak season for travel. On a per airline basis, the positive trend is very evident at Japan Airlines, Singapore Airlines, Thai Airways International, All Nippon Airways and EVA Air. These airlines reached record RPK and PAX levels.

Cargo traffic continued to strengthen, fuelled by the recovery in trade in the Asia-Pacific region and to North America. A majority of member airlines have now recouped their losses in the freight business. However, their load factors are still on the low side given the region-wide expansion in capacity.

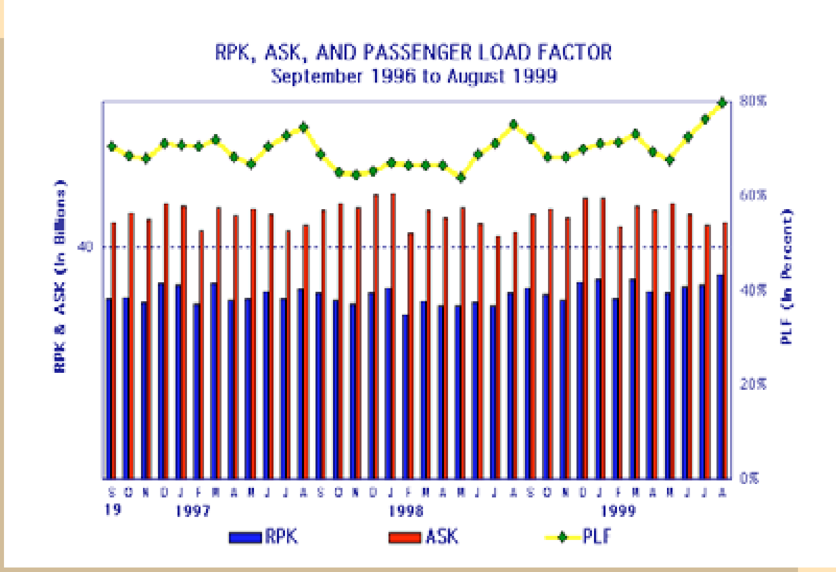


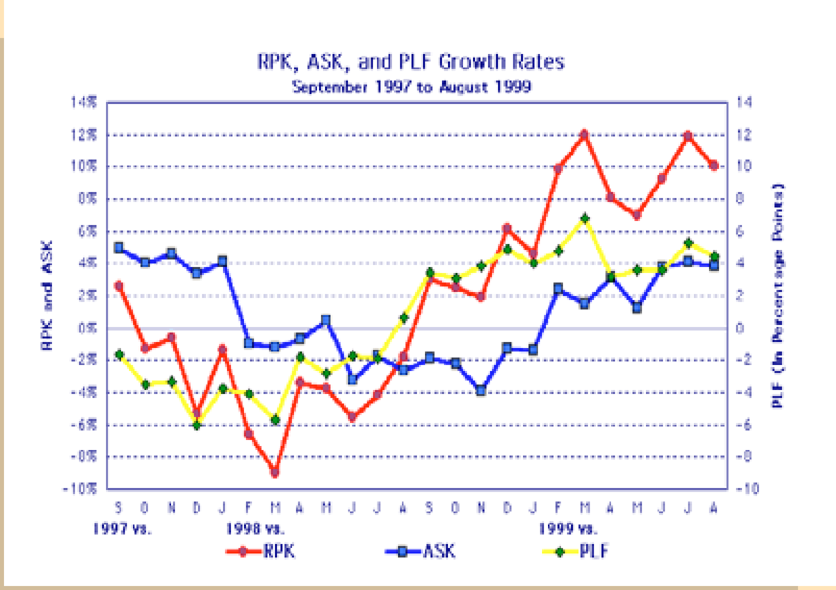




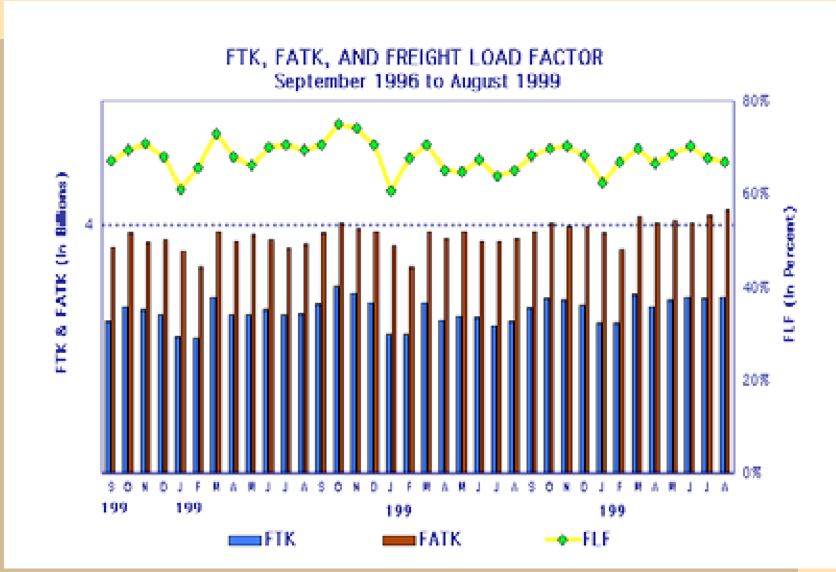
Cathay Pacific Airways: record highs in RPKs in August

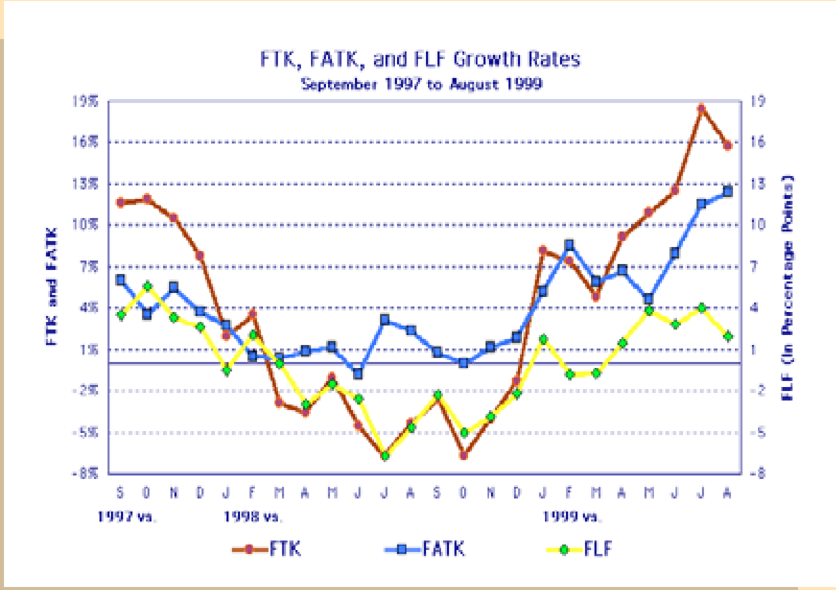
Monthly international PAX statistics of AAPA members





Monthly international cargo statistics of AAPA members





AAPA monthly international statistics (MIS)

*IN THOUSANDS

	RPK (000)	ASK (000)	PLF %	FTK (000)	FATK (000)	FLF %	RTK (000)	ATK	PAX
1999 to 1998									
AUG-99	35,194,712	44,200,406	79.63	2,835,640	4,237,149	66.92	6,118,377	8,313,201	8,172
JUL-99	33,306,052	43,611,994	76.37	2,816,925	4,156,936	67.76	5,914,619	8,183,895	7,819
JUN-99	33,057,236	45,627,007	72.45	2,829,103	4,024,718	70.29	5,902,079	8,222,369	7,522
MAY-99	31,960,045	47,348,342	67.50	2,793,281	4,065,038	68.71	5,773,053	8,413,688	7,330
APR-99	32,155,728	46,297,805	69.45	2,677,524	4,023,679	66.54	5,669,420	8,268,167	7,426
MAR-99	34,227,332	46,818,276	73.11	2,877,111	4,122,554	69.79	6,047,421	8,426,876	7,763
FEB-99	30,893,703	43,302,725	71.34	2,414,267	3,610,183	66.87	5,261,692	7,574,648	7,191
JAN-99	34,284,350	48,281,164	71.01	2,413,981	3,871,605	62.35	5,575,361	8,311,763	7,481
DEC-98	33,805,220	48,273,612	70.03	2,711,950	3,970,275	68.31	5,819,042	8,372,488	7,700
NOV-98	30,676,873	44,922,845	68.29	2,792,604	3,971,937	70.31	5,615,258	8,073,025	7,056
OCT-98	31,584,245	46,428,490	68.03	2,803,310	4,011,298	69.89	5,708,284	8,249,383	7,201
SEP-98	32,818,810	45,462,078	72.19	2,659,541	3,890,812	68.35	5,696,313	8,102,004	7,181
TOTAL	393,964,306	550,574,743	71.56	32,625,237	47,956,184	68.03	69,100,920	98,511,507	89,843
1998 to 1997									
AUG-98	31,983,275	42,567,064	75.14	2,449,649	3,769,563	64.98	5,405,716	7,675,693	7,461
JUL-98	29,763,469	41,885,162	71.06	2,378,607	3,729,019	63.79	5,129,145	7,570,262	6,904
JUN-98	30,263,787	43,967,789	68.83	2,514,464	3,726,437	67.48	5,312,776	7,732,083	6,795
MAY-98	29,882,897	46,786,290	63.87	2,518,814	3,884,192	64.85	5,273,916	8,151,421	6,741
APR-98	29,755,772	44,883,718	66.30	2,453,566	3,771,834	65.05	5,212,267	7,882,379	6,890
MAR-98	30,575,411	46,112,047	66.31	2,744,004	3,892,857	70.49	5,577,233	8,094,151	6,964
FEB-98	28,131,428	42,280,272	66.54	2,248,817	3,324,838	67.64	4,851,231	7,192,933	6,489
JAN-98	32,770,842	48,943,219	66.96	2,231,332	3,680,418	60.63	5,268,989	8,159,997	7,091
DEC-97	31,844,853	48,894,782	65.13	2,748,860	3,899,399	70.49	5,699,407	8,348,642	7,314
NOV-97	30,106,948	46,749,317	64.40	2,911,044	3,926,032	74.15	5,703,346	8,183,173	6,949
OCT-97	30,819,542	47,495,824	64.89	3,004,752	4,011,090	74.91	5,864,854	8,337,188	7,093
SEP-97	31,870,920	46,340,943	68.77	2,729,376	3,862,765	70.66	5,689,710	8,075,692	7,082
TOTAL	367,769,143	546,906,427	67.25	30,933,284	45,478,445	68.02	64,988,590	95,403,613	83,775
1997 to 1996									
AUG-97	32,565,007	43,735,913	74.46	2,562,241	3,681,754	69.59	5,578,402	7,661,961	7,550
JUL-97	31,066,431	42,605,854	72.92	2,550,902	3,616,972	70.53	5,425,668	7,493,850	7,233
JUN-97	32,040,636	45,425,520	70.53	2,633,630	3,757,756	70.09	5,603,114	7,883,779	7,250
MAY-97	31,037,075	46,559,497	66.66	2,546,410	3,838,451	66.34	5,431,046	8,071,740	7,100
APR-97	30,807,978	45,219,804	68.13	2,544,608	3,739,549	68.05	5,404,919	7,847,301	7,313
MAR-97	33,599,094	46,670,864	71.99	2,825,859	3,879,309	72.84	5,959,385	8,115,181	7,762
FEB-97	30,135,591	42,696,237	70.58	2,171,495	3,309,918	65.61	4,973,106	7,193,963	7,195
JAN-97	33,232,107	47,001,275	70.70	2,188,475	3,581,885	61.10	5,289,208	7,859,914	7,406
DEC-96	33,650,024	47,298,022	71.14	2,551,798	3,759,715	67.87	5,695,782	8,060,632	7,867
NOV-96	30,285,351	44,699,284	67.75	2,633,045	3,720,108	70.78	5,462,729	7,788,413	7,138
OCT-96	31,225,267	45,656,267	68.39	2,685,261	3,873,830	69.32	5,591,187	8,031,040	7,278
SEP-96	31,061,921	44,136,090	70.38	2,445,968	3,645,390	67.10	5,340,082	7,664,716	7,000
TOTAL	380,706,482	541,704,627	70.28	30,339,692	44,404,636	68.33	65,754,628	93,672,490	88,092

Percentage point change

	RPK	ASK	PLF	FTK	FATK	FLF	RTK	ATK	PAX
Aug 99-Sept 98 vs Aug 98-Sept 97									
AUG-99	10.04	3.84	4.49	15.76	12.40	1.94	13.18	8.31	9.53
JUL-99	11.90	4.12	5.31	18.43	11.48	3.98	15.31	8.11	13.25
JUN-99	9.23	3.77	3.62	12.51	8.00	2.82	11.09	6.34	10.70
MAY-99	6.95	1.20	3.63	10.90	4.66	3.87	9.46	3.22	8.74
APR-99	8.07	3.15	3.16	9.13	6.68	1.49	8.77	4.89	7.79
MAR-99	11.94	1.53	6.80	4.85	5.90	-0.70	8.43	4.11	11.47
FEB-99	9.82	2.42	4.81	7.36	8.58	-0.76	8.46	5.31	10.82
JAN-99	4.62	-1.35	4.05	8.19	5.19	1.72	5.81	1.86	5.49
DEC-98	6.16	-1.27	4.90	-1.34	1.82	-2.19	2.10	0.29	5.27
NOV-98	1.89	-3.91	3.89	-4.07	1.17	-3.84	-1.54	-1.35	1.53
OCT-98	2.48	-2.25	3.14	-6.70	0.01	-5.03	-2.67	-1.05	1.53
SEP-98	2.97	-1.90	3.41	-2.56	0.73	-2.30	0.12	0.33	1.40
Aug 98-Sept 97 vs Aug 97-Sept 96									
AUG-98	-1.79	-2.67	0.68	-4.39	2.38	-4.61	-3.10	0.18	-1.17
JUL-98	-4.19	-1.69	-1.86	-6.75	3.10	-6.74	-5.47	1.02	-4.55
JUN-98	-5.55	-3.21	-1.70	-4.52	-0.83	-2.61	-5.18	-1.92	-6.28
MAY-98	-3.72	0.49	-2.79	-1.08	1.19	-1.49	-2.89	0.99	-5.05
APR-98	-3.42	-0.74	-1.83	-3.58	0.86	-3.00	-3.56	0.45	-5.79
MAR-98	-9.00	-1.20	-5.68	-2.90	0.35	-2.36	-6.41	-0.26	-10.28
FEB-98	-6.65	-0.97	-4.05	3.56	0.45	2.03	-2.45	-0.01	-9.81
JAN-98	-1.39	4.13	-3.75	1.96	2.75	-0.47	-0.38	3.82	-4.24
DEC-97	-5.36	3.38	-6.02	7.72	3.72	2.62	0.06	3.57	-7.03
NOV-97	-0.59	4.59	-3.35	10.56	5.54	3.37	4.40	5.07	-2.64
OCT-97	-1.30	4.03	-3.50	11.90	3.54	5.59	4.89	3.81	-2.54
SEP-97	2.60	5.00	-1.60	11.59	5.96	3.56	6.55	5.36	1.17

All eyes are on MAH

TURBULENCE

By Tom Ballantyne

When it comes to the complexities of the world's stock markets yours truly is a babe in arms. But here is a major tip for the new millennium; keep a speculative eye open for a rash of new players from the aviation sector.

If Asia's first airport Initial Public Offering (IPO), Malaysia Airport Holdings (MAH), is an indicator, you can bet a rash of others will follow Kuala Lumpur's lead and put their runways on the 'Big Board' for the bears and bulls to toy with.

My views on Malaysia as an Asian hub are no secret. Despite its wonderful new greenfield facility at Sepang it will never knock Singapore off its pedestal as Southeast Asia's major airline throughput factory. On top of that there is Bangkok, not too far away.

Nevertheless, the MAH IPO, the first step in a partial privatisation process, has been an impressive success. The operator runs Malaysia's 37 airports, including the US$2.8 billion Kuala Lumpur International Airport (KLIA).

With 88 million shares on offer to private investors, at M$2.50 apiece, and another 110 million available to institutional investors at the same price, the float will only result in the government's stake being reduced from 100% to 72%. The shares will be listed on the Kuala Lumpur Stock Exchange in December and a further tranche will be offered to foreign institutional investors next year, leaving the government with a 52% stake in the airports.

Investors apparently like the idea of all this; the IPO was 1.9 times over-subscribed, with the company receiving 85,876 applications for shares. Why the rush? After all, listed airports are not exactly a dime a dozen. There have been none in Asia until now and only five elsewhere; the British Airports Authority, Rome, Vienna, Copenhagen and Auckland in New Zealand.

Basir Ismail, MAH's executive chairman, explained it nicely: "Airport stocks are recognised by prudent investors the world over as strong growth stocks that give attractive returns over the long term. Airports have an appetite for capital to keep pace with growth and the robustness of cash flows allows prudent balance-sheet gearing which can deliver attractive equity returns."

In anyone's language, the prospect of "returns" lures investors. There are several attractions in this offer for those seeking a bright new stock. The main one is the government will retain all the debt associated with KLIA's development, allowing MAH to project net profits of at least RM256.3 million (US$67.7 million) this year. The share offer price represents a net price-earnings multiple of 13.2 times on a fully-diluted basis.

Also, being a brand new airport, KLIA will not require any major capital investments in the next five years, so any pick-up in passengers will feed straight to profitability.

And revenue from non-aeronautical activities is targeted to rise to 50% in the next five years, from 41% last year. This is good news because it means profit from such things as retail outlets should lift nicely, avoiding any conflict with airlines over increases in aeronautical charges, which are likely to be held down.

All of this amounts to what analysts call the upside of the offer. They generally predict a compounded annual growth rate of between 10% and 12% for the airports over the next five financial years, with turnover breaching the RM1billion (US$265 million) mark in 2002.

In fact, the airport operator's five-year (1994-1998) average return on equity and assets has been 23.8% and 20%, respectively. With these ratios, MAH will rank at the top among international public-listed airport operators.

And all of this when KLIA is still struggling to attract traffic away from rival Singapore's Changi Airport, which itself continues to expand for the future.

Other airport operators in the region (apart from Auckland) have, not surprisingly, been watching all this very closely. The potential for listing must be very attractive in some cases.

As recently as November 18, Australia's Finance Minister, John Fahey, said the government will consider a public float as one option for privatising the US$2 billion Sydney Airports Corporation.

It is the only one of Australia's major gateway facilities that is not privatised. The others, including Melbourne, Brisbane and Perth, are now privately owned after a US$2.7 billion sale several years ago, although none is yet listed as a company.

Mr Fahey said Canberra may depart from the trade sale option in the case of Sydney's Kingsford Smith Airport and sell all or part of it via a public float. As the country's primary gateway, by a long way, it would be a plum target for investors, domestic or foreign.

Thailand is another country in the process of privatising its airports and a flotation is a definite option.

Airport development is expensive. A float or partial float is a wonderful way to raise hard cash while retaining overall control of a strategic asset. Even if you do lose control of the business, governments lay down rules to ensure that, in reality, anything new owners do is closely scrutinised and regulated.

As our cover story this month makes clear, there is a new awareness in the aviation community world-wide that privatisation of facilities like airports and air traffic services is increasingly inevitable.

It is a way of instilling a genuine commercial regime into sectors which have traditionally been steeped in bureaucratic torpor. Even corporatisation does not eliminate this problem because there is still too much government involvement in management.

There are a host of airports across the region with bigger prospects for growth and profit than KLIA.

Despite the virtual certainty of ongoing down cycles in the industry, the forecasts for air travel growth make airports a blue chip prospect for stock exchange listing across Asia. I'd bet my Microsoft shares on it ... if I had any.